District Human Development Report - 2017

Dindigul District

State Planning Commission
Tamil Nadu

DINDIGUL

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Dindigul, and
Planning Commission, Tamil Nadu
in association with kalanjiam Foundation

Contents

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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.

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Preface

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 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. 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.

/P.T.O/-

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 Dindigul 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 raising 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 Kalanjiam Foundation, for their tireless efforts in preparing the DHDR for Dindigul 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 desired 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

District Collector
Dindigul

ACKNOWLEDGEMENTS

It was a great privilege for Kalanjiam Foundation to prepare the District Human Development Report (DHDR) for the Dindigul district. It was an wonderful experience for us not only in terms of understanding the concept of the DHDR but also it has provided a valuable opportunity to interact with various stake holders of the development through a systematic methodology and process. We highly place our sincere thanks to State Planning Commission, Chennai and the District Administration for providing this excellent opportunity to Kalanjiam Foundation in preparing the DHDR for Dindigul. Though the report majorly depends on the secondary data, there was a huge challenge involved while collecting and validating those data without compromising the quality. We have tried our level best in preparing the report with the available particulars pertaining to the various components of human development like health, education, employment, gender, social security and infrastructure of the Dindigul district. We take great pleasure to thank one and all for their valuable contributions during the endeavors.

Firstly, we would like to record our sincere thanks to **Tmt. Santha Sheela Nair, I.A.S., (Retd),** Former Vice Chairman, State Planning Commission, Government of Tamilnadu for her admirable guidance and constant review of the process. We would extend our gratitude to **Thiru. M.Balaji, I.A.S.,** the then Member Secretary, State Planning Commission, Chennai, who has initiated this exercise with great involvement. Also we would like to express our indebtedness to **Dr. Sugato Dutt, I.F.S.,** Former Member Secretary i/c, State Planning Commission and **Thiru. Anil Meshram, I.A.S.,** for their constant review and encouragement in accomplishing this assignment.

We owe our sincere gratitude to our Executive Director **Shri. M. P. Vasimalai** for his valuable guidance and content support in designing the report. Our heart felt thanks to **Ms.V.K.Padmavathy,** the then CEO of Kalanjiam Foundation for her constant guidance and moral support in every stage of the report preparation. We express our special thanks to **Ms.A.Umarani,** present CEO of Kalanjiam Foundation for her unconditional support during the final stage of the report completion.

We are immensely pleased to express our benevolent thanks to **Thiru. N.Venkatachalam, I.A.S.,** Former Collector of Dindigul district for selecting Kalanjiam Foundation as resource institution for preparing the DHDR. His tremendous involvement and constant encouragement in the whole process of the DHDR preparation deserves a huge appreciation and high regards from all the corners. We owe our heartfelt thanks to our District Collector, **Thiru. T.N.Hariharan, I.A.S.,** for his unstinted support and encouragement in accomplishing the task.

We take this opportunity to share our special thanks to **Thiru. P.Selvarajan,** Head of Division, Rural Development and District Planning, State Planning Commission for his critical inputs and moral support. We express our heartfelt thanks to **Selvi.S.Namagiri,** Senior District Planning Officer, State Planning Commission, Chennai for her tireless efforts and unstinted support in the whole process of the assignment, since from the inception to final completion of the report. A word of special mention to **Mr.R.K. Haroon,** Senior District Planning Officer, who definitely added more value to this report with his patient corrections and timely inputs.

We place our sincere thanks to **Thiru. A.Selvaraj,** District Planning Officer, Dindigul for his sensible approach and constant administrative support in completing this report. We express our gratitude to **Thiru.L.Balan,** District Planning Officer (In charge) for his timely support in getting the 2013-14 data. Our heartfelt thanks to **Thiru.G. Alagar Raj,** Technical Assistant, District Planning Office, who did all the work in each and every stage of the process with his efforts, that made our job easier in collecting the secondary data from the line departments. The support staff of District Planning Office especially **Thiru. M. Muthupandi** deserve great appreciation for their timely support throughout the process.

We would be failing in our duty, if we have not expressed our sincere gratitude to **Thiru. A.Madankumar,** Programme Leader, DHAN Foundation for his tireless and valuable support in each and every stage of the report. A special word of mention to our fellow colleagues **Tmt. R.Sasikala** and **Tmt. P.Dheivanai** for their timely support in shaping the report. We record our heartfelt and sincere thanks to **Thiru.N.Saravanan, Thiru.S.Sriram and Mr.S.Thirumalai Samy** of Kalanjiam Foundation for their timely administrative support in organising the meetings and discussions pertaining to the preparation of the DHDR. A special thanks to **Thiru. C.Kandasamy** for his meticulous support in aligning and refining the document.

We would like to express our sincere gratitude to all the heads of line departments for their active participation during the validation of the report. Last but not the least, we place our high regards to all the administrative staff of State Planning Commission, Chennai for their moral support in this endeavors.

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CHAPTER 1

DINDIGUL DISTRICT - A PROFILE

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District Profile

Topography

Dindigul district has extensive hilly areas with undulating plains. The Palani Hills on the West forming the North-eastern spur of the Western Ghats range in height from 1000 to 2700 metres. The upper hills comprise peaks like Perumalmalai and Vandarvermalai and include the beautiful scenic, salubrious hill station known as Kodaikanal. The lowest Palani Hills incude Thandikudi and Virupatchi. On the eastern side, a large number of isolated peaks like Sirumalai, Alagarmalai, Karumalai, Kodarangimalai, Rangamalai, Natham and Ayyalur Hills are found. The rest of the district is characterized by an undulating plains covered mostly by red soil (55%) while the rest of the plains are covered by black soil.

In Dindigul district three different climatic conditions prevail. Tropical climate prevails in plains, sub-tropical in lower Palani Hills and Sirumali and temperate climate prevails in Palani Hills. In the plains, the maximum and the minimum temperature recorded are 37.5°C and 19.7°C in the hill stations 20.6°C and 7.7°C respectively. The district receives an average rainfall of 930 mm with dominant share of 436 mm from the North - east Monsoon (October-December).

History

Dindigul district is an administrative region in the south of Tamilnadu, India. It was carved out of the composite Madurai district on September 15, 1985. Dindigul district, during the course of time, had names like Dindigul Anna, Quaid-e-Milleth and Mannar Thirumalai. Dindigul, which was under the rule of Tipu Sultan, has a glorious past. The historical Rock Fort of Dindigul was constructed by the Naik King Muthukrishnappa Naicker. It has an area of 6266.64 km^2 which is 4.82 percent of the State.

The history of Dindigul is centered around the fort over the small rock Hill and Fort. Dindigul region was the border of the three prominent kingdoms of South India, the Pandyas, Cheras and Cholas. The Chera king Dharmabalan is believed to have built the temples of Abirami and Padmagirinathar. The ancient tamil book, Silappathikaram records the city as the northern border of the Pandya kingdom whose capital was Madurai.

Historian Strabo mentions about the city in his 20 A.D. work and Pillani, the great historian of the time described about the Pandya king in his works.

During the first century A.D., the Chola King Karikal Cholan captured the Pandya kingdom and Dindigul came under the Chola rule. During the sixth century, the Pallavas took over most provinces of Southern India. Dindigul was under the rule of Pallavas until Cholas regained the state in the 13th century. In the 14th century, South India was invaded by the Moghuls. Dindigul was safe in the hands of Vijaya Nagara king before Cheras took over the Pandya kingdom. Chandrakumara Pandyan won the war against cheras with the assistance provided by the Vijaya Nagar Kingdom. The commander of the Vijaya Nagar army Kampanna Udayar played an important role in the war. In 1559, Nayaks became powerful and their territory bordered with Dindigul in the north. After the death of King Viswanatha Nayak in 1563, Muthukrisna Nayaka became the king in 1602 A.D and he built the strong hill fort in 1605 A.D. He also built a fort at the bottom of the hill. Muthuveerappa Nayak and Thirumalai Nayak followed Muthukrishna Nayak. Dindigul came to prominence once again during Nayaks rule of Madurai under Thirumalai Nayak. After his immediate unsuccessful successors, Rani Mangammal became the ruler of the region and she ruled efficiently.

In 1736 Chanda Sahib, the lieutenant of Delhi Sultanate seized power from Vangaru Nayak. In 1742, the Mysore army under the leadership of Venkatarayer conquered Dindigul. He governed Dindigul as a representative of Maharaja of Mysore. There were Eighteen Palayams (a small region consisting of few villages) during his reign and all these palayams were under Dindigul Semai with Dindigul capital. These palayams wanted to be independent and refused to pay taxes to venkatarayer. In 1748, Venkatappa was made governor of the region in the place of Venkatarayer, who also failed. In 1755, Mysore Maharaja sent Haider Ali to Dindigul to handle the situation. Later Haider Ali became the Maharaja of Mysore and in 1777, he appointed Purshana Mirsaheb as governor of Dindigul. He strengthened the fort. His wife Ameer-um-Nisha-Begam died during her delivery and her tomb is now called Begambur. In 1783 British army, lead by captain Long invaded Dindigul. In 1784, after an agreement between the Mysore province and British army, Dindigul was restored by Mysore province. In 1788, Tipu Sultan, the Son of Haider Ali, was crowned as King of Dindigul.

In 1790, James Stewart of the British army gained control over Dindigul by invading it in the second war of Mysore. In a pact made on 1792, Tipu ceded Dindigul to the English. Dindigul is the first region to come under English rule in the Madurai District. In 1798, the British army strengthened the hill fort with cannons and built sentinel rooms in every corner. The British army, under Statten stayed at Dindigul fort from 1798 to 1859. After that Madurai was made headquarters of the British army and Dindigul was attached to it as a taluk. Dindigul was under the rule of the British until India got its Independence on 15 August 1947.

Geography and Administrative setup

The district is situated between 10° 05' and 10° 09' of Northern Latitude and 77° 30' and 78° 20' of Eastern Longitude with a mean sea level of (+) 280.11MSL. Dindigul district is bounded by Erode, Coimbatore, Karur and Trichy districts in the North; Sivaganga and Trichy districts in the East; Madurai district in the South, and by Theni and Coimbatore districts and Kerala in the West. It comprises of three revenue divisions, eight taluks, 4 Municipalities, 14 panchayat unions, 306 panchayats, 23 Special village Panchayats, and 358 revenue villages, with 3870 hamlets.

Demography

According to the 2011 census, the district population was 2159775 with a population growth rate of 12.31**%.** It has a sex-ratio of 998 females for every 1,000 males, above the state average of 995 per 1000 males. A total of 216,576 was under the age of six, constituting 111,955 males and 104,621 females. Scheduled Castes and Scheduled Tribes accounted for 20.95% and 0.37% of the population respectively. The average literacy of the district seems to be 76.26%, compared to the state average of 80.1%. The male literacy rate is 84.23 % whereas the female literacy rate is only 68.33%. The district had a total of 560,773 households with an average size of 3.9. There was a total of 1,105,155 workers, comprising 155,332 cultivators, 388,725 main agricultural labourers, 25,253 in house hold industries, 393,707 other workers, 142,138 marginal workers, 10,073 marginal cultivators, 79,234 marginal agricultural labourers, 5,576 marginal workers in household industries and 47,255 as other marginal workers. In respect to rural-urban divide, there are 650375 workers in rural areas and 312642 workers are in urban areas.

TABLE 1.1—DISTRICT BASIC DEMOGRAPHIC INDICATOR

Sl. No	Indicators	2001	2011
1	Population	1923014	2159775
2	Decennial Growth (%)	9.22	12.31
3	Density of population per sq,km.	317	358
4	Urban population (%)	35.01	37.41
5	Sex ratio (per 1000 male)	986	998

Source: *Census documents 2001 and 2011*

Economy

The district income is defined as the sum total of the economic value of all goods and services produced within a district. The per capita income of the district (at constant prices) in the year 2010-11 is Rs.53271 which is nearly double when compared to 2004-05 with Rs.31842. The district ranks 18th in the State in respect to per capita income for the seventh consecutive year.

Per capita Income

The per capita income of Dindigul district at constant prices was in increasing trend over a period of eight years since 2004. The growth rate in the year 2011-12 is 5.72% against the state growth rate of 6.72%, whereas in the year 2010-11, both the district and the state show positive growth rate of 12.57%, 12.38% and that shows the increasing trend of the district growth. This indicates there are employment opportunities for the work force in the form of MGNREGA, textile industry, construction industry and self-employment initiatives in the district, which is a positive sign.

TABLE 1.2 PER CAPITA INCOME (GDDPat constant prices)

Sl. No	Year	Dindigul	Tamil Nadu
1	2004 - 2005	31842	33998
2	2005 - 2006	34713	38435
3	2006 - 2007	39532	43941
4	2007-2008	40867	46293
5	2008-2009	43493	48473
6	2009-2010	47372	53359
7	2010-2011	53327	59967
8	2011-2012	56376	63996

Source: Department of Economics and Statistics

Agriculture

Agriculture and allied activities like horticulture, sericulture, dairy, inland fishing constitute the primary sector of the district. Crops like paddy, cholam, maize, cumbu, cotton, tobacco, groundnut, pulses and oilseeds are grown in this district. According to 9th Agricultural census (2010-11), the marginal farmers (below 1 ha) occupies 66.79% of the total farmers in the district followed by small farmers (1-4 has) with 29.17%, medium farmers (4-10 ha) with 3.61% and large farmers (above 10 ha) with meager 0.43 %. With respect to area, the marginal farmers occupy 25.27% followed by small farmers with 49.12%, small farmers with 18.98% and large farmers with 6.6%. This shows that the small farmers are having nearly 50 percent of the total area in the district, though the marginal farmers are more in numbers. The total geographical area of the district is 626664 ha. in which net sown area holds 241747 ha, leaving forest area of 138923 ha and cultivable wastes of 5842 ha. With respect to irrigation sources, there are 28 government canals, 3104 tanks, 416 tube wells, 91801 open wells in the district. Vaigai River, Manjalaru and Kudaganaru are the other sources of irrigation for many of the farming families in the district.

Horticulture

Since, both sub-tropical climate and temperate climate prevails in the district, there is higher possibility of various horticultural crops in both plains and hills. In Plains, the major horticulture crops cultivated are , fruit crops like banana, mango, sapota, guava and acid lime, vegetables like tomato, brinjal, okra, chillies, beans and cabbage, flowers like jasmine, pitchi, crossandra, nerium, chrysanthemum, tube rose and medicinal plants like Gloriosa. In hills, fruit crops like pear, plums, peach, hill banana, acid lime and orange, vegetables like beans, chow-chow, potato, carrot and peas, spices like cardamom, pepper and garlic, plantation crops like coffee and cocoa and cut flowers like rose, carnation, gerbera and gladiolus are mainly cultivated in hills.

Animal husbandry

Dindigul district has the reputation of being located in the white belt of Tamil Nadu. Along with horticulture, the animal husbandry also shares equal importance in the district economy due to its remunerative occupation. Palani and Vedasandur are the two taluks that naturally lies in the Kangeyam breeding tract that has favourable environment for animal husbandry. Kodaikanal, Palani and Sirumalai hill ranges provide suitable climate for breeding pure exotic milk breeds like Jersey. Buffalo breeding that is highly productive in this dry tract is dominant in Palani, Vedasandur and few parts of Dindigul taluk.

Kodaikanal, Dindigul, Natham and Nilakottai taluks have good population of crossbred cows with different level of exotic inheritance. The density of sheep and goat population is high in Palani and Vedasandur and Dindigul taluks. The reputed Macheri breeds are abundantly seen here. There are two Poultry Extension Centres at Gandhigram and Kodaikanal. These centres serve as model units in poultry management.

Infrastructure for cattle and buffalo breeding is extended through a wide network of insemination centers in this district. Animal Health Cover is extended through a network of veterinary institutions distributed uniformly in this district. As per 19th livestock census (2012-13), the status of cattle population reads as 265850 cows, 73376 buffaloes, 243854 sheep, 175205 goats and 2857537 poultry with more cattle population at Thoppampatty (32.19%) followed by Palani (19.75%) and Oddanchathram (16.14%)

Industry

For a long time, Dindigul town has been associated with iron locks and safes of good quality and durability. A lock manufacturing unit under co-operative sector is functioning here. Another industry for which Dindigul is noted is leather tanning.This district has a flourishing handloom industry at Chinnalapatti, which is located at 11 km away from Dindigul on the Madurai-Dindigul highway. Art silk saris and Sungudi saris produced in Chinnalapatti are famous throughout India. More than 1000 families are engaged in this industry.

Tanneries are thickly situated in this district. The finished and semi-finished leather and other leather products have a good export market. A large number of chamber brick units are functioning in this district. Dindigul Lock and Iron Safes are very famous for their quality. Handloom, rice milling, ground nut and vermicelli are the other types of food based Industries functioning in this district.

Tourism

Dindigul is privileged to have one of the six celebrated abodes of Lord Muruga at palani hills, where the famous Dhandayuthapani temple is situated on a hill at a height of about 450 metres. Thousands of pilgrims visit this temple every day, particularly during festival days like Thai Poosam, Adi Krithigai, Panguni Uthiram, and Vaikasi Visagam. Three electric winches and rope car are unique features of the temple. They facilitate the aged, children and the disabled to reach the temple in eight minutes. The income of the temple, which is the largest in the State, is growing year by year.

Besides the Palani temple, there is also another Murugan temple at Thirumalaikeni, 25 km away from Dindigul town, which is becoming popular as a pilgrim centre. Abirami Amman temple in Dindigul and Raja Kaliamman temple at Thethupatti 20 km away from Dindigul are the other important temples which attract thousands of pilgrims.

Kodaikanal, a popular summer resort located at an altitude of 2133 metres in the Western Ghats, is the 'Princess of Hill Stations.' A notable feature of Kodaikanal is the 'Kurunji' flower that blooms once in 12 years. The next blooming will be in 2018.

Peranai and Sirumalai are the two picnic spots of this district. There are nine dams–Palar Porundalar, Varathamanathi and Kuthiraiaru in Palani block; Parappalar and Nangachiar in Oddanchatram block; Maruthanathi, Kamarajar Sagar in Athoor block; Mavoor in Nilakottai block and Kudaganar in Vedasandur block. They augment irrigation facilities to agricultural fields in the district. Nilakkottai town is famous for brass vessels and jewellery. Nilakottai taluk is famous for flowers and grapes. Oddanchatram is a famous market for vegetables. Batlagundu is an important market for tomato. Pattiveeranpatti in Batlagundu block is famous for cardamom and coffee curing enterprises.

Infrastructure

Dindigul town, which is an important wholesale market for onions and groundnuts, has a network of inter-district roads connecting Theni, Coimbatore, Tirupur, Erode, Tiruchi, Karur, Madurai and Sivaganga. It has transport facilities for 186 kms of national highways, 2340.87 kms of State highways, 350.59 kms of municipal roads, 724.01 kms of town panchayats and 4424.23 kms of Panchayat unions and panchayat roads.

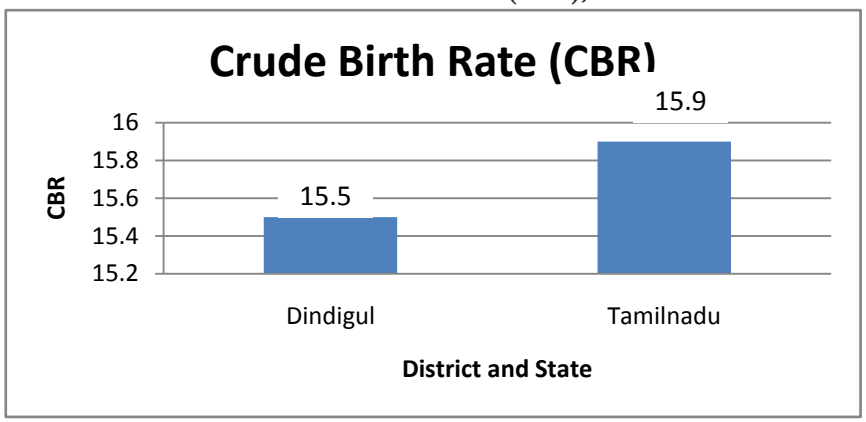
Social Sector

Health

Dindigul district has good amount of medical facilities with the existence of 27 Government hospitals, 58 Primary Health Care hospitals, 311 Health Sub Centers. Apart from this, there are more than 81 private hospitals in the district to cater to the health care needs the people. Gandhigram Kasthuribai hospital and Christian Fellowship hospitals of Oddanchathram and Amblikai are well known to the public for their quality services.

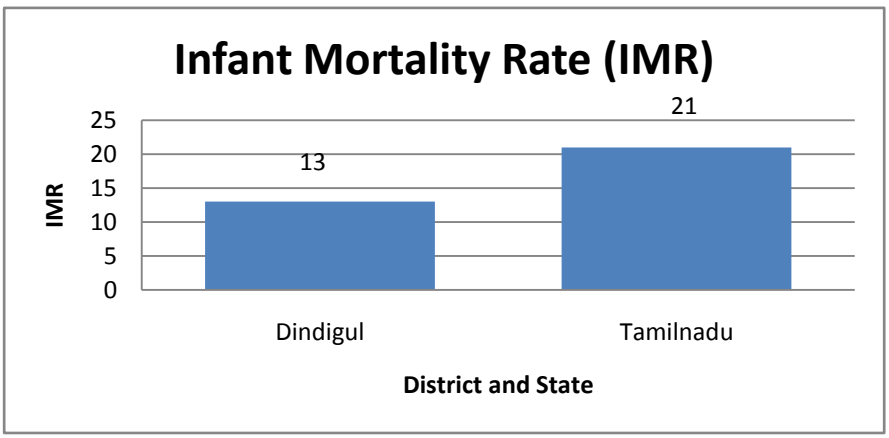
Health is one of the backward parameter in this district with all the six backward blocks showing backwardness in the critical health indicators. Low literacy level, migration, anemic among adolescent girls and pregnant women, poor health seeking behavior in the remote pockets of the hilly areas, poor awareness on sanitation and hygiene are the key reasons which pull down the district to a backward state in terms of health. Though the comparative performance with the state is far below, efforts are being made by the district administration continuously to cater to the health needs of the common man. Figure 1.1 & 1.2 shows detail of the crude birth rate in these areas. We find that IMR in the district is much lower than that of the state.

FIG. 1.1—Crude Birth Rate (CBR), 2013 – 14



***Source**: DDHS, Dindigul and Palani*

FIG. 1.2 -- INFANT MORTALITY RATE, 2013 - 14



***Source**: DDHS, Dindigul and Palani*

Literacy and Education

As per 2011 census, Dindigul has the total literacy rate of 76.26 against the state literacy of 80.09. With respect to male literacy, the rate is 84.23 against the state rate of 86.81 and for the female; the literacy rate is 68.33 when compared to the state female literacy of 73.86. On the education front, Dindigul is a well developed and popular centre. It has many high schools and higher secondary schools of repute. St. Mary's Higher Secondary School, an institution known for the discipline of its students, is one of the oldest in the town. The district has two universities -- Mother Teresa Women's University at Kodaikanal and Gandhigram Rural University at Gandhigram. Also there are plenty of engineering colleges, arts and science colleges, polytechnics and ITIs located all over the district.

The enrollment exhibits positive trend at primary and upper primary level whereas it declines when it comes to secondary and higher secondary level. The case is worse in the case of girls at secondary level, as they tend to discontinue their education in search job in the textiles industries, migration of the parents (that facilitates child labour) and due to social reasons to some extent. The government has launched various education promotion schemes like free books and uniforms, noon- meal programme, bicycles for secondary students, laptops for higher secondary students to satiate the felt needs of the rural poor. SSA and RMSA have also play significant role in ensuring the primary and secondary enrollment respectively of all the eligible students through outreach programmes at the students' doorstep.

Conclusion

Dindigul district is known for agriculture and its allied activities. The district has good agriculture and horticulture activities beyond emerging small scale industries. It has a great scope for tourism development and it also has good infrastructure facilities. It also has health care facilities in around the district. The literacy and education level are in the increasing trend, which paves way for a good development in the hole district.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

Chapter 2

Status of Human Development in Dindigul District

The Human Development Index (generally known as HDI) is a summary of human development of a particular area, state, nation, or world as a whole that implies whether it is developed, still developing, or underdeveloped based on factors such as life expectancy, education, literacy, gross domestic product per capita.

According to the 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. Development is thus about expanding the choices people have to lead lives that they value."

The basic purpose of human development is to maximize the choices of the people by creating an enabling environment to enjoy long, healthy and creative lives. Human development means greater access to knowledge, better nutrition and health services, secured livelihoods, security against crime and physical violence, satisfying leisure hours, political and cultural freedoms and sense of participation in community activities.

Human development in Dindigul district has been assessed based on the computed Human Development Index (HDI) and Gender Inequality Index (GII) at block level. This chapter attempts to explain the status of HDI and GII at block levels along with variations between the blocks. Also it deals with the linkage between the two indices and the classification of the blocks based on their index values.

Human Development Index Background

The UNDP has calculated the HDI for its member states since 1975. The first Human Development Report, published in 1990 with leadership from Pakistani economist and finance minister Mahbub ul Haq and Indian Nobel Prize Laureate for Economics, Amartya Sen.

The main motivation for the Human Development Report itself was a focus on only real income per capita as the basis for a country's development and prosperity. The UNDP claimed that economic prosperity as shown with real income per capita, was not the only factor in measuring human development because these numbers do not necessarily mean a country's people as a whole are better off. Thus, the first Human Development Report used the HDI and examined such concepts as health and life expectancy, education, and work and leisure time.

Human Development Index: Inter – Block Variations

Human development is a multidimensional feature. HDI is a composite index measuring average achievement in 3 basic dimensions and 11 indicators of human development. The dimensions are standard of living, health and education. These three dimensions are crucial, contributing to the human development of the block and district. Details of the indicators have been furnished here.

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 Rate Under 5 Mortality Rate
Education	Literacy rate Gross enrollment in Primary Gross enrollment in secondary

Index value falls between 0 to 1. The human development index is the positive index. The higher the HDI value, the higher in the human development and the lower the index value lower the human development. The Human Development Index was constructed for 14 blocks in the district. As per the indicators of standard of living, health and education, the index value ranges between 0.84 and 0.31. Dindigul block ranks the top owing to its urban nature and Guziliamparai ranks low in the category due to its low performance in health and education indicators. The second ranked Oddanchathram is a municipality oriented block wherein both the standard of living and health indicators have strong influence. In contrast, apart from low ranked Guziliamparai, the other low ranked blocks like Vadamadurai and Natham have poor HDI values that could be influenced by lack of access to basic amenities and health services.

Table 2.1. Top and Bottom three blocks in Human Development Index, 2013

Top 3	Bottom 3
Dindigul(0.84)	Vadamadurai (0.46)
Oddanchathram (0.67)	Natham (0.45)
Kodaikanal (0.66)	Guziliamparai (0.31)
Source: Dindigul district indices computation	

Gender Inequality Index

The **Gender Inequality Index (GII)** is a new index used for measuring the gender disparities prevailing in a location. This was introduced as an experimental measure to overcome the shortcomings of the previous, and no longer used, indicators like Gender Development Index (GDI) and the Gender Empowerment Measure (GEM), that were introduced in the 1995 Human Development Report.

The UNDP has introduced the Gender Inequality Index (GII) in 2010 Human Development Report that captures the loss of achievement due to gender inequality using three dimensions: reproductive health, empowerment, and labour market participation. The GII does not include income levels as a component, which was one of the most controversial components of the GDI and GEM. It also does not allow for high achievements in one dimension to compensate for low achievement in another.

Gender inequality in Dindigul

The Three dimensions viz., Health, Empowerment and Labor market have been taken for computing the GII values for the blocks. These three dimensions have fourteen indicators to compute the GII. The nature of this gender inequality index is negative and thus the value closer to the 0 shows lower gender inequality and value closer to 1, shows higher gender inequality. The dimensions and the indicators are given below.

Dimensions	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

The status of GII indicators has given in Annexure - 2. The top three and bottom three blocks in GII are given in table 2.2.

Table 2.2. Top and Bottom three blocks in Gender Inequality Index, 2013

Top 3	Bottom 3
Vadamadurai (0.01)	Batlagundu (0.08)
Palani (0.01)	Guziliamparai (0.09)
Reddiarchathram (0.02)	Thoppampatti (0.09)
Source: Dindigul district indices computation	

Out of 14 blocks in the district, Vadamadurai and Palani block each show lower GII value followed by Reddiarchathram. Low MMR, more antenatal mothers' coverage, higher share of female elected representatives, the high presence of female children could be the contributing factors for the better GII performance of the blocks. On the other hand, blocks like Batlagundu, Thoppampatty and Guziliamparai are showing higher GII values due to low female literacy, low female worker participation rate in non-agri sector, low female agricultural wages, high incidence of MMR etc.,

Child Development Index

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 1. A zero score would be the best. The higher the score, worse the children are faring. The dimensions and the indicators used for CDI computation is given below and the values are given in Annexure 3.

Dimensions	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

In Dindigul district, out of 14 blocks, Dindigul block performs better in CDI due to low percentage of malnourished children and higher school enrollment rate, whereas Kodaikanal block seems to be faring low due to high under-five mortality rate and low school enrollment ratio at higher secondary level. The top three and bottom three blocks in Child Development Index is given in table 2.3.

Table 2.3. Top and Bottom three blocks in child development index, 2013

Top Three blocks with higher CDI value	Bottom Three blocks with lower CDI value
Dindigul (0.77)	Thoppampatti (0.45)
Batlagundu (0.73)	Vadamadurai (0.42)
Natham (0.58)	Kodaikanal (0.34)

Multi-dimensional Poverty Index (MPI)

The Multidimensional Poverty Index (MPI) is a new measure of poverty. It can be used to build an ample image of people living in poverty, and permits comparisons across blocks. As per the MIDS and SPC guideline, three dimensions are used to assess the disparity in poverty, v*iz*., health, education and living standard with ten indicators. Indicators used for MPI computation are furnished here.

Dimensions	Indicators
Health	IMR Higher order birth rate Malnourished children
Education	Dropout of the primary Dropout in secondary
Standard of living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to Pucca houses Access to electricity

Among the 14 blocks in the Dindigul district, Dindigul block shows lower MPI followed by Oddanchatram and Palani. This attributes the fact that these blocks are urban in nature and hence the standard of living is high that resulted in low MPI. On the other side, blocks like Vedasandur, Guziliamparai and Natham have higher MPI owing to their poor access to health and educational infrastructures. The top and bottom three blocks that have lower and highest MPI are given below,

Top Three blocks with lower MPI	Bottom Three blocks with higher MPI
Dindigul (0.17)	Vedasandur (0.48)
Oddanchathram (0.19)	Guziliamparai (0.63)
Palani (0.32)	Natham (0.65)

Inferences on the Overall Index rankings

Based on the outcomes of the index values of the above discussed HDI, GII, CDI and MPI, attempt has been made to rank the blocks based on the computed values. It is interesting to quote that majority of the rankings obtained have coincided with the reality of the respective blocks. For instance, the Dindigul block owing to its urban nature established its supremacy in three indices except GII that seeks attention. Also, blocks like Palani and Oddanchathram fare well due to its agriculture base and urban base. Similarly, backward blocks like Thoppampatty and Vadamadurai have gained lower ranks in more than two indicators as they matched with the ground situation. An interesting feature is that Guziliamparai that is at bottom of the table has not been declared as the backward block whereas Reddiarchathram that has notable performance find itself in the backward block list. Measures can be taken by the district administration to include Guziliamparai as one of the backward blocks that badly needs attention in all dimensions.

TABLE:2.4 OVERALL INDEX RANKINGS

S. No	Block	HDI		GII		CDI		MPI	
		Value	Rank	Value	Rank	Value	Rank	Value	Rank
1	Athoor	0.55	9	0.08	11	0.45	10	0.40	7
2	Batlagundu	0.66	4	0.08	12	0.73	2	0.43	9
3	Dindigul	0.84	1	0.08	10	0.77	1	0.17	1
4	Guziliumbarai	0.31	14	0.09	13	0.49	9	0.63	13
5	Kodaikanal	0.66	3	0.05	7	0.34	14	0.38	6
6	Natham	0.45	13	0.04	6	0.58	3	0.65	14
7	Nilakkotai	0.62	6	0.07	9	0.55	5	0.35	5
8	Oddanchatram	0.67	2	0.02	4	0.57	4	0.19	2
9	Palani	0.63	5	0.01	2	0.54	6	0.32	3
10	Rediyarchatram	0.47	11	0.02	3	0.53	7	0.40	8
11	Shanarpatti	0.48	10	0.03	5	0.45	11	0.44	10
12	Thoppampatti	0.60	7	0.09	14	0.45	12	0.33	4
13	Vadamadurai	0.46	12	0.01	1	0.42	13	0.44	11
14	Vedasandur	0.55	8	0.06	8	0.50	8	0.48	12

Source: *Consolidation of overall index values*

Conclusion

The Human Development deals with the diversity of human needs where it highlights people to enjoy cherish and a sense of belongings to one's own community apart from the income they earn. Efficiency, Equity, Freedom and Empowerment are the main four factors that hold the key to achieve the human development outcomes. As per Tamil Nadu Human Development Report, 2003, the HDI of the Dindigul district is 0.641 and GDI value of the district is 0.638 where the district has been classified as medium in terms of both HDI and GDI.

With respect to 2013-14 data, the range between the highest HDI value (Dindigul – 0.84) and the lowest HDI value (Guziliamparai – 0.31) is 0.58. This shows that there is a wide range of disparity existing within the district. But, in case of GII, there is not much disparity among the blocks.

CHAPTER 3
EMPLOYMENT, INCOME AND POVERTY

Chapter
3
Employment, Income and Poverty

Since independence the focus and strategy of development plans in India have changed with respect to the dynamics of different geographical context, national and international economic situation. But the economy, irrespective of the sectoral or sub-sectoral priority, continues to be the central focus of almost all the Five-Year Plans in India. On the other hand, it is confirmed empirically, that the economy and human development are mutually dependent on each other (Ranisand Stewart, 2005). To make human development sustainable, it is argued that the development plans have to facilitate the process of enhancing the capabilities of people (Sen, 1985, 1987; Dasgupta, 1993).The economy represented by the per capita income has been one of the three core areas of human development since the UNDP's first human development report (UNDP, 1990). At the district level however, understanding the human development perspective of the other economic indicators such as net domestic product and its composition, wage and employment, nature and extent of poverty, indebtedness, homelessness, child labour, migration, and infrastructure are vital. This chapter attempts to capture the above dimensions of human development in the Dindigul district. Intra-district (block level) comparison of different indicators has been emphasized in this chapter.

Employment

Size of the workforce and workers participation rate

Table 3.1—Total Workers And Non-Workers

S. No	Block	Total Workers		Main Workers		Marginal Workers		Non-workers		Total population	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Athoor	69394	79550	59707	67629	9687	11921	76745	80296	146139	159846
2	Batlagundu	47606	58768	38023	50469	9583	8299	56796	61941	104402	120709
3	Dindigul	135929	163573	121863	146619	14066	16954	212207	229406	348136	392979
4	Guziliumbarai	53807	54398	42184	48349	11623	6049	32342	39169	86149	93567
5	Kodaikanal	51799	59542	47392	54114	4407	5428	48846	55708	100645	115250
6	Natham	69692	84064	55819	67201	13873	16863	64516	74623	134208	158687
7	Nilakkotai	72782	85657	57342	68994	15440	16663	73550	80275	146332	165932
8	Oddanchatram	72815	78873	65078	72157	7737	6716	51082	57708	123897	136581
9	Palani	92889	106420	86018	96986	6871	9434	108667	116159	201556	222579
10	Rediyarchatram	67264	72497	61327	60526	5937	11971	45646	51207	112910	123704
11	Shanarpatti	58577	67065	46485	58475	12092	8590	49243	56162	107820	123227
12	Thoppampatti	67015	69604	61024	62506	5991	7098	41597	46137	108612	115741
13	Vadamadurai	54846	62020	47784	56589	7062	5431	43713	51954	98559	113974
14	Vedasandur	58917	63124	51847	52403	7070	10721	44732	53875	103649	116999
District		**973332**	**1105155**	**841893**	**963017**	**131439**	**142138**	**949682**	**1054620**	**1923014**	**2159775**

Source: *Census 2001 and 2011*

Dindigul district is a drought prone district that naturally demands more of workforce. With respect to the workforce, around 51.17% of the total populations are workers in 2011 compared to 50.61 in 2001. The state workers participation rates are 45.6 % and 44.7% in 2011 and 2001 respectively. This explains that there is an increasing trend in the number of workers over a period of time. Also, the growth rate of the workers (13.54%) in 2011 seems to be on the higher side when compared to the district population growth rate (12.31%). From Table No.3.1, it explicit that around 48.83% of the district population are of non-worker category, which is in decreasing trend when compared to the 2001 status (49.39%). The status of main workers exhibiting an increasing trend with 87.14% in 2011 compared to 86.50 % in 2001. In contrast, the marginal workers show a decreasing trend with 12.80% to total workers in 2011 compared to 13.50 % in 2001.

Top Three blocks with Higher WPR (2011 status)	Bottom Three blocks with lower WPR (2011 Status)
Thoppampatty (60.14%)	Dindigul (41.62%)
Reddiarchathram (58.61%)	Palani (47.81%)
Guziliamparai (58.14%)	Kodaikanal (51.66%)

Worker Participation Rate

TABLE 3.2—WORKER PARTICIPATION RATE

Rural/Urban	2001			2011		
	Population	Workers	WPR	Population	Workers	WPR
Rural						
Male	629073	390469	62.07	678605	427632	63.02
Female	620689	308807	49.75	673130	334561	49.70
Persons	1249762	699276	**55.95**	1351735	762193	**56.39**
Urban						
Male	339064	194677	57.42	402333	237837	59.11
Female	334188	79379	23.75	405707	105125	25.91
Persons	673252	274056	**40.71**	808040	342962	**42.44**
Total						
Male	968137	585146	60.44	1080938	665469	61.56
Female	954877	388186	40.65	1078837	439686	40.76
Persons	1923014	973332	**50.61**	2159775	1105155	**51.17**

***Source**: Census 2001 and 2011*

In 2011, the overall worker participation rate is 51.17%, which shows an increasing trend compared to 2001. With respect to rural- urban divide, the WPR in rural area seems to be higher (56.39%) compared to the urban with 42.44%. This could be attributed to the general fact that, higher the urbanization, lower is the work participation rate and vice-versa. The fact remains same when we look into the top and bottom three blocks of the district that clearly expresses that the worker participation rates are high in the remote and agrarian blocks like Thoppampatty, Reddiarchathram and Guziliamparai where it is low in the urban based blocks like Dindigul, Palani and Kodaikanal. Similarly, the female work participation rate in rural areas is double that of the urban female rate. In contrast, the difference between male WPR at rural and urban areas shows only a slight variation compared to that of female WPR. Thus, in overall, the WPR of the particular district or a block is highly influenced by rural-urban divide and gender divide prevailing in that particular location.

Sectoral Composition of Workers

TABLE - 3.3 SECTORAL COMPOSITION OF WORKER

Sl. No	Blocks	Total Workers		Cultivators		Agri Labourers		Household workers		Other Workers	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Athoor	69394	79550	7550	5929	33745	35625	2701	3311	25398	34685
2	Batlagundu	47606	58768	8761	7027	21455	29598	917	1104	16473	21039
3	Dindigul	135929	163573	7255	8133	18730	20591	8090	8024	101854	126825
4	Guziliumbarai	53807	54398	14972	12333	25883	26492	1063	927	11889	14646
5	Kodaikanal	51799	59542	10861	8488	19251	27302	854	930	20833	22822
6	Natham	69692	84064	16747	13973	38206	47384	1423	2112	13316	20595
7	Nilakkotai	72782	85657	15540	11118	35578	45253	2828	2315	18836	26971
8	Oddanchatram	72815	78873	21802	23038	30455	33106	1663	1201	18895	21528
9	Palani	92889	106420	10511	10588	35971	41367	2696	2572	43711	51893
10	Rediyarchatram	67264	72497	17440	12569	35587	42401	1573	1130	12664	16397
11	Shanarpatti	58577	67065	11323	8201	30006	34054	1674	2254	15574	22556
12	Thoppampatti	67015	69604	24576	23454	26874	29035	1979	1443	13586	15672
13	Vadamadurai	54846	62020	12139	9616	27692	32382	1029	1392	13986	18630
14	Vedasandur	58917	63124	13873	10938	25157	23369	1490	2114	18397	26703
District		**973332**	**1105155**	**193350**	**165405**	**404590**	**467959**	**29980**	**30829**	**345412**	**440962**

***Source**: Census, 2011*

From the above table, it is quite evident that though there is an increasing trend in the total workers, the rate of growth in respect to cultivators is not encouraging as it declines significantly with negative trend. This may be due to the fact that the declining nature of agriculture with the sudden development of real estate business. Many of the crop fields are slowly transforming as commercial assets in the name of real estate promotion thus ending the road for future

agricultural development. Measures need to be taken stringently to save land from the clutches of real estate traders. Interestingly, the growth rate of agricultural labourers (15.66%) has got increased over a period of years than that of the total workers growth (13.54%) which is a significant development that to be noted. The relative growth of household workers is meager as it conveys that the household workers have a tendency to go to work to improve their better standard of life. The other workers of various categories have emerged as prominent workforce as they nearly match with the number of agricultural laborers. This situation may read as there consistently emerging enough employment opportunities for the needy ones. With respect to blocks, the agricultural labourers are quite high in the agrarian blocks like Natham (where mango, tamarind and vegetable cultivations are more), Nilakottai (where jasmine cultivation is prominent) and Reddiarchathram (where intense agricultural crops are being cultivated). In respect to household workers, Dindigul and Palani blocks being urban nature have more of household workers compared to the other blocks in the district.

Box 3.1—Child Labour Decline in District

The district official child labour status reports zero, there are instances across the district, where the child labour prevalence is there. Blocks like Athoor, Guziliamparai, Nilakottai seem to have a sizable number of child labour as a result of employment opportunities in the mills, brick kilns and quarries, inward migration from the states of Andhra, Orissa and Bihar, migration of the parents etc.. The functioning of SSA in these blocks has the facility of conducting Non-Residential Special Training Centre (NRSTC) wherein constant efforts are made to reduce the child labour in the district thereby ensuring the continuity of their education

Registration and Placement

TABLE 3.4 REGISTRATIONS AND PLACEMENT- 2013-14

Sl. No	Year	Registration	Placement
1	2007	31686	465
2	2008	32167	412
3	2009	32413	476
4	2010	30163	234
5	2011	28665	271
6	2013-14	24721	270
Total		**179815**	**2128**

***Source**: District Employment Office, Dindigul*

The number of registration with the employment office in Dindigul has been decreasing since 2009. The same is the case with the placement as it records a partially 0.95 % in the year 2011 with an average placement of 1.20% since 2007. This situation denotes that the rate of both registration and placement falls steeply as there were more of competitive exams by central and

state public commissions apart from banks and other reputed institutions. Thus, the interest towards registration has come down naturally among the job aspirants who are now highly attracted towards immediate placement thanks to the frequent exams conducted by recruitment boards and through employment melas. During the year 2013 – 14, totally 24721 registered their name in district employment office, out of which, 270 persons got employment opportunity.

Box 3.2 MGNREGA –Employment and Income

Direct provision of wage employment is obviously considered as an attractive instrument for poverty alleviation, wherever the poor depend heavily on wage employment for their income. Wage employment Programmes have sought to achieve multiple objectives. They not only provide employment opportunities during lean agricultural seasons but also in times of floods, droughts and other natural calamities. They create rural infrastructure which supports further economic activity. These Programmes also put an upward pressure on market wage rates by attracting people to public works Programmes, thereby reducing labour supply and pushing up demand for labour. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) that was launched on February 2006 across 200 districts has been now witnessed as one of the prime employment assurance programme for the rural poor that heightened their income level and purchasing power. Though it is often criticized as a barrier for the agricultural development, it has tremendous impact in the cash flow of the rural poor. The limitations in this scheme are seriously looked at and it ensures the direct payment to the beneficiaries baring few hurdles. In Dindigul district, as on 2011-12, around 2.46 lakhs households have received the job cards against the total rural households of 3.83 lakhs, thus registering 64.37 percent of employment opportunities to the rural poor with Reddiarchathram block (88.34 percent) leading the top followed by Thoppampatty (82.65 percent) and Vadamadurai (73.03 percent).

In 2013 – 14, the total number of rural households benefited under MGNREGA is 185642, i.e. 61.8 percent from 300469 households. The benefit realization of the MGNREGA work is very low in Kodaikanal block, 21.1 percent followed by Dindigul block, 42.8 percent due to urban nature.

Income

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

This section analyses the district income (net domestic product and its sectoral composition, and per capita net domestic product) from 2008-09 to 2011 at constant prices in comparison with the state (Tamil Nadu). It is to be mentioned here that the district is the lowest unit with income

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

Per capita Income

Per capita income, also known as income per person, is the mean income of the people in an economic unit such as a country or city. It is calculated by taking a measure of all sources of income in the aggregate (such as GDP or Gross Domestic Product) and dividing it by the total population. Per capita income is often used to measure a country's standard of living. The per capita income of the Dindigul district at GDDP constant prices seems to be in increasing trend over a period of time from 2004 – 05 to 2011 - 12.

The growth rate in the year 2011 - 12 is 5.7 percent against the state growth rate of 6.7 percent. Whereas in the year 2010-11, both the district and the state showed positive growth rate of 12.6 percent and 12.4 percent, respectively, and that shows the increasing trend of the district growth marginal than that of the state. This indicates there emerges enough employment opportunities for the workforce in the form of MGNREGA, textile industries, construction industry and self-employment initiatives in the district and that is a positive sign.

TABLE 3.5 PERCAPITA INCOME – AT GDDP CONSTANT PRICE

(In Rupees)

Sl. No	Year	Dindigul	Tamil
1	2004 - 2005	31842	33998
2	2005 - 2006	34713	38435
3	2006 - 2007	39532	43941
4	2007-2008	40867	46293
5	2008-2009	43493	48473
6	2009-2010	47372	53359
7	2010-2011	53327	59967
8	2011-2012	56376	63996

Source: National Accounts Statistics

The per capita income of the district is Rs.56,376 is lower than that of state Rs.63,996. The district ranks 18th in the state with respect to per capita income for the seventh consecutive year.

Sector wise Gross District Domestic Product

The GDDP of the district has been often perceived as a vital indicator to appraise the economic growth of the district. Among the three sectors, the income from the service sector (tertiary) has been prominent both at District and State income share. The income from the secondary sector has shown an increasing trend with the emergence of more industrial setups in the district.

The income of the district has been computed based on three sectors, namely Primary, Secondary and Tertiary sectors.

Primary sector: Agriculture and allied activities, Forestry and logging, fishing, mining and quarrying services boost up the primary sector. Among these, agriculture and dairy contributes much in primary sector growth of the district. **Secondary sector:** Manufacturing by means of registered and unregistered bodies, electricity, gas & water supply and construction constitutes the secondary sector. The availability of more number of textile mills, tanneries, flour mills contributes a sizeable portion of the district's income and this sector shows an increasing trend over a period. **Tertiary sector**: Catering, hotels, call centers, communications (telephone, broadband, etc.,) medicine, legal services, education and distribution of goods fall under the tertiary sector of the district. The Blooming nature of catering and hotels, education services in the recent years have a significant say in the district's economy.

Table: 3.6 Sector wise Gross District Domestic Product at Constant price (In percentage)

Year	Primary	Secondary	Tertiary
2004-2005	19.3	27.6	53.1
2005-2006	18.0	26.9	55.1
2006-2007	17.2	27.7	55.1
2007-2008	16.5	26.4	57.1
2008-2009	16.0	26.0	58.0
2009-2010	15.2	29.3	55.5
2010-2011	15.2	30.2	54.6
2011-2012	14.6	30.3	55.1

***Source**: Department of Economic and Statistics, Dindigul*

In Dindigul district, the income from the tertiary sector is high, Rs. 630235 lakhs followed by secondary sector, Rs. 347331 lakhs and primary sector, Rs.167240 lakhs during 2011 - 12. In recent years the contribution of the primary sector to the GDDP has been relatively less in comparison with other sector from table 3.6 we find that the contribution of the secondary and the tertiary sectors has more are less doubled during 2004-2005 to 2011-2012. Whereas, primary sector witnessed one third of increase in its contribution. Decrease in the net sown area and less productivity of agriculture and allied activities due to monsoon failure over the period of years could be possible reasons for the decline of the primary sector in the district. Similarly, the booming of industries such as textiles, flour mills in the district will increase the share of the secondary sector in the forthcoming years.

Box. 3.3 Recycling of Plastics – Panjampatty way

Making every panchayat a plastic litter-free zone is the grand ambition of the district administration. But making it happen is a daunting task for almost all village panchayats.

Many panchayats have successfully managed to collect plastic waste. But they face difficulty in disposing it of safely or re-using them properly. But N. Panjampatti village panchayat has shown the way in not only collecting plastic waste successfully but also disposing them of efficiently through recycling, thus making the panchayat a plastic waste-free zone.

Now, roads at Panjampatti are clean and plastic waste cannot be seen in open areas or on roadsides. The entire credit goes to three self-help groups (SHG) — Marudham, Thaazhambu and Janaki. They collect waste from all sources, including houses, and convert them into shredded plastics and pellets. "We supply shredded plastics for laying asphalt roads, and pellets to tube making units, says S. Jayanthi, head of the unit and president of the Panchayat-Level Federation.

"We procure wastes from collectors at Rs.5 a kg and sell finished products at Rs.25 a kg. We have invested Rs.3 lakh on machine." With a sharp increase in demand for pellets and shredded wastes, raw material (plastic waste) requirement has also gone up manifold for this unit.

Now, the unit has started procuring plastic waste from nearby village panchayats and town panchayats also, she adds. "Besides ensuring sustainable income for rural women, we also protect the environment and help keep the surroundings clean."

Besides ensuring sustainable income for rural women, we also protect the environment and help keep the surroundings clean. Courtesy: The Hindu, October 4, 2014

Poverty and Inequality

Poverty is often defined as the state of being poor with little or no income, goods or means of support. It is the condition of being deprived. Below Poverty Line is an economic benchmark and poverty threshold used by the government and economists.

In Dindigul, there are 2, 84,282 farming families in which majority of the farmers (92.45 percent) belonged to OC, BC and MBC categories and 7.54 percent are in SC category with a paltry 26 farming families in Kodaikanal block belonging to ST category. 9.01 percent of SC farmers are grouped under less than 1ha. of dry land or 0.5 ha of wetland category and another 4.58 percent of the SC farmers are grouped under more than 1 ha of dry land or 0.5 ha of wetland category. Interestingly in the other categories except ST, we find many large farmers with the dominant presence of about 92.45 percent. Among the blocks, Nilakottai has more farmers who belonged to SC category followed by Palani and Batlagundu block. The other category farmers are more in number in Oddanchathram block followed by Vedasandur and Kodaikanal.

TABLE 3.7 BLOCKWISE TRENDS IN POVERTY LEVEL, 2013 - 14

Sl. No	Block	Total No. of HHs	Total No. of BPL HHs	% of BPL families
1	Athoor	32871	8025	24.41
2	Battlagundu	22331	6601	29.56
3	Dindigul	35052	8647	24.67
4	Guziliumbarai	21089	5568	26.40
5	Kodaikanal	22432	5530	24.65
6	Natham	38317	9717	25.36
7	Nilakkotai	31132	8509	27.33
8	Oodanchadram	29374	10028	34.14
9	Palani	27522	5680	20.64
10	Rediyarchatram	30802	8375	27.19
11	Shanarpatti	28242	10733	38.00
12	Thoppampatti	25055	10948	43.70
13	Vadamadurai	18563	5241	28.23
14	Vedasandur	20291	7312	36.04
District		**383073**	**110914**	**28.95**

***Source**: PO, MahalirThittam and Pudhuvaazhalvu, Dindigul*

From the table 3.7 we find that Dindigul district has 28.95 percent of BPL with Thoppampatty block having the highest of 43.70 percentage, followed by Sanarpatty (38.00 percent) and Vedasandur (36.04 percent).The percentage of BPL families are very low in Palani (20.64 percent), Athoor (24.41 percent), Kodaikanal (24.65 percent) and Dindigul (24.67 percent) during 2013 – 14.

Box 3.4. Backward Regions Grant Fund (BRGF)

The erstwhile Rashtriya Sam VikasYojana (RSVY) implemented in the five backward districts of Tamil Nadu through the funding of Union Planning Commission was transferred to Ministry of Panchayat Raj and modified as Backward Regions Grant Fund. Now, the scheme is implemented in the 6 districts of Villupuram, Tiruvannamalai, Cuddalore, Nagapattinam, Dindigul and Sivagangai.

The BRGF is designed to redress the regional imbalances in development so as to bridge the critical gaps in local infrastructure and other development requirements that are not being met adequately by the existing inflows. The scheme focuses on strengthening the local governance through capacity building and professional support to local bodies for planning, implementation & monitoring their plans and improves the performance and delivery of critical functions.

BRGF consists of two funding windows:-

1. Capacity Building Fund meant to build capacity of the elected representatives and the officials associated with Panchayat Raj Institutions in planning, implementation, monitoring, accounting and improving the accountability & transparency.
2. An untied grant meant to be used by Panchayats and urban Local Bodies to address critical gaps in integrated development, identified through the participative planning process.

The Government of India have sanctioned Development Grants under BRGF to the six BRGF districts for the years 2011-12 and 2012-13 as detailed below:

Allocation under BRGF for 2011-12 & 2012-13

Sl.No.	District	2011-12	2012-13
		Amount (Rs.in crores)	
1.	Cuddalore	19.33	19.34
2.	Vilupuram	24.10	24.10
3.	Tiruvannamalai	14.16	21.14
4.	Dindigul	20.46	20.46
5.	Nagapattinam	16.08	16.08
6.	Sivagangai	16.64	16.64
	Total	**110.76**	**117.76**

Family Card holders

The District Supply Office of Dindigul has the prime responsibility in distributing the family cards to the needy and eligible families. BPL families are those who primarily depend on the Public Distribution System for their basic consumption needs. The details of the family cards in the district as of 2013 - 14 are given in table 3.8. Nearly, 684338 households are having family cards in Dindigul district.

TABLE 3.8 FAMILY CARD HOLDERS, 2013 - 14

S.No	Blocks	HH provided Family Cards
1	Athoor	41975
2	Battlagundu	31182
3	Dindigul	164608
4	Guziliamparai	23051
5	Kodaikanal	30771
6	Natham	37470
7	Nilakkotai	73232
8	Oddanchadram	52829
9	Palani	80645
10	Rediyarchatram	38880
11	Shanarpatti	30433
12	Thoppampatti	23070
13	Vadamadurai	26800
14	Vedasandur	29392
District		**684338**

***Source**: District Supply Office, Dindigul*

Conclusion

It is a well known fact that employment, income and poverty are interrelated and they have significant influence over human development. So, analysing changes pertaining to these aspects is very important to understand what is happening regarding human development. The decline in share of the primary sector in national income is not being accompanied by a significant shift in the share of primary sector employment to secondary and tertiary sectors. With respect to Dindigul district, the secondary sector has a superior trend than the primary and tertiary that needed to be capitalized for stabilizing and sustained growth.

The worker participation rates are high in the remote and agrarian blocks like Thoppampatty, Reddiarchathram and Guziliamparai where it is low in the urban based blocks like Dindigul, Palani and Kodaikanal. Similarly, the female work participation rate in rural areas is double the urban female rate. With respect to blocks, the agricultural labourers are quite high in the agrarian blocks like Natham (where mango, tamarind and vegetable cultivations are more), Nilakottai (where jasmine cultivation is prominent) and Reddiarchathram (where intense agricultural crops are being cultivated). In respect to household workers, Dindigul and Palani blocks being urban nature, have more of household workers compared to the other blocks in the district.

Dindigul district has a BPL of 28.95 percent with Thoppampatty block having the highest 43.70 percentage, followed by Sanarpatty (38.00 percent) and Vedasandur (36.04 percent).

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

Chapter
4
Demography, Health and Nutrition

The measurement of aspects related to demography, health and nutrition forms an important constituent in determining the human resource development of the population. In the tracking of demography, the important elements that are recorded and monitored include population, sex ratio, crude birth rates and death rates. In the tracking of health, the important elements that are recorded and monitored include life expectancy rate, infant mortality rate, maternal mortality rate, institutional deliveries and immunization. On the other hand, the extent of malnutrition, and incidence of life-threatening diseases are important elements for tracking nutrition.

This chapter presents the demography, health and nutrition indicators for the Dindigul district and the blocks in the Dindigul district. While doing so, some of the indicators have been present vis-a-vis the comparable indicators for the state. Also, in some of the cases, the trends in the indicators have been presented for last five years. The indicators for the period 2011 have been also compared with the measurement of the indicators in the year 2001. Tables and charts are presented in the chapter to explain the trends, and the trends are also discussed.

Demographic Trends and Health Indicators

Table 4.1 presents the demographic profiles of the fourteen blocks of Dindigul district. In the years between 2011 and 2001, the district has shown a population increase of 12.3 percent, as compared to the population increase of 15.6 percent in the state of Tamil Nadu. The highest increase in population (18.2 percent) was recorded for the Natham block, while the lowest increase (6.5 percent) was recorded for Thoppampatti block.

Natham has highest High Order Birth rate in the district that naturally boosts up the population growth in the block. Consistent measures to be taken by the respective block health officials in joining hands with local PRIs, SHG federations to bring down the HOB thereby regulating the population explosion in that block. In Thoppampatty block, the CBR is very low and this contributes for the lesser population growth in that block. With respect to sex ratio, Dindigul district has 998 females per 1000 males against the state ratio of 995. This was slightly lower than that of state in 2001. Athoor, Vedasandur, Oddanchathram, Dindigul and Palani are the top five blocks having sex ratio more than 1000 and blocks like Vadamadurai, Batlagundu and Natham are the bottom three blocks having less sex ratio in 2011. When all other blocks in the district show increased trend of sex ratio, blocks like Natham and Vadamadurai show decreased trend.

Dindigul district has shown a decrease in population density to the extent of 32 percent between the years 2001 – 2011. All the blocks of Dindigul district show a decrease in population density, except for the Shanarpatti block, which has shown an increase of 27 percent in population density.

TABLE 4.1 DEMOGRAPHIC PROFILES

S. No	Block	Population		Sex Ratio		SC Popln. %		ST Popln. %	
		2001	2011	2001	2011	2001	2011	2001	2011
1	Athoor	146139	159846	1004	1015	21.04	21.85	0.05	0.07
2	Batlagundu	104402	120709	957	981	22.01	23.83	0.52	0.43
3	Dindigul	348136	392979	988	1007	14.52	16.20	0.11	0.10
4	Guziliumbarai	86149	93567	985	994	20.75	21.34	0.19	0.02
5	Kodaikanal	100645	115250	960	991	15.67	19.80	2.00	3.13
6	Natham	134208	158687	991	983	13.09	12.59	0.01	0.02
7	Nilakkotai	146332	165932	972	986	28.08	29.34	0.96	1.01
8	Oddanchatram	123897	136581	1002	1006	20.22	22.58	0.13	0.12
9	Palani	201556	222579	987	1008	26.88	29.20	0.48	0.54
10	Rediyarchatram	112910	123704	994	998	17.29	18.60	0.12	0.22
11	Shanarpatti	107820	123227	988	992	20.48	20.81	0.21	0.02
12	Thoppampatti	108612	115741	984	993	23.47	25.13	0.00	0.03
13	Vadamadurai	98559	113974	980	979	17.33	17.91	0.40	0.01
14	Vedasandur	103649	116999	1003	1013	15.60	16.78	0.01	0.01
District		**1923014**	**2159775**	**986**	**998**	**21.04**	**21.85**	**0.05**	**0.07**
State		**62405679**	**72138958**	**987**	**995**	**22.01**	**23.83**	**0.52**	**0.43**

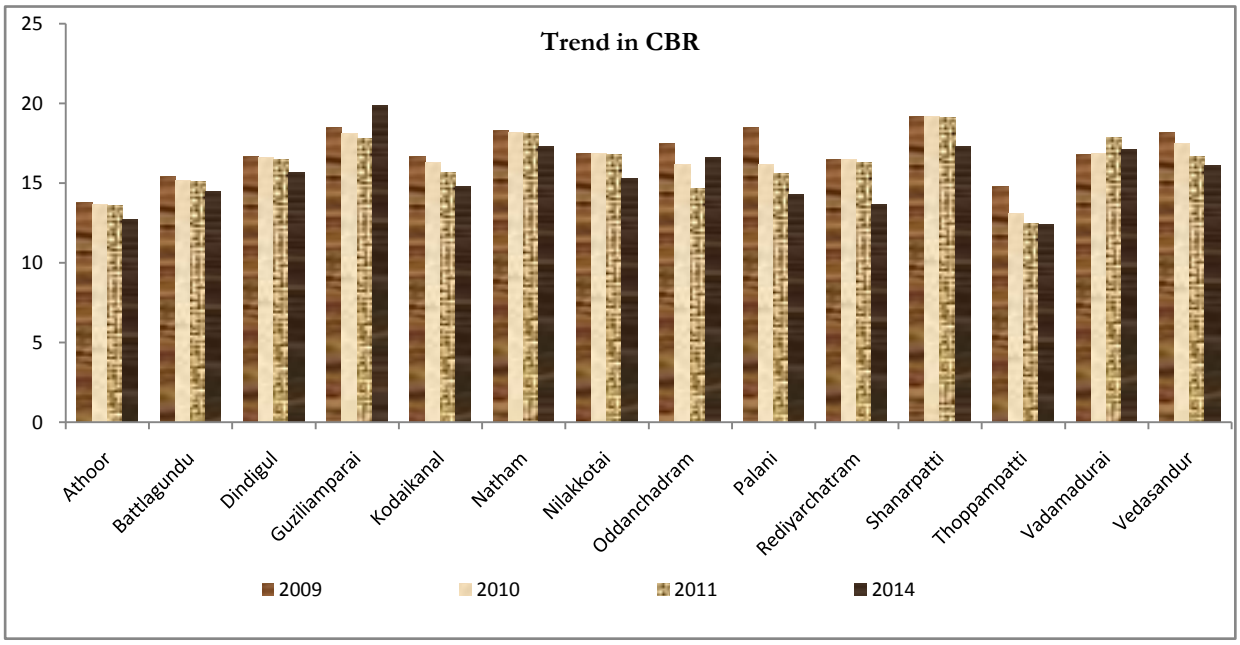
***Source**: Revenue Department Census 2011*

Crude Birth Rate and Crude Death Rate

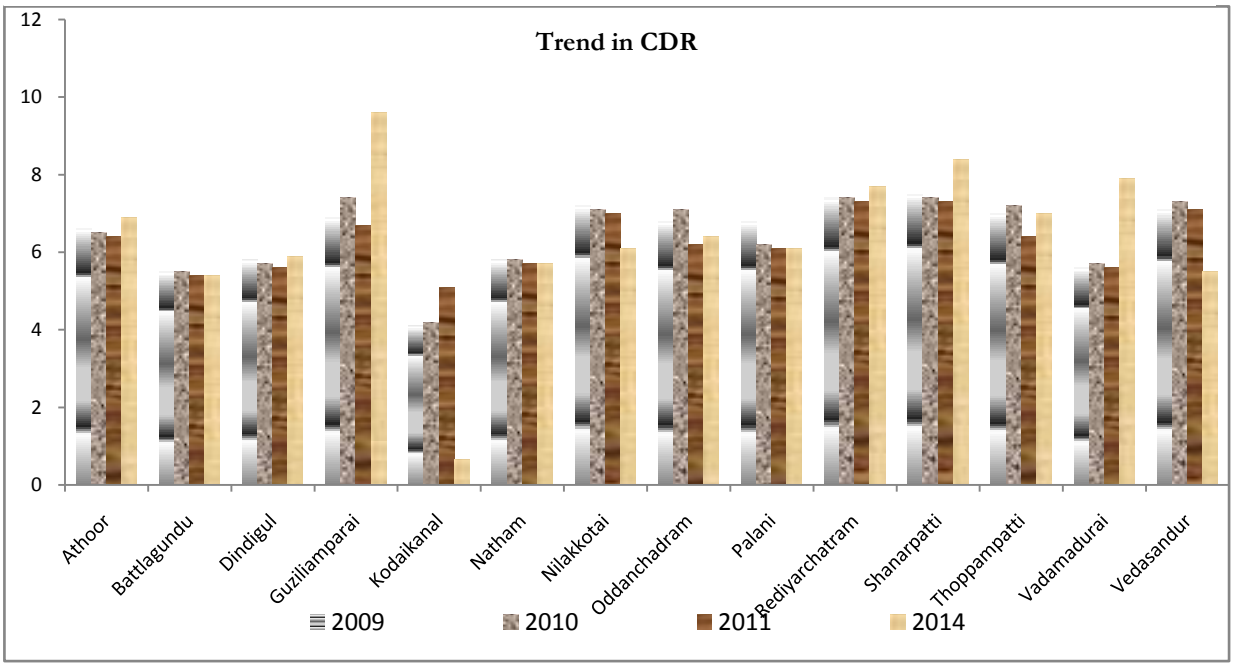
The Crude Birth Rate (CBR) and Crude Death Rate (CBR) are termed as statistical values that are used to measure the growth or decline of a population.

The Crude Birth Rate and Crude Death Rate are both measured by the rate of births or deaths respectively among a population of 1000. The CBR and CDR are determined by taking the total number of births or deaths in a population and dividing both values by a number to obtain the rate per 1000.

Fig 4.1 Trends in CBR & CDR



***Source**: DDHS of Dindigul and Palani*



***Source**: DDHS of Dindigul and Palani*

The Crude Birth Rate is called "crude" because it does not take into account age or sex differences among the population. In our hypothetical country, the rate is 15 births for every 1000 people but the likelihood is that around 500 of those 1000 people are men and of the 500 who are women, only a certain percentage are capable of giving birth in a given year. Crude Birth Rates of more than 30 per 1000 are considered high and rates of less than 18 per 1000 are considered low.

Figure 4.1 presents the trends in CBR (Crude Birth Ratio) and CDR (Crude Death Ratio) for the years 2009 to 2014. The CBR for Dindigul is 18.7 as compared to the CBR of 19.3 for Tamil Nadu in 2001. Correspondingly the CDR for Dindigul has declined from 6.8 per 1000 population in the year 2001 to 6.4 in the year 2014. With respect to the blocks, Guziliamparai have high death rate (9.6) in the year 2014 while Kodaikonal possess lower death rate. But it is true that the trend of death rate has been reduced, in India efforts are being made to reduce the epidemics like plague, malaria etc. In the Seventh Five Year Plan, a sum of Rs. 715 crore was spent on this particular aspect. Moreover, development of medical and sanitary conditions has also reduced the death rate.

Sex Ratio

The sex ratio is the number of males and females for every 1000 females in a population. Sex ratios affect various aspects of social life, including the availability of potential marriage partners and the composition of the labor force. In Dindigul district, the sex ratio is quite encouraging as there are 998 females against 1000 males edging the state ratio of 995 per 1000 males.

TABLE 4.2 SEX RATIO

Sl. No	Block	Sex ratio	
		2001	2011
1	Athoor	1004	1015
2	Batlagundu	957	981
3	Dindigul	988	1007
4	Guziliumbarai	985	994
5	Kodaikanal	960	991
6	Natham	991	983
7	Nilakkotai	972	986
8	Oddanchatram	1002	1006
9	Palani	987	1008
10	Rediyarchatram	994	998
11	Shanarpatti	988	992
12	Thoppampatti	984	993
13	Vadamadurai	980	979
14	Vedasandur	1003	1013
District		**986**	**998**
State		**987**	**995**

***Source**: Census 2011*

Table 4.2 presents the sex ratio for Dindigul district and its blocks for the years 2001 and 2011. The sex ratio in Dindigul has shown an increase of 1.19 percent, or an increase of about 12 females for 1000 males for the district, as compared to the increase of about 8 females per 1000 females in the state from 2001 to 2011. The highest increase in sex ratio is recorded for the

Kodaikanal block, where the number of females has increased from 960 to 991 per 1000 males. Interestingly, the Natham block with the highest increase in population has also recorded the most negative percentage change in the sex ratio in the years between the 2001 and 2011. The number of females in the block has decreased from 991 females per 1000 males in 2001 to 983 females per 1000 males in 2011.

Child Sex Ratio (Per thousand male children)

Child Sex Ratio is defined as the number of females per thousand males in the age group 0-6 years in the human population. An imbalance in this age group will extend to older age groups in future years. Currently the ratio of males to females is generally greater than 1; i.e. there are more boys than girls. The child sex ratio in Dindigul is alarming as there are only 933 female children per 1000 male children whereas the ratio for the state is 946 per 1000.

TABLE 4.3 CHILD SEX RATIO

Sl. No	Block Wise / District / State	Population in the age group of 0-6		Sex Ratio
		Male	Female	
1	Athoor	7848	7203	918
2	Batlagundu	6238	5881	943
3	Dindigul	20309	18969	934
4	Guziliumbarai	4997	4491	899
5	Kodaikanal	6194	6044	976
6	Natham	9582	9126	952
7	Nilakkotai	9331	8706	933
8	Oddanchatram	5868	5312	905
9	Palani	10311	9900	960
10	Rediyarchatram	6256	5941	950
11	Shanarpatti	7232	6677	923
12	Thoppampatti	4834	4532	938
13	Vadamadurai	6814	6347	931
14	Vedasandur	6141	5492	894
District		**111955**	**104621**	**933**
Tamilnadu		**-**	**-**	**946**

***Source**: Census 2011*

Table 4.3 presents the child sex ratio for Dindigul district and its blocks for population in the age group of 0-6. The district has recorded a child sex ratio of 933 females per 1000 males, as compared to the child sex ratio of 946 for the state of Tamil Nadu. Among the blocks of Dindigul district, the Kodaikanal block has the highest child sex ratio of 976 females per 1000

males, and the Vedasandur block has the lowest child sex ratio of 894 females per 1000 males. Undesired practices among the scan centers in communicating the births of female children, female infanticide in the remote pockets of the rural blocks are the key reasons for the grim child sex ratio in the district.

Life Expectancy at Birth

TABLE 4.4 LIFE EXPECTANCY AT BIRTH

S.No	District	Male			Female			Combined		
		2001	2011	2014	2001	2011	2014	2001	2011	2014
1	Dindigul	62.67	65.89	69.9	66.64	69.16	73.6	64.66	67.53	71.6
2	State	64.91	64.97	71.8	68.85	68.85	75.2	66.74	66.20	73.4

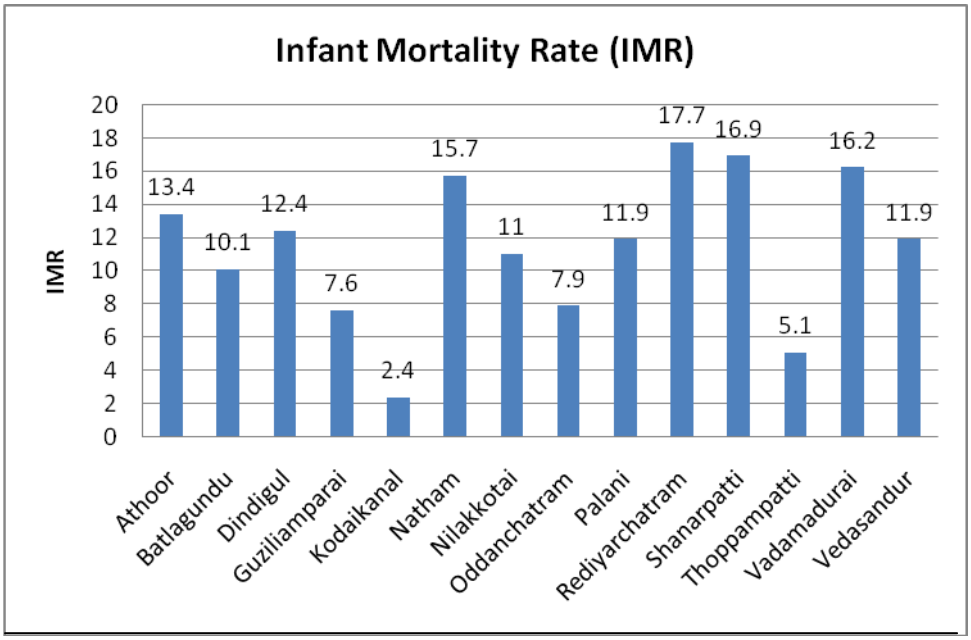
***Source**: DDHS of Dindigul and Palani*

Table 4.4 presents the Life Expectancy at Birth of Dindigul district for males and females, for the years 2001, 2011 and 2014. Dindigul district has recorded life expectancy at birth as 71.6 for the year 2014, and it has increased from 64.66% in the year 2001. The life expectancy at birth for males has increased from 62.67 in the year 2001 to 69.9% in the year 2014. The life expectancy at birth for females has increased from 66.64% in the year 2001 to 73.6 in the year 2014. It is a general pattern that the female has more longevity than the males both in the district and the state. It is also interesting to note that in the year 2011, life expectancy at birth of the district was higher than that of the state. But in the year 2014 we find that it is lower than that of the state.

Infant Mortality rate

Infant Mortality Rate (IMR) is defined as the ratio of the number of deaths in the first year of life to the number of live births occurring in the same population during the same period of time. This rate is often used as an indicator of the level of health in a locality. Dindigul district shows IMR of 18.7 in the year 2009 when compared to the state rate of 22 per 1000 live births in the corresponding year. In the year 2014, the IMR of the district has been reduced to 13 and that reflects the good performance of the Health department in the district. Figure 4.2 shows the inter-block variations in the district in respect to the IMR. The blocks like Reddiarchatram, Shanarpatti, Vadamadurai, Natham and Athoor show higher IMR Kodaikanal and Thoppampatty blocks show lower IMR compared to other blocks. IMR is often attributed to low awareness among the rural women, prevalence of anemia among the pregnant mothers, poor pre-natal care owing to poverty etc., but generally these rates are often fluctuating between the years and a trend analysis for a minimum five years would give a better picture. Increase in female literacy, media awareness and effective government schemes like Muthualakshmi Reddy scheme have a direct positive relationship in bringing down the IMR.

Fig 4.2 INFANT MORTALITY RATE (IMR)



***Source**: Vital events survey, 2014*

Maternal Mortality Rate

The Maternal Mortality Rate (MMR) is the annual number of female deaths per one lakh live births from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). The MMR includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, for a specified year. As per the vital statistical events data 2009, the MMR of Dindigul district is 123.69 per lakh live births. The backward blocks like Thoppampatty, Guziliamparai and Shanarpatty often record high MMR due to remote nature of the blocks coupled with lack of awareness among the pregnant mothers. It is specifically noted that high order birth rates in blocks like Shanarpatty and Natham are important contributing factors to MMR of the blocks. Prevalence of anaemia among the adolescent girls and the pregnant mothers has also a special role in increasing the MMR of the block. Despite these constraints, the reach of government schemes like JSSY has encouraged more mothers to go for institutional deliveries and has a significant role in the reduction of MMR in many of the blocks.

TABLE 4.5 MATERNAL MORTALITY RATE

Sl.No	Blocks	2009	2014
1	Athoor	142.31	23.99
2	Batlagundu	232.69	38.00
3	Dindigul	132.45	32.59
4	Guziliamparai	242.72	119.95
5	Kodaikanal	138.70	64.88
6	Natham	154.44	75.08
7	Nilakkotai	0.00	65.28
8	Oddanchatram	90.42	26.44
9	Palani	0.00	22.80
10	Rediyarchatram	0.00	0.00
11	Shanarpatti	193.24	23.46
12	Thoppampatti	228.96	50.80
13	Vadamadurai	107.18	25.38
14	Vedasandur	170.55	35.82
	District	123.69	43.17

***Source**: Vital events survey, 2009 and DDHS, Dindigul,2014*

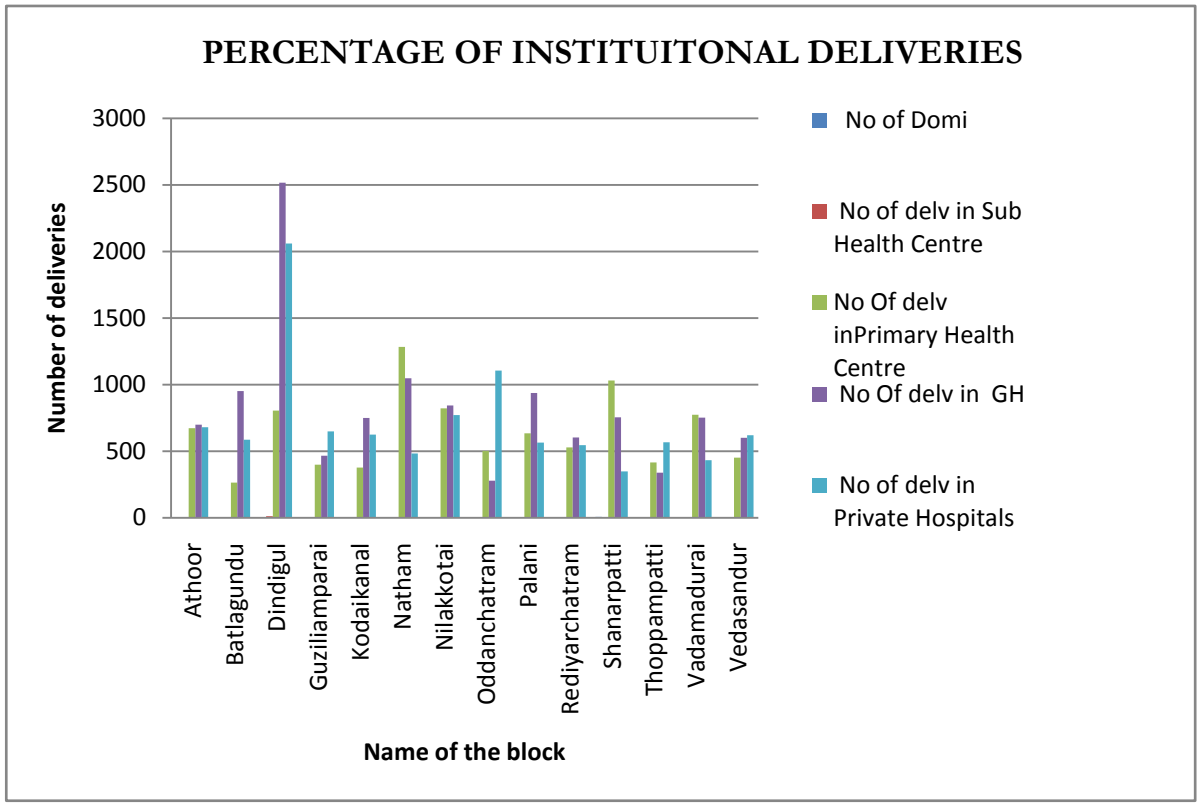
Table 4.5 gives details of block-wise maternal mortality rates in the district. There is a very significant decline in MMR in the entire block except Palani as a result of the steps taken by the heath department. But in the case of Palani MMR increased from zero rate in 2009 to 22.80 in 2014. The interesting causes for this set back must be looked into so that necessary measures may be taken. Among the blocks in the district, the highest decline from 242.74 in 2009 to 119.95 in 2014 has been recorded in Guziliamparai block, and no death has occurred in Reddiarchatram block. Blocks like Vadamadurai, Shanarpatty and Natham need to be concentrated constantly to keep the momentum going.

Place of Delivery

Gone are the days, when the pregnant mothers of rural area sought the services of local 'midwife' for delivery. Recent advanced changes in the medical field in coupled with the appropriate government schemes and increased awareness among the literate pregnant mothers have changed the scenario resulting in higher percentage of institutional deliveries. Among the different places of deliveries in the district for the year 2013-14, 11547 deliveries happened in the govt hospitals whereas in private hospitals 10,039 deliveries took place and the lowest (18 deliveries) being domestic deliveries that clearly reflect the intensity of the institutional deliveries in the district. The blocks Athoor and Oddanchathram have recorded more number of private deliveries than the other blocks due to the presence of Kasthuribai maternity hospital, Gandhigram and Christian Fellowship Hospital respectively, whereas in Dindigul (including

Dindigul Corporation), Natham and Vathalgundu blocks more deliveries took place at government hospitals that expresses the efficiency of the government healthcare services in the block.

Fig 4.3 PERCENTAGE OF INSTITUITONAL DELIVERIES, 2013 – 14



***Source**: DDHS, Dindigul & Palani.*

Fig 4.3 shows that the remote and backward blocks like Natham, Shanarpatty and Guziliamparai have accessed more of institution deliveries though there are only slight differences among the other blocks. The domiciliary nature of deliveries is still being a feature in some of the blocks like Shanarpatty, where the hill belt of few villages in and around Sengurichi panchayat being the victim.

Box. No. 4.1 Christian Fellowship Hospital, Oddanchathram

The story of Oddanchatram hospital is that of a few people venturing into a very backward area as a three-man team including a doctor - living in mud wall huts and starting in a one-room dispensary. This has developed after 50 years into a multi-speciality base hospital with 100 doctors, 299 beds and an average attendance of one thousand out-patients a day. Daily bed occupancy is 75%.

The challenge came to a small prayer group in a medical school in Miraj way back in the forties as to what to do with their lives. Three options came to them. One was to stay back and develop the school as a good medical college, to train potential missionaries and the other was to go and try to revive mission hospitals, which were closing down in the wake of India's independence. The last option was to go out into needy areas and provide health care in co-operation with the local people and with local resources as a new venture in faith. Finally the last option was accepted. One section of the group went to Madhya Pradesh and the other thought of some needy place in South.

The team surveyed the place and found a great need for healthcare and development of the people. Local friends welcomed the group and offered assistance to start the medical service. There was only a mud walled hut for the doctor to stay in, and a "haunted house" to start the dispensary. The hospital was inaugurated in January 1955.

As the centre did not have much in the way of facilities, only a few patients with minor illnesses attended the dispensary. But one night a woman was brought who was in labour for 3 days. As she needed a cesarean operation, she was advised to go to Madurai (80 Km. away) for surgery. The husband expressed his inability to take her out. As the patient faced imminent death, the medical team offered to do the surgery if the party was willing to accept the high risk. They agreed. So the team attempted a Cesarean in the side room of the kitchen on a raised bench, with boiled hand towels and handkerchiefs as linen. The operation was performed successfully and the mother and child were saved by the grace of the Lord who heard our prayers in that crude set up. The news spread and many patients began to attend the hospital. Bullock carts in which they arrived were converted into emergency beds. Neighbours offered their spare rooms and even cow sheds to accommodate patients.

During the last five decades, the base hospital was steadily growing, adding more speciality from time to time. Today the hospital has hundred doctors, nearly half of whom are postgraduates. The outpatient attendance in the main hospital averages about one thousand patients a day, drawn from a radius of about 50 kms.

(Courtesy: CF Hospital, Oddanchathram)

Still Birth Rate (SBR)

Still Birth Rate or Fetal Death Rate is termed as the number of still births or fetal deaths divided by the sum of live births and fetal deaths occurring in the same population during the same time period. The district has a still birth rate of 16.90 in the year 2011 and has been fluctuating since 2007, in 2013 it has been reduced to 15.60.

TABLE 4.6 STILL BIRTH RATE

Sl.No	Block	2001	2007	2008	2009	2010	2011	2013
1	Athoor	19.00	18.50	20.10	18.90	17.90	15.70	15.10
2	Batlagundu	10.00	6.80	17.00	11.70	7.80	9.90	1.90
3	Dindigul	16.90	15.50	21.50	12.10	18.90	11.70	17.00
4	Guziliamparai	20.55	14.60	14.30	13.10	12.10	16.30	11.20
5	Kodaikanal	11.54	16.40	16.20	13.60	11.60	20.80	20.70
6	Natham	23.10	7.50	19.00	19.00	15.80	20.30	23.70
7	Nilakkotai	23.70	24.90	24.80	18.90	16.10	12.30	11.30
8	Oddanchatram	16.64	11.90	11.50	12.10	12.40	13.30	30.80
9	Palani	19.44	17.90	16.90	15.40	15.20	22.40	17.90
10	Rediyarchatram	15.80	5.70	20.10	19.60	13.40	15.10	12.80
11	Shanarpatti	12.20	9.70	15.20	14.2.	15.90	19.40	9.30
12	Thoppampatti	20.85	18.00	17.60	16.50	16.10	23.00	12.90
13	Vadamadurai	32.49	25.90	24.80	22.10	20.50	19.70	17.90
14	Vedasandur	30.48	15.10	14.90	13.40	12.60	16.80	15.90
	District	**19.48**	**14.88**	**18.14**	**15.87**	**14.73**	**16.90**	**15.60**

Source: DHDR 2007 &DDHS of Dindigul and Palani

Table 4.6 presents the Still Birth Rate for Dindigul district and its blocks for the years 2001 and 2007 to 2013. Overall, the district has recorded a decline in the Still Birth rate from 19.48 per 1000 in the year 2001 to 15.6 per 1000 in the year 2013. Among the blocks in the district the highest SBR occurred in Oddanchatram block in the year 2013 which has been increased from 16.64 to 30.80 where district administration has to address the issue. Natham, Kodaikonal, Dindigul, Palani, Vadamadurai have also to focused in reducing the still birth rate.

Immunization

Of the total number of 12225 children, the number of children immunized is 12000, i.e. 98.16 percent of the children were recorded as immunized. Among the blocks in the district, the highest percentage of children immunized (100 percent) was recorded for Oodanchadram and Kodaikonal block, and the lowest percentage (93.40 percent) of children immunized was recorded for Vadamadurai block, and 4 blocks Ahoor, Dindigul, Natham and Shanarpatty have recorded 99% of immunization.

Female infanticide

Female infanticide is the intentional killing of newborn female children or the termination of a female foetus through selective abortions. Infant mortality rate, the neonatal mortality rate, still birth rate and the child sex ratio have the correlation with female infanticide. Vedasamdur (894), Guziliamparai (899) and Athoor (918) block shows lesser child sex ratio than that of the district that gives an apprehension of possibility of female infanticides in these blocks. Though there prevails strict stringent laws against female infanticide, still cases are there in the remote pockets of the distant blocks that could not be unveiled in the normal scheme of things. Usually, discrimination against girls is measured by using the child sex ratio. The government is implementing women empowerment schemes over a decade to showcase the significance of women. Some of the notable schemes are;

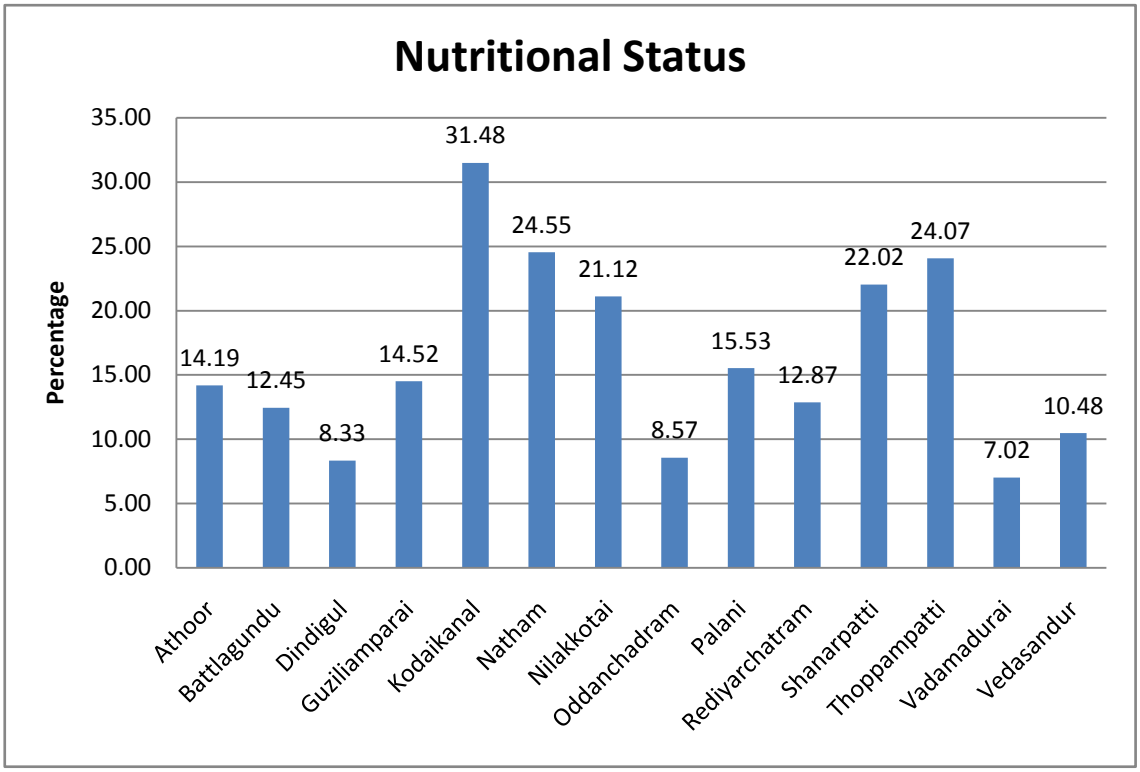
- Support to Training & Employment Program for Women (STEP)
- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)
- Rashtriya Mahila Kosh - (National Credit Fund for Women)

Thanks to the urban literacy and media awareness, the urban families have positive trend towards female children whereas the case is still a worry in the rural areas where the preference for male children is more. Social audit, attitudinal change towards female children and the surprise visits to the scan centres by the concerned department officials is the need of the hour to prevent the female infanticides in the district.

Nutritional Status

Nutritional status is one of the indicators of the overall wellbeing of population and human resources development. Malnutrition is the cumulative effect of factors like poverty, inadequate access to food, illiteracy, large size families, poor environmental sanitation, lack of basic minimal health care, lack of personal hygiene, lack of easy access to adequate safe drinking water and lack of awareness. The manifestations of malnutrition could be seen in the prevalence of specific nutrient deficiency disorders such as protein-energy malnutrition, anemia, night blindness, goiter, susceptibility to a number of infectious diseases, low birth weight of children, high IMR and MMR, lack of resistance to illnesses among mothers and children, growth retardation (both physical and mental) and stunting among toddlers. Infants, growing children, pregnant and lactating women are the most malnourished segments of society and they need adequate nutritional support.

Fig 4.4 NUTRITIONAL STATUS OF THE CHILDREN (0-5 YEARS)



***Source**: ICDS, Dindigul,2013-14*

Figure 4.4 presents the Trend in Nutritional Status (0-5 years) for Dindigul district between the years 2001 – 2014. As seen from the chart, while the percentage of normal children has increased from 57.99 percent in 2001 to 80.46 percent in the year 2011, the percentage of malnutrition children has decreased from 42.01 percent in the year 2001 to 19.54 percent in the year 2013-14. The ICDS department has taken significant steps in reaching all the eligible families for improving the nutritional status of the children. Frequent awareness camps, appreciable nutrition schemes by the government, constant follow ups are the key influencing factors that give the better performance rank in the nutrition status of the district.

Box No 4.2. Nutritional security through kitchen garden - (A Case Study of Murugeswari, Dharmathupatti Village, Kannivadi, Dindigul District)

Murugeswari lives in Dharmathupatti village with her husband and two children. She is a member of Durgaiyamman Kalanjiam (women SHG) in that village. The group used to meet once in every month and discuss about their savings, credit, insurance in addition that issues related to health and sanitation and sharing the good health practices they have adopted. During the present season, the staff convened a meeting and suggested them to raise Nutritional gardens, whoever has space around their houses. The members discussed amongst themselves about this and of them six members have shown interest in raising the kitchen garden. Murugeswari's family was one among them. The family lives in a tiled house constructed with a front yard. This front yard was unkempt for long and many weeds, bushes and wild creepers had grown all over. Kalanjiam Thozhilagam Limited, Madurai supplied them with good quality vegetable seeds through Kannivadi Vattara Kalanjiam (A federation of women SHGs), as part of Nutritional Kitchen Garden promotion program. The entire family worked for two days and cleared the wild plants, level the land and made a fence around it. They sowed the seeds of various vegetables like Bitter Guard, Radish, Bottle Guard, Snake guard, Tomato, Brinjal, Green Leafs, Beans, Pumpkin and Ladies finger. Their children fetched water from nearby hand pump and watered the plants. The garden was taken care continuously by the family members.

The plants had a healthy growth and within three months, they started yielding vegetables. With a meager investment of Rs.10/- Murugeswari and her family were able to consume fresh vegetables, worth about Rs. 2,500 almost throughout the year. Now the family has achieved nutritional security to an extent. They are also distributing some of the surplus vegetables to their neighboring families, free of cost as a good will gesture. Consequently, their neighboring families have a very friendly relationship with them and are protecting the Nutritional kitchen garden from cattle and watering it, in their absence. Totally, 500 families have raised kitchen gardens around their houses and improved the nourishment and nutrition security of their families.

Provision of IFA Tablets

Provision of Iron Folic Acid (IFA) tablets for the adolescent girls, pregnant women and below 5 years children results in the mental development, increase the IQ levels, concentration and physical activity. Iron deficiency is called as anaemia, the untreated anaemia affects the body immune system, heart and lungs. Iron is a main component in red blood cells; it carries the oxygen throughout the body. Hemoglobin content 12gm shows normal Hb and less than 7gm shows severe anaemia. Lack of awareness on anaemia and its practices, poor/ low consumption of iron rich food, IFA tablets, personal hygiene practices like not using chappals, malnourishment among the women, children and adolescent girls, early marriage, early

conception, frequent conception, nil spacing between two pregnancies and lack of awareness of the antenatal care etc. are some of the key factors influencing anaemia prevalence among the adolescent girls and pregnant mothers.

TABLE 4.7 PROVISIONS OF IFA TABLETS

Sl.No	Block	% of Women took IFA tablets	% of adolescent girls took IFA tablets
1	Athoor	102.2	95.7
2	Batlagundu	98.8	97.1
3	Dindigul	97.9	95.5
4	Guziliamparai	95.9	76.1
5	Kodaikanal	70.5	60
6	Natham	106.1	102.5
7	Nilakottai	108.4	91.9
8	Oddanchatram	70	12
9	Palani	73.9	37.4
10	Rediyarchatram	94.8	92
11	Shanarpatti	97.4	100.3
12	Thoppampatti	89.2	57.6
13	Vadamadurai	52.5	72
14	Vedasandur	98.1	69.4

***Source**: DDHS of Dindigul and Palani, 2013-14*

Table 4.7 presents details of provision of IFA tables for the blocks of Dindigul district, in terms of percentage of women who took IFA tablets and the percentage of adolescent girls who took IFA tablets. As seen from the table, among the different blocks, Nilakottai block had the highest percentage (108.4 percent) of women who took IFA tablets, and the Vadamadurai block had the lowest percentage (52.5 percent) of women who took IFA tablets. The Natham block had the highest percentage (102.5 percent), while Oddanchatram block had the lowest percentage (12 percent) of adolescent girls who took IFA tablets.

Box- 4.3 Nutrition Programmes of Government

The Integrated Child Development Scheme programme aims at providing services to pre-school children in an integrated manner so as to ensure proper growth and development of children in rural, urban and tribal areas. Immunization, Health checkup, Referral services, Pre-school non-formal education, Nutrition and Health information are the key performance areas of the ICDS. In Dindigul, there are 2031 anganwadi centres in which 1712 are functioning in the govt. buildings, 115 are rent free and 204 are rented. Out of total 0-5 children of 142610, ICDS have extended their services to more than 11000 children in the district. It provides key focus on the Severely Under-weight (SUW) children with ghee, dhal and groundnut to improve their nutrition status. Besides, the centres conduct awareness programmes and exhibitions on nutritive value of millet products and also ensure periodic vaccinations through parental counselling. The schedule of the noon-meal programme and ICDS is given below,

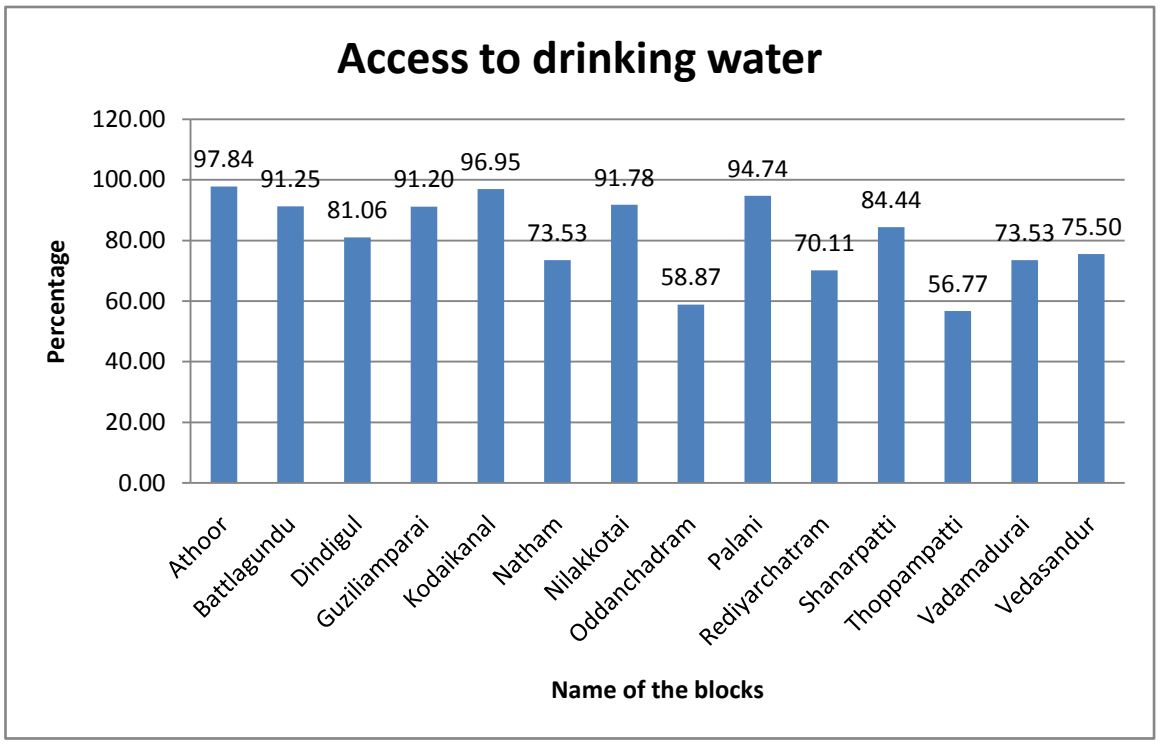
Mid day meal	Rice (100 g), Vegetables (50 g), Dal (15g), oil (3g) and egg for 5 days. For Tuesday and Friday, Bengal gram (20g) and Potato (20 g) respectively. This schedule is prescribed for students who are under going primary education. Instead of 100 g rice, 150g rice and 60 g vegetables are suggested for upper primary students.	
ICDS centres	**Age**	**Food provided**
	6 months to 1 year children	Weaning food
	1-2 years children	Weaning food, one boiled egg per week (Wednesday)
	2-3 years children	Weaning food, noon meal, Bengal gram/green gram (20g) on Tuesday, 3 boiled egg per week (Banana for non egg eating children), Potato 20 g on Friday
	3-5 years children	Noon meal, Bengal gram/green gram (20g) on Tuesday, 3 boiled egg per week (Banana for non egg eating children), Potato 20 g on Friday
	AN and PN	Weaning food
	Old age pensioners	Noon meal
	Adolescent girls	Weaning food

Water supply

The Tamil Nadu Water supply and Drainage Board (TWAD) was established in the year 1971 as an autonomous body with the stated objective of providing water supply and drainage facilities to rural and urban areas of Tamil Nadu excluding the Chennai Metropolitan Area. The norms prescribed by the Govt. of India for protected water supply to rural population are 40 litres per capita per day (40 lpcd). Rural Water Supply Schemes are being implemented with State government funds under the Minimum Needs Programme (MNP) and Central Government funds through National Rural Drinking Water Programme (NRDWP). Dindigul District known for its water scarcity has several natural constraints in providing adequate water supply to the habitants. Continuous monsoon failures, lack of awareness on rain water harvesting systems,

non-judicious usage of drinking water are the key reasons for the shortage of water supply. However, the district administration has been continuously taking efforts in streamlining the existing water resources like Kamarajar dam, Maruthanathi, Manjalar dam in ensuring sufficient water supply to the rural and urban pockets of the district.

Figure 4.5 ACCESSES TO DRINKING WATER- 2013-14



***Source**: Nation Rural Drinking Water Programme (www.ddws.gov.in)*

Fig 4.5 presents the block wise habitations provided with drinking water in terms of total number of habitations, number of HHs (Households) provided with drinking water and percentage of HHs provided with safe drinking water, for Dindigul district and the blocks in Dindigul district.

A total of 2924 HHs or 80.68 percentage of HHs in Dindigul district are provided with safe drinking water. Among the different blocks of Dindigul district, Athoor block had the highest percentage (97.84) of HHs provided with safe drinking water, and Thoppampatti block had the lowest percentage (56.77 percent) of HHs provided with safe drinking water.

Sanitation

The fastest growing economy seems to have missed out on having adequate toilet facilities for as high as 65% of its population. For example, nearly half of India's 1.2 billion people have no toilet at home, but more than half of India's people own a mobile phone, indicates the latest census data.

According to the census of 2011, 53.1% (63.6% in 2001) of the households in India do not have a toilet, with the percentage being as high as 69.3% (78.1% in 2001) in rural areas and 18.6% (26.3% in 2001) in urban areas Furthermore, field studies indicate that even the use of the existing toilets in both rural and urban areas is very low

These facts have also been reconfirmed by another report released on 6th March 2012 by the WHO/UNICEF's Joint Monitoring Programme on sanitation for the Millennium Development Goals, which has also indicated that 59% (626 million) Indians still do not have access to toilets and practice open defecation and that majority of them live in rural areas;

TABLE 4.8 ACCESS TO TOILET - 2013-14

Sl. No	Block Wise / District	Total Number of HHs	Number of HHs with Toilet facilities	% of HHs Provided with Toilets
1	Athoor	27481	5953	41.41
2	Batlagundu	21985	7114	55.48
3	Dindigul	36145	10717	64.86
4	Guziliamparai	19923	3961	36.57
5	Kodaikanal	20728	7369	72.76
6	Natham	33564	15804	66.05
7	Nilakkotai	29534	12910	64.57
8	Oddanchadram	28838	11509	65.60
9	Palani	27522	4920	33.23
10	Rediyarchatram	28109	11585	62.74
11	Shanarpatti	31542	14193	73.58
12	Thoppampatti	29129	12235	66.41
13	Vadamadurai	20540	6935	57.37
14	Vedasandur	27192	8248	52.05
District		**382232**	**133453**	**59.30**

***Source**: Ministry of Drinking Water and Sanitation*

Table 4.8 presents the block-wise provision of toilets in terms of total number of HHs, number of HHs with toilet facilities, and percentage of HHs provided with toilets, for Dindigul district and the blocks in the district. A total of 133453 HHs or 59 percent of HHs in Dindigul district are provided with toilets. Among the different blocks of Dindigul district, Shanarpatti block had the highest percentage (73.58) of HHs provided with toilets, and Palani block had the lowest percentage (33.23 percent) of HHs provided with access to toilets.

Box-4.4 Utilisation of Public Health Services and health programmes of State and Central Govt.

While Tamil Nadu ranked among the best states in India in terms of human development, it needed to reduce its infant and maternal mortality rates, especially among disadvantaged communities and in lagging regions. The Tamil Nadu Health System Project extended secondary health services in the rural areas through the establishment of 80 Comprehensive Emergency Obstetrics and Neonatal centres (CEmONCs) and 385 ambulances. Rural women in the state of Tamil Nadu in India can now reach a comprehensive emergency obstetric and neonatal health facility within a half an hour from their homes. In Dindigul district, there are adequate medical facilities in the form of latest medical advancements and door step programmes to cater to the needs of the poor families. The significant one among them is the 108 ambulance service that received good response from the rural poor especially those residing in the remote pockets of the district. In the period between January 2013 to December 2013, around 4609 deliveries have happened safely mainly due to the prompt response of the 108 services in the remote areas that significantly contributes in reduction of MMR in the district. In the same period, the state has recorded 198150 deliveries with support of 108 services. This has been perceived by the community as a star impact programme in the field of health.

Special Programmes

AIDS Control

The Government of India has estimated that about 2.40 million Indians are living with HIV (1.93 -3.04 million) with an adult prevalence of 0.31% (2009). Children (<15 yrs) account for 3.5% of all infections, while 83% are the in the age group 15-49 years. Of all HIV infections, 39% (930,000) are among women. India's highly heterogeneous epidemic is largely concentrated in only a few states — in the industrialized south and west, and in the north-east. The Kerala has high prevalence states of South India (Andhra Pradesh – 500,000, Karnataka – 250,000, Tamil Nadu – 150,000) account for 55% of all HIV infections in the country.

TABLE 4.9 HIV POSITIVE CASES

Sl. No	Age - Group Wise	Positive cases in 2007		Positive cases in 2011		Positive cases in 2014	
		Male	Female	Male	Female	Male	Female
1	0-14	15	19	10	16	5	7
2	15-19	5	20	9	15	5	4
3	20-24	60	81	16	59	14	23
4	25-29	122	155	63	71	31	40
5	30-39	255	203	188	171	109	119
6	40-49	175	117	184	108	156	97
7	50 & Above	86	30	90	55	92	45
Total		**718**	**625**	**560**	**495**	**412**	**335**

***Source**: Joint Director of Health Services, Dindigul*

Table 4.9 presents the HIV positive cases for males and females in the years 2007 and 2014. As can be seen from the table, the total numbers of HIV positive cases in males have decreased from 718 cases in 2007 to 412 cases in 2014. Also, the total numbers of HIV positive cases in females have declined from 625 cases in 2007 to 335 cases in 2014.

In males, the highest reduction in the number of HIV positive cases has been observed in the age group of 30-39, while the age group of 15-19 has recorded the highest reduction in the number of HIV positive cases.

Tuberculosis and Leprosy cases

India is the highest TB burden country, accounting for one-fifth (21%) of the global incidence (Global Annual incidence estimate is 9.4 million cases out of which it is estimated that 2 million cases are from India). India is 17th among 22 High Burden Countries in terms of TB incidence rate. In Tamil Nadu, every year about 1.4 lakh 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 under Private hospitals.

TABLE 4.10 TB AND LEPROSY CASES

Sl.No	Block	Positive TB cases					Leprosy cases				
		2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
1	Athoor	214	181	176	200	230	10	4	8	7	9
2	Batlagundu	227	179	175	220	200	13	4	8	9	13
3	Dindigul	633	600	548	493	541	21	14	8	9	20
4	Guziliumbarai	132	128	132	122	132	5	4	1	1	4
5	Kodaikanal	119	126	113	119	160	3	2	1	1	1
6	Natham	193	188	177	221	219	4	5	10	7	7
7	Nilakkotai	235	192	176	196	242	15	17	13	12	14
8	Oddanchatram	191	157	140	148	174	4	3	1	1	6
9	Palani	140	138	148	131	149	17	12	13	13	14
10	Rediyarchatram	175	176	157	150	194	7	6	4	4	7
11	Shanarpatti	150	172	155	149	169	3	4	3	2	3
12	Thoppampatti	394	441	427	423	390	5	2	9	7	3
13	Vadamadurai	119	116	97	110	99	6	3	5	8	6
14	Vedasandur	201	196	178	155	164	5	8	11	8	3
	District	**3123**	**2990**	**2799**	**2837**	**3063**	**118**	**88**	**95**	**89**	**110**

***Source**: DD, Health (TB) and DD Health Leprosy*

The National Leprosy Eradication Programme (NLEP) was launched in 1994–95. With the introduction of multidrug therapy in 1981, there has been a remarkable improvement in the treatment and recovery of leprosy patients. Taking into account the changes in trends and profile of leprosy, the State government decided to integrate leprosy services into general health services. Leprosy curative services are now available in all PHCs, corporations, municipal hospitals and government dispensaries. The program components in Tamil Nadu include: case detection, treatment and release; prevention of disabilities and rehabilitation; manpower development; IEC and community participation; and monitoring and evaluation, backed up by health system research.

Table 4.10 presents the TB and leprosy cases for Dindigul district and its blocks for the years 2007 – 2011. Overall, the district has recorded a decline in the number of Positive TB cases from 3123 cases in the year 2007 to 3063 cases in the year 2011. Among the blocks in the district, the highest decline (-92) has been recorded for Dindigul block, and the smallest decline (-4) has been recorded for Thoppampatti block. On the other hand, the highest increase (+26) in the number of positive TB cases has been recorded for Natham block.

Overall, the district has recorded a decline in the number of leprosy cases from 118 cases in the year 2007 to 110 cases in the year 2011. Among the blocks in the district, the highest decline (-3) has been recorded for Palani block. On the other hand, the highest increase (+3) in the number of leprosy cases has been recorded for Natham block.

Health and Gender

DLHS, 2011 indicated that while 56 per cent of the eligible women underwent sterilization there was no male sterilization among the families surveyed. This indicates the basic flaw in the population policy. Unfortunately the official policies consider women's health need only from the perspective of their role as producers of children and so there contribution towards changing the social attitudes regarding position of women is meager. DLHS 2011 indicated that about 18 per cent of married women belonged to the age group below 18 years. Early marriage not only denies a girl the years of growth and development but it is harmful to health. Maternal and female infant deaths constituted significant proportion of total mortality in the district. Female infanticide is a matter concern in the district.

Conclusion

While Tamil Nadu's infant mortality rate (IMR) had declined from the early 1990s, in part due to the state's success in immunization of young children, these rates were stagnating, and maternal mortality continued to be high. With four out of five infant deaths taking place among newborns - within the first 28 days of life - the high mortality among mothers and babies indicated that the quality of care in the state's secondary level health facilities was poor, especially since almost 80 percent of births took place in these facilities. Tamil Nadu had less than one Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) per million people, while the World Health Organization recommends one such centre for at least 250,000 people.

Malnourishment among the rural and urban children has been a big problem in the country and Dindigul District has no exception. As per nutritional status of the district, Kodaikonal block has more of 31% malnourished children that need a special attention. The backward blocks like Thoppampatty, Guziliamparai and Shanarpatty often recorded high MMR due to remote nature of the block in coupled with lack of awareness among the pregnant mothers. It is specifically noted that high order birth rates in blocks like Shanarpatty and Natham have made significant contribution to MMR of the blocks. Prevalence of anaemia among the adolescent girls and the

pregnant mothers has also a special say in increasing the MMR of the block.

Reddiarchatram, Shanarpatty, Vadamadurai, Natham and Athoor blocks show higher IMR Kodaikanal and Thoppampatty show lesser IMR compared to other blocks. IMR is often attributed to low awareness among the rural women, prevalence of anaemia among the pregnant mothers and poor pre-natal care owing to poverty. But generally these rates are often fluctuating between the years and a trend analysis for a minimum five years would give a better picture. Increase in female literacy, media awareness and effective government schemes like Muthualakshmi Reddy scheme have a direct positive relationship in bringing down the IMR.

The backward blocks like Thoppampatty, Guziliamparai and Shanarpatty often recorded high MMR due to remote nature of the blocks of coupled with lack of awareness among the pregnant mothers. It is specifically noted that high order birth rates in blocks like Shanarpatty and Natham have made significant contribution to MMR of the blocks. Prevalence of anaemia among the adolescent girls and the pregnant mothers has also a special role in increasing the MMR of the block.

CHAPTER 5

LITERACY AND EDUCATION

Chapter
5
Literacy and Education

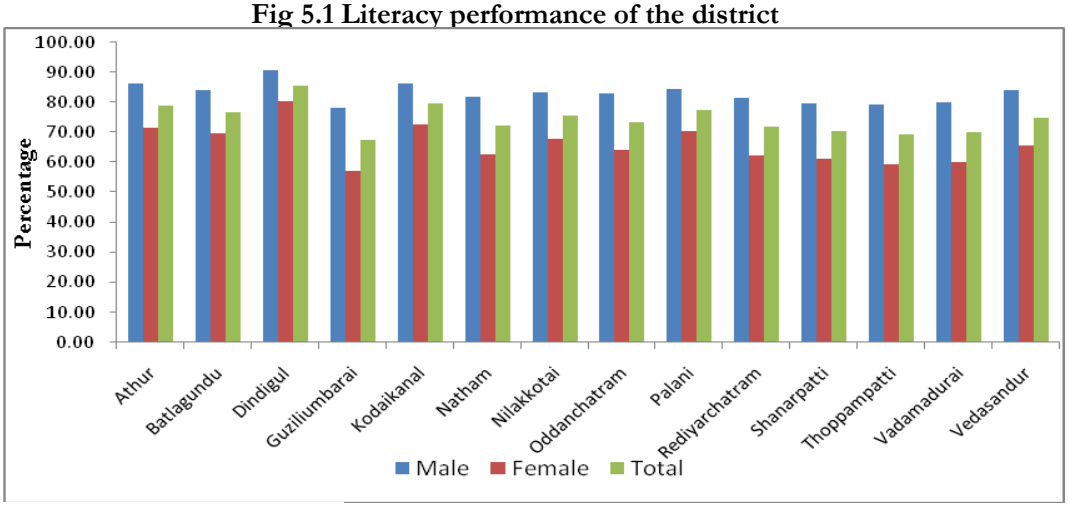
Literacy and education has the unique characteristics of being both the means and end of human development, as it has both instrumental and intrinsic value. They have a great instrumental role in improving the capabilities, thereby improving the freedom of choice of human beings which is the basics of human development. Tamil Nadu, given its rich heritage in education, is in the forefront with regard to several educational indicators such as literacy, school enrolment, infrastructure, access and achievement. Dindigul being a backward district, lot of attention was bestowed by the State on education in the recent past. In this chapter progress in literacy, school education and higher education are discussed. Elementary education is examined as an indicator of the present level of human development as well as a means for greater human development in the future.

Literacy

Literacy performance in Dindigul

One cannot overstate the instrumental role of literacy in bringing out various dimensions of human development. Ravallion & Datt (2002) observed that literacy played a notable role in making growth of the non-farm economy pro-poor in various States of India. The role of female literacy is much more crucial in bringing about human development, not only in this generation but also in future generation. Abhiman Das (2001) found that female literacy served as the threshold of women for bringing in fertility decline in various districts of India. Though the district literacy rate was marginally better than that of the nation, it was far behind when compared to the State getting 22nd rank among the 32 districts in 2011. So there is so much need to invest in this district to improve the educational status. Particular attention is needed to improve female literacy as the male-female literacy gap is very high. It is heartening to observe that Dindigul is fast catching up with the State through higher growth rate. There is a significant rural-urban gap in literacy, particularly so for female literacy. But this gap is narrowing due to higher growth rate of literacy in the rural areas between 2001 and 2011.

Fig 5.1 Literacy performance of the district



Source: Census 2001 and 2011

As per 2011 census, Dindigul has the total literacy rate of 76.26 against the State Literacy of 80.33. With respect to male Literacy, the rate is 84.23 against the State rate of 86.81 and for the female; the literacy rate is 68.33 when compared to the State female literacy of 73.86. The district has significant growth in the literacy rate between the years 2001 and 2011. Though the district literacy rate is below the State literacy rate, the comparative growth rates between the years are almost similar to that of the state growth rate. In respect to gender gap, the district has a distinct 15.9% when compared to the State gender gap of 12.9%.

There had been a very significant rise in the literacy rates in all the blocks between 2001 and 2011, particularly so with Athoor, Batlagundu, Guziliumparai and Kodaikanal. But there are wide variations across blocks and across social grouping in the district. There had been a less significant rise in the literacy rates between 2001 and 2011 in Dindigul, Palani and Shanarpatti. In 2011, Dindigul is the best performing block with 85.5 per cent literacy rate (higher than the State literacy rate) among all blocks. Guziliumparai was the least performing block with 67.6 per cent literacy, followed by Thoppampatty and Vadamadurai. The average literacy rate of all the blocks was 76.2%. Literacy in the rest of the blocks was in the range of 78 to 90 per cent. The female literacy rate has been witnessing an increasing trend in all the blocks. Dindigul has a highest female literacy with 80.3 per cent literacy rate among all blocks. Natham block has the least female literacy with only 62.5 per cent literacy rate among all blocks. The average female literacy rate of all the blocks was 68.3%. The male literacy rate was higher in Dindigul (90.7 %) and lower in Guziliamparai (78.15%).

Top 3 blocks having a higher literacy rate (2011)	Bottom three blocks having a low literacy rate (2011)
Dindigul (85.51)	Guziliamparai (67.69)
Kodaikanal (79.59)	Thoppampatty (69.39)
Athoor (78.86)	Vadamadurai (70.17)

Elementary Education

Sarva Shiksha Abhiyan (SSA) is Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory education to the children of 6-14 years age group, a Fundamental Right. SSA is being implemented in partnership with State Governments to cover the entire country and address the needs of 192 million children in 1.1 million habitations. The programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.

Existing schools with inadequate teacher strength are provided with additional teachers, while the capacity of existing teachers are being strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level. SSA seeks to provide quality elementary education including life skills. SSA has a special focus on girl's education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide.

TABLE 5.1 GENDER WISE ENROLMENT IN PRIMARY EDUCATION- 2013-14

Sl.No	Block	Primary		
		Boys	Girls	Total
1	Athoor	100.11	100.12	100.11
2	Battlagundu	100.12	100.13	100.14
3	Dindigul	100.12	100.11	100.19
4	Guziliamparai	100.17	100.14	100.16
5	Kodaikanal	100.03	100.15	100.17
6	Natham	100.02	100.13	100.1
7	Nilakkotai	100.04	100.11	100.14
8	Oddanchadram	100.04	100.14	100.11
9	Palani	100.13	100.12	100.13
10	Rediyarchatram	100.03	100.15	100.16
11	Shanarpatti	100.12	100.14	100.15
12	Thoppampatti	100.12	100.14	100.13
13	Vadamadurai	100.14	100.16	100.04
14	Vedasandur	100.13	100.17	100.07
15	Dindigul Urban	100.02	100.14	100.06
16	Plani Urban	100.04	100.11	100.12
	District	**100.09**	**100.14**	**100.12**

***Source**: SSA, Dindigul*

Primary education serves as the basic education to all. In the district, all the blocks invariably have a better enrolment rate in respect to primary education. It is clearly visible that the range between the top and bottom blocks is very low as all the blocks have a significant enrollment ratio. It is also noted that the district has performed well in 2013-14 with 102.09 when compared to 2012-13 with the enrolment rate of 100.12.The same is also observed for both boys and girls with 102.96 and 101.22 in 2013-14.

Completion Rate and Dropout Rate in Primary Education

Completion rate

With respect to completion rate, the district has a very good rate of 99.26% in 2013-14 when compared to the previous year to 95.30 % in 2012-13. This explains that the education department has taken enough steps in ensuring the completion of primary education, though there is a system of all pass up to upper primary level. It is also observed that in both the years, the girls' completion rate has shown upper trend compared to boys' rate. With respect to block level performance, Dindigul urban record higher completion rate (99.67) followed by Oddanchathram (99.54) and Reddiarchathram (99.53). Vedasandur (98.62), Palani rural (98.68) and Thoppampatty (98.88) are the bottom three blocks that are having a low completion rate in 2012-13. With respect to trend, there is a drastic improvement in the completion rate in the district with an increase from 95.30 in 2012-13 to 99.26 in 2013-14, thanks to a bigger contribution from Guziliamparai (88.20 to 99.14), Dindigul rural (90.70 to 99.34) and Palani rural (92.21 to 98.68).Interestingly, both Guziliamparai and Palani rural are two of the bottom three blocks that are having good performance in the recent years. Significant efforts are made by the concerned block officials for the improvement of the completion rate.

TABLE 5.2 COMPLETION RATE AND DROPOUT RATE – PRIMARY EDUCATION

S. No	Block	Completion						Drop out					
		Boys		Girls		Total		Boys		Girls		Total	
		12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14
1	Athoor	98.70	99.54	98.77	99.39	98.74	99.46	0.46	0.52	0.61	0.34	0.53	0.86
2	Batlagundu	96.78	99.21	96.86	99.05	96.82	99.13	0.79	0.45	0.95	0.3	0.87	0.75
3	Dindigul Rural	90.66	99.26	90.74	99.43	90.70	99.34	0.74	0.43	0.57	0.28	0.66	0.71
4	Guziliamparai	85.75	99.12	90.65	99.16	88.20	99.14	0.88	0.71	0.84	0.47	0.86	1.18
5	Kodaikanal	98.59	99.19	97.33	99.75	97.96	99.47	0.81	0.73	0.25	0.49	0.53	1.22
6	Natham	98.70	99.03	97.61	99.10	98.16	99.06	0.97	0.72	0.9	0.48	0.94	1.2
7	Nilakottai	98.21	99.16	98.08	99.13	98.15	99.14	0.84	0.39	0.87	0.26	0.85	0.65
8	Oddanchatram	98.16	99.45	98.08	99.63	98.12	99.54	0.55	0.32	0.37	0.21	0.47	0.53
9	Palani Rural	92.19	98.51	92.22	98.84	92.21	98.68	1.49	0.64	1.16	0.43	1.32	1.07
10	Reddiyarchatram	91.42	99.56	96.09	99.50	93.76	99.53	0.44	0.16	0.5	0.11	0.47	0.27
11	Sanarpatty	94.73	99.15	95.40	99.33	95.07	99.24	0.85	0.20	0.67	0.13	0.76	0.33
12	Thoppampatty	95.58	98.93	97.63	98.82	96.61	98.88	1.07	0.12	1.18	0.08	1.12	0.2
13	Vadamadurai	94.26	99.48	95.73	99.35	95.00	99.41	0.52	0.11	0.65	0.07	0.58	0.18
14	Vedasadur	94.12	98.30	95.40	98.94	94.76	98.62	1.7	0.51	1.06	0.34	1.39	0.85
15	Dindigul Urban	96.85	99.59	96.66	99.75	96.76	99.67	0.41	0.52	0.25	0.35	0.33	0.87
16	Palani Urban	93.48	99.26	94.18	98.97	93.83	99.11	0.74	0.35	1.03	0.24	0.88	0.59
District Total		**94.89**	**99.21**	**95.71**	**99.30**	**95.30**	**99.26**	**0.79**	**0.43**	**0.70**	**0.29**	**0.75**	**0.72**

***Source**: SSA, Dindigul*

Drop out

At the block level, drop out rate is considerably decreased in Vadamadurai (0.18) and Thoppampatty (0.20) blocks during the year 2013-14, they recorded higher drop out rate in the previous year 2012-13. Blocks like Kodaikanal(1.22), Guziliamparai(1.18) and Palani Urban (1.07) had higher drop out rate in the year 2013-14. But overall at the district level, the drop out ratio has decreased from 0.75 in the year 2012-13 to 0.72 in the year 2013-14 which is a positive sign.

Child labour, migration of parents in search of employment, generally during agricultural lean season lack of interest towards education are seen as major reasons for higher drop outs in these blocks. Performance wise, the so called backward blocks like Guziliamparai (1.18) and Vadamadurai (0.18) have shown better performance in bringing down the dropout rate along with the Kodaikanal (1.22). Special interventions like home visits, parent counselling, special study centres are the key contributing factors that have brought the dropout rate in these blocks. Gender wise, the girls show lesser dropout ratio compared to boys in the year 2012-13 Kodaikanal, Guziliamparai and Natham blocks. Interestingly, almost the same trend has been witnessed in the previous year too, whereas, in the case of boys, lesser drop out rate is witnessed in Batlagundu, Thoppampatty and Reddiarchathram blocks compared to girls in the year 2012-13, a similar trend is also seen in the earlier year too.

For the year 2013-14, the drop out rate for the boys is 0.43 and for the girls it is 0.29 with the district dropout rate shows 0.72. It is visible that though the drop out for the boys is higher than the girls, the gap is not vast.

Upper Primary/Middle School Education

The upper primary that denotes classes from VI to VIII is the transition stage for students and has the basis to consolidate their learning at primary level. Table 5.3 shows the performance of enrollment in upper primary across the blocks for the year 2013-14. It is observed that there is not much difference among the blocks though there is relatively better performance at Athoor, Shanarpatti, Thoppampatti and Palani.

TABLE 5.3 ENROLMENTS IN UPPER PRIMARY EDUCATION

Sl.No	Block	Upper Primary		
		Boys	Girls	Total
1	Athoor	100.25	100.2	101.44
2	Battlagundu	102.35	100.56	101.34
3	Dindigul	102.32	100.35	101.19
4	Guziliamparai	103.36	100.02	101.2
5	Kodaikanal	101.98	100.04	101.01
6	Natham	101.68	100.03	101.02
7	Nilakkotai	101.68	100.35	100.74
8	Oddanchadram	101.23	100.24	101.17
9	Palani	102.01	100.32	100.84
10	Rediyarchatram	101.65	100.03	100.62
11	Shanarpatti	101.02	100.21	101.5
12	Thoppampatti	102.98	100.02	101.4
13	Vadamadurai	102.36	100.44	101.34
14	Vedasandur	102.65	100.02	100.74
15	Dindigul Urban	101.45	100.03	100.95
16	Plani Urban	101.69	100.21	100.11
	District	**102.02**	**100.19**	**101.11**

***Source**: SSA, Dindigul, 2013-14*

Table 5.4 gives completion rate and drop out rate at upper primary level.

At district level, the completion rate in the Upper primary of the district shows 92.9% in 2013-14 when compared to 98.7% in the year 2012-13. Gender wise, girls are having higher completion rate (93.2) than that of boys (92.6) in 2013.14. With respect to blocks in 2013-14 Dindigul urban (93.8) had the highest completion rate followed by Athoor, Batlagundu and Dindigul rural each with 93.6. The bottom three blocks in the same year with low completion rate are Palani urban (91.96), Guziliamparai (91.8) and Thoppampatty (92.5). In respect to girls, the performance is

higher in the case of Dindigul urban (94.5) followed by Vedasandur (93.9) and Reddiarchathram (93.8) and lower in Guziliamparai (92.4), Kodaikanal(92.5) and Thoppampatty (92.6).

The district has a dropout rate of 1.26% in 2013-14 with no significant change from the previous year. At the block level, the top three blocks that have a low dropout rate are Dindigul urban (0.48), Reddiarchathram (0.69) and Oddanchathram (0.78) whereas the bottom three blocks are Vedasandur (2.47), Palani rural (2.25) and Thoppampatty (1.76). Performance wise, the dropout has considerably decreased in Kodaikanal block (3.20%) followed by Athoor (1.78%) and Reddiarchathram (0.50%) whereas the rate has significantly increased in the backward blocks of Natham (1.46%), Guziliamparai(1.00%) and Vadamadurai (0.68%). In respect to gender, the boys drop out rate is higher in the case of Vedasandur (2.63) and lowest in the case of Dindigul urban (0.47) and the same trend is seen among the girls too in these blocks. Athoor block has recorded a higher drop out reduction rate (2.34%) for boys and Kodaikanal block (4.78%) for girls whereas the rate has significantly increased for both boys (1.84%) and girls (1.06%) in Natham block.

TABLE 5.4 COMPLETION AND DROP OUT RATE – UPPER PRIMARY EDUCATION

Completion and Drop out - Upper Primary													
S. No	Block	Completion						Drop out					
		Boys		Girls		Total		Boys		Girls		Total	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Athoor	98.84	93.8	98.95	93.4	98.89	93.6	3.50	1.16	2.24	1.05	2.89	1.11
2	Batlagundu	98.99	93.8	98.50	93.4	98.74	93.6	0.75	1.01	0.70	1.50	0.73	1.24
3	Dindigul Rural	98.69	93.4	98.71	93.7	98.70	93.6	1.44	1.31	1.59	1.29	1.50	1.30
4	Guziliamparai	98.27	91.2	98.48	92.4	98.37	91.8	0.67	1.73	0.58	1.52	0.63	1.63
5	Kodaikanal	98.43	93.4	99.29	92.5	98.86	92.9	3.33	1.57	5.49	0.71	4.36	1.16
6	Natham	97.97	92.5	98.53	92.7	98.25	92.6	0.18	2.03	0.40	1.47	0.29	1.75
7	Nilakottai	98.57	92.5	98.59	93.0	98.58	92.8	0.48	1.43	0.71	1.41	0.60	1.42
8	Oddanchatram	99.24	92.9	99.19	92.6	99.22	92.8	1.07	0.76	0.93	0.81	1.00	0.78
9	Palani Rural	97.67	92.3	97.83	93.4	97.75	92.8	1.52	2.33	1.13	2.17	1.34	2.25
10	Reddiyarchatram	99.49	92.8	99.11	93.8	99.30	93.3	1.17	0.51	0.61	0.89	0.91	0.69
11	Sanarpatty	98.82	92.5	98.80	92.6	98.81	92.6	1.94	1.18	1.43	1.20	1.69	1.19
12	Thoppampatty	98.58	92.5	97.83	92.6	98.21	92.5	1.77	1.42	1.32	2.17	1.57	1.76
13	Vadamadurai	99.17	92.3	98.64	92.7	98.90	92.5	0.45	0.83	0.36	1.36	0.41	1.08
14	Vedasadur	97.37	92.7	97.71	93.9	97.54	93.3	1.93	2.63	2.60	2.29	2.25	2.47
15	Dindigul Urban	99.53	93.1	99.51	94.5	99.52	93.8	0.38	0.47	0.80	0.49	0.59	0.48
16	Palani Urban	98.88	89.5	98.31	93.6	98.60	91.6	1.77	1.12	1.37	1.69	1.56	1.41
District Total		**98.7**	**92.6**	**98.7**	**93.2**	**98.7**	**92.9**	**1.25**	**1.26**	**1.26**	**1.26**	**1.25**	**1.26**

***Source**: SSA, Dindigul*

Box: 5.1 - Impact of Non-residential Special Training Centre (NRSTC) of SSA - M. Karthiga, daughter of Murugan, Sinthalaipatty, Oddanchatram Block is a drop out student of Vth Standard from Panchayat Union Primary School, Sinthalaipatty in 2010–2011. After her father's death she went to her grandmother's village in Kerala. During survey she was found as a drop out student. In the academic year 2013–2014, she was admitted in nearby NRSTC PUMS Thangachiammapatty centre in VIIIth Standard as per age appropriation act. Now she is very much interested in studying. Her Creative thinking is good and her handwriting is also very fine. She is appreciated by the teachers and everyone of her school. She is also very much interested in drawing. She makes so many craft works. There is a marked improvement in her Reading and writing skills in both Tamil and English.
(Courtesy: SSA, Dindigul)

girls is 99.15. This shows that the girls children are having slightly better transition rate compared to boys. In respect to blocks, rural areas like Guziliamparai and Natham are having more boys transition rate, whereas Palani and Oddanchathram blocks show higher transition rate among the girls.

The rate of transition from upper primary to secondary has been considered as a significant parameter of achievement in the school education. The district has a healthy transition rate of 99.15% and with respect to blocks, the transition rate is high in Vedasandur block (99.60) followed by Dindigul Urban (99.35) and Palani urban (99.10). The rate is comparatively low in the case of Shanarpatty followed by Kodaikanal and Natham. It is noticed that there is no significant gap in the performance between the blocks with an inference that the urban bound blocks show a slightly higher transition rate compared to the rural blocks.

Table 5.5 Transition Rate, 2013 - 14

S.No.	Block	Primary to Upper Primary			Upper Primary to Secondary		
		Boys	Girls	Total	Boys	Girls	Total
1	Athoor	99.32	98.96	**99.14**	98.20	98.57	**98.39**
2	Batlagundu	99.48	99.07	**99.28**	98.29	98.55	**98.42**
3	Dindigul Rural	99.09	98.52	**98.81**	99.16	98.25	**98.71**
4	Guziliamparai	99.69	99.11	**99.40**	98.67	98.26	**98.47**
5	Kodaikanal	99.54	98.64	**99.09**	98.19	98.32	**98.26**
6	Natham	99.58	99.23	**99.41**	98.23	98.42	**98.33**
7	Nilakottai	99.55	99.31	**99.43**	98.29	98.25	**98.27**
8	Oddanchatram	99.30	99.42	**99.36**	99.22	98.81	**99.02**
9	Palani Rural	99.31	99.50	**99.41**	99.52	98.15	**98.84**
10	Reddiyarchatram	98.05	99.33	**98.69**	98.61	98.87	**98.74**
11	Sanarpatty	98.95	99.34	**99.15**	98.35	98.15	**98.25**
12	Thoppampatty	98.35	99.36	**98.86**	98.44	98.53	**98.49**
13	Vadamadurai	98.29	98.95	**98.62**	99.50	98.20	**98.85**
14	Vedasadur	98.47	99.07	**98.77**	99.74	99.45	**99.60**
15	Dindigul Urban	99.03	99.20	**99.12**	99.12	99.58	**99.35**
16	Palani Urban	98.00	99.37	**98.69**	99.75	98.44	**99.10**
District Total		**99.00**	**99.15**	**99.08**	**99.83**	**98.55**	**99.19**

***Source**: SSA, Dindigul*

Access to Schools

TABLE 5.6 ACCESS TO SCHOOLS 2013-14

S. No	Block wise/ District	No. of Habitations	No. of Primary Schools	No. of Upper Primary School
1	Athoor	198	86	40
2	Batlagundu	171	69	33
3	Dindigul - Rural	254	100	45
4	Guziliamparai	319	81	30
5	Kodaikanal	209	76	44
6	Natham	164	104	49
7	Nilakottai	172	94	41
8	Oddanchathram	239	90	45
9	Palani - Rural	228	69	38
10	Reddiarchathram	294	85	40
11	Sanarpatty	193	74	40
12	Thoppampatty	212	115	32
13	Vadamadurai	288	75	34
14	Vedasandur	338	98	35
15	Dindigul - Urban	408	44	43
16	Palani - Urban	183	16	19
District Total		**3870**	**1276**	**608**

***Source**: SSA, Dindigul*

Table 5.5 shows that there are 3870 villages in Dindigul district in which Dindigul urban has more habitations with 10.54% and Natham has 4.24% of the total habitations. With respect to access to schools, Natham block has more of primary schools (63.41%) and upper primary schools (29.88%) compared to other blocks in the district. Next is followed by Nilakottai block, where 54.65% of schools are primary type and 23.84% of the schools are upper primary category. Owing to their urban nature, Dindigul urban and Palani urban have lesser number of both primary and upper primary schools. Among the rural blocks, Guziliamparai has lesser number of both primary and upper primary schools, thus exhibiting the educational backwardness of the block. The other notable blocks that fall under this category are Vadamadurai and Vedasandur.

Box 5.2: Impact of Residential Special Training Centre (RSTC) of SSA, Dindigul

As the Right to Free and Compulsory Education act 2009 has come to effect from 1st April 2010 and our State Government notified the State Rules on 8th November 2011, every child in the age group of 6 to 14 years has his / her right to get free and compulsory admission and quality elementary education. The state has taken several initiatives to enroll and induct all out of school children in the neighbouring school. Residential Special Training Centres is one among them and are organized to cover children in sparsely populated habitations, never enrolled and drop-out, street children, migrant children, nomadic children (narikuravas), child labourers and children from tribal areas. In Tamilnadu, 306 Residential Special Training centres are functioning to cover 14091 children in the year 2011-2012. 214 NGOs / SHGs are involved in conduct of RSTCs/Special RSTCs for mentally retarded, through 7 Special RSTCs for MR children, 408 children have been covered in Coimbatore, Cuddalore, Dindigal, Perambalur, Ramnad, Salem and Erode Districts.

The Impact

Baby M.Julfia Fathima is a special child from Sitharevu village, Athoor Block, Dindigul district. She is 9 years old child suffering from visual impairment congenitally (total blind). She is a younger child for her parents and has an elder brother and sister. Her father Mr. Musfarrahman is working in a rice mill at Sitharevu as a labourer and mother is a housewife. During the time of pregnancy, her mother was suffering from a severe viral fever, due to that child has been affected with the visual defect.

She is a total blind child (100%), but has the special talents. She is fully independent for doing her Activities of Daily Living (ADL) at home. She is very helpful for her mother at home in cooking, washing, and cleaning works. Her mother has special care on her at home. Julfia was admitted in the RSTC, Sitharevu on 18.08.2011. The special teachers Mrs. Anitha and Mrs. Stella from Athoor block started the early intervention for her on 2011. They regularly visiting the school and giving the ideas to her school teacher about her curriculum and follow-up. Julfia is very cooperative and attentive child in class room. Usually she is very friendly to all classmates and teachers. She is talking very fluently and answering all questions immediately without any hesitations.

Her school teacher Mrs.E.Sahayaseeli used the regular curriculum for teaching. Now she is following the III standard curriculum for Julfia. The child is able to tell the numbers up to 100 orally without any interruption. She is able to identify the colours by touching the objects and close observation. She has a nice talent of telling all t he Tamil and English rhymes at class room. The child has very excellent performance in oral activities. Her school head master Mrs. Prabavathy is giving kind attention and support to Julfia at school. Her parents are very thankful to teachers for improving her talents and academic skills.

Pupil-Teacher Ratio in Primary and Upper Primary

Table 5.7 gives pupil-teacher ratio in primary and upper primary levels in the district. The pupil teacher ratio is generally calculated based on the enrollment of students and the sanctioned strength of teacher in each district or block. In the Dindigul district, the pupil teacher ratio is 25 for primary and 31 for upper primary. At the block level, Natham (31), Palani urban (30) and Dindigul rural (29) have better pupil-teacher ratio in primary level compared to other blocks. The ratio is low in the blocks like Thoppampatty (19), Vedasandur (22) and Reddiarchathram (22). In respect to upper primary, Batlagundu (47) has the highest ratio followed by Athoor (44) and Dindigul urban (44) whereas the rate is low in the case of Oddanchathram(21), Reddiarchathram (23) and Palani urban (24). It is visible that the pupil-teacher ratio in upper primary seems to be on the higher side compared to the ratio that of primary school.

TABLE 5.7 PUPIL TEACHER RATIO 2013 - 14

S.No	Block	Primary	Upper primary
1	Athoor	25	44
2	Batlagundu	25	47
3	Dindigul - Rural	30	40
4	Guziliamparai	23	27
5	Kodaikanal	24	26
6	Natham	31	30
7	Nilakottai	29	25
8	Oddanchathram	22	21
9	Palani - Rural	24	25
10	Reddiarchathram	22	23
11	Sanarpatty	27	31
12	Thoppampatty	19	23
13	Vadamadurai	24	29
14	Vedasandur	22	30
15	Dindigul - Urban	29	44
16	Palani - Urban	30	24
District Total		**25**	**31**

***Source**: SSA, Dinidgul*

Secondary Education

Secondary education is generally perceived as the gateway to higher education for many of the aspirants of the student fraternity. The future of the younger generations has been more often decided in this critical stage. Table 5.8 reveals that the Dindigul district has a healthy GER (97.43) with GER for boys at (98.57) and for girls (96.15) in 2012-13. But in 2013-14 the GER

for girls is higher than rate of the boys. Among the blocks, Dindigul urban (153.22), Batlagundu (140.62) and Palani urban (113.70) recorded very high GER in the district in 2012-13. Shifting the families to urban areas like Dindigul and Palani to admit children in secondary schools, enrollment of students from nearby blocks are the reason for very high GER in these blocks. The blocks that have low GER are Athoor (74.64), Reddiarchathram (78.24) and Guziliamparai (80.92). Early marriage, cultural beliefs, employment opportunities available in the nearby spinning mills and textiles are the possible reasons for the low GER in these blocks.

For the year 2013-14, the GER for the district has a healthy rate of 100.32 when compared to 97.43 in 2012-13. This exhibits the intensive enrollment performance across the blocks in the district. Most of the blocks show positive trend in GER except a few blocks like Batlagundu and Palani urban where the students get transferred to nearby towns and other districts like, Namakkal in order to get more marks in the plus two examinations.

TABLE 5.8 ENROLMENT IN SECONDARY EDUCATION

S.No	Block	GER (2012-13)			GER (2013-14)		
		Boys	Girls	Total	Boys	Girls	Total
1	Athoor	89.39	58.75	74.64	78.29	80.84	79.51
2	Batlagundu	170.08	108.38	140.62	122.53	116.42	119.61
3	Dindigul (Rural)	81.55	83.91	82.50	90.35	93.60	91.65
4	Guziliamparai	85.11	76.71	80.92	87.97	77.40	82.70
5	Kodaikanal	80.17	82.07	81.08	83.39	81.33	82.40
6	Natham	93.12	97.49	95.21	93.50	97.49	95.41
7	Nilakottai	76.52	94.00	84.88	83.55	99.58	91.22
8	Oddanchatram	87.91	88.56	88.23	92.58	94.17	93.35
9	Palani (Rural)	97.52	76.82	87.43	114.58	90.97	103.08
10	Reddiyrachatram	84.38	71.85	78.24	89.86	72.93	81.56
11	Shanarpatty	86.86	84.14	85.56	92.76	87.45	90.21
12	Thoppampatty	86.74	83.27	85.23	94.69	87.40	91.52
13	Vadamadurai	78.66	97.25	86.41	79.35	99.93	87.93
14	Vedasandur	106.21	106.22	106.21	116.71	112.58	115.11
15	Dindigul (Urban)	149.34	157.34	153.22	158.44	157.80	158.13
16	Palani (Urban)	87.46	141.21	113.70	64.22	130.40	96.53
District		**98.57**	**96.15**	**97.43**	**99.43**	**101.30**	**100.32**

***Source**: RMSA, Dindigul, 2012-13 and 2013-14*

We find from table 5.9 in 2013-14 the drop out rate of Dindigul district at secondary level is 4.50. It is observed that except few blocks like Dindigul Urban (2.48) Palani Urban (2.83), Batlagundu (2.88), Kodaikanal (2.93), Oddanchatram (3.92) all other blocks have higher drop out rates. We also find that at the District level the drop out rate for girls (3.46) is much lower than boys (5.54).

TABLE 5.9 DROP OUTS IN SECONDARY EDUCATION

Sl. No	Block Wise / District	Secondary, 2013 - 14		
		Boys	Girls	Total
1	Athoor	6.71	2.44	4.57
2	Battlagundu	3.59	2.17	2.88
3	Dindigul	1.73	0.81	1.27
4	Guziliamparai	13.39	8.72	11.06
5	Kodaikanal	3.87	1.99	2.93
6	Natham	8.39	4.75	6.57
7	Nilakkotai	6.37	4.15	5.26
8	Oddanchadram	5.45	2.39	3.92
9	Palani	4.75	4.62	4.68
10	Rediyarchatram	5.65	6.18	5.91
11	Shanarpatti	5.76	5.75	5.75
12	Thoppampatti	7.98	4.60	6.29
13	Vadamadurai	7.03	4.10	5.56
14	Vedasandur	10.95	5.93	8.44
Dindigul (Urban)		**3.31**	**1.66**	**2.48**
Palani (Urban)		**3.44**	**2.22**	**2.83**
District		**5.54**	**3.46**	**4.50**

***Source**: RMSA, Dindigul*

Box-5.3 Initiatives for improvement in quality of Education

Simplified Activity Based Learning (SABL) - SABL method is a unique and effective approach to attract the children especially the out of school children. It helps the children to develop readiness, interest, self learning, group learning and many other qualities. It also helps the children to learn 753 skills at primary level. (Source: Elementary Education Register, 2013-14)

The following efforts are taken by the Sarva Siksha Abhiyan, to improve the quality of education. Based on RTE- PTR, the process of appointing additional teachers at primary level and at upper primary level are in progress. Every year need based in-service training programme is given to all existing teachers for 20 days and induction training to all newly appointed teachers. Educational Management Information system has facilitated maintenance of the student's record, provision of smart card to identify and track the benefits of government schemes, monitor attendance of students and teachers and education content server called ECS is set to build up child's knowledge, potentiality and talent.

The ABL system has facilitated students to learn at their own pace resulting in enhancement of the 3 R's (reading, writing and arithmetic). Every year need based in-service training programme is given to all existing teachers for 20 days and induction training to all newly appointed teachers. Similarly free uniforms are being provided to all children studying in Classes I - XII by the State Government. For effective classroom processes, TLM grant and School grant are provided to all Governments and Aided schools. The outcome of initiatives are reflected in reduction of dropout rate in primary from 1.97 in 2007-08 to 1.31 in 2012-13, in upper primary from 2.28 in 2007-08 to 1.85 in 2012-13.

Box 5.4 Reading writing skills among primary and upper primary school children

Sarva Shiksha Abhiyan (SSA) has been actively involving in assessing the reading and writing skills among primary and upper primary school children in periodic basis with a specific tool devised for this purpose. As per March 2014 report of SSA, Dindigul the students studying between 2nd and 8th standard were assessed in which 78% of the students could read Tamil fluently and 71% of the students could able to write Tamil language without mistakes. Similarly, 64% of the students could able to read English fluently and 47% of the students could write without mistakes. In respect to Maths, around 77% of the students could understand the subject and 66% of the students could resolve the problems with skill. To increase the reading and writing ability of the students on the above subject, the SSA has planned to organize sequential trainings to the primary and middle school teachers on the above subject with the support of State Educational Research and Training Institute.

Source: SSA, Dindigul

Access to Higher Secondary Schools

In Dindigul district, as per UDISE abstract 2013-14, there are 175 schools having the higher secondary education facilities in which 133 schools are having primary and upper primary education and 44 schools are having upper primary education along with the secondary education facilities. With respect to management, 77 are government schools, 49 are government aided and the remaining 49 are unaided. Schools transition from higher secondary to collegiate education has been witnessing an increasing trend thanks to the better awareness among both the students and parents through various print and mass media apart from the education loan facilities from the banks. A sizable number of the students are also interested in income generating skill oriented courses.

Basic Infrastructure

School infrastructure as per the SSA norm suggests that there should be a room for every teacher for every grade/class, whichever is lower in primary and upper primary school, with the provision of there should be two class rooms with verandah to every primary school with at least two teachers. A room for Headmaster in upper primary school is a necessity. Table 5.10 shows that there are 1889 schools available in Dindigul district in which 1203 schools (63.6%) are having more than three classrooms and 304 schools (16.0%) are having three classrooms whereas the rest are having less than three classrooms.

It is noted that around 13 schools were without toilet with major share from Nilakottai block. In the year 2012-13 and in the year 2013-14 it has come down to zero which is a good sign of improvement. Around 49 schools are without electricity and no school is without drinking water facilities. A considerable number of 804 schools are without enough desks and chairs. Show there is need for strengthening the school infrastructure in the district.

TABLE 5.10 INFRASTRUCTURES 2013-14

S. No	Block	Total No. of Schools	With 3 Class rooms	more than 3 Class rooms	Without Toilet	Without Girls Toilet	Without electricity	Without Drinking Water	Without Desk and Chair
1	Athoor	126	66	20	0	0	4	0	61
2	Batlagundu	105	67	19	0	0	2	0	45
3	Dindigul - Rural	142	74	14	0	0	5	0	54
4	Guziliamparai	111	96	15	0	0	0	0	21
5	Kodaikanal	120	61	15	0	0	5	0	78
6	Natham	155	92	46	0	0	6	0	23
7	Nilakottai	136	84	22	0	0	0	0	102
8	Oddanchathram	134	100	16	0	0	1	0	52
9	Palani - Rural	110	66	22	0	0	1	0	69
10	Reddiarchathram	126	95	17	0	0	3	0	46
11	Sanarpatty	114	76	30	0	0	4	0	5
12	Thoppampatty	143	114	12	0	0	2	0	48
13	Vadamadurai	109	85	32	0	0	2	0	44
14	Vedasandur	135	102	18	0	0	6	0	54
15	Dindigul - Urban	90	18	3	0	0	6	0	45
16	Palani - Urban	33	7	3	0	0	2	0	57
District Total		**1889**	**1203**	**304**	**0**	**0**	**49**	**0**	**804**

Source: SSA, Dindigul

Hostel Facilities

Availability of adequate hostel facilities in the remote areas will considerably enhance the education opportunities for the poor. The state government has taken necessary efforts in providing hostel facilities for the deprived and deserved thus ensuring education for all. In Dindigul district, 278 schools have hostel facilities, thus extending the service to 5925 students. At the block level, Dindigul block is the way with 82 schools with hostel facilities and Guziliamparai block has hostel facilities only in three schools.

TABLE 5.11 HOSTELS, 2013 - 14

Sl.No	Block	No. of Schools	Total No. of Students	No. of students in hostel
1	Athoor	24	21214	984
2	Batlagundu	11	18525	328
3	Dindigul	82	63094	620
4	Guziliamparai	3	9955	225
5	Kodaikanal	8	15699	495
6	Natham	9	24316	203
7	Nilakkotai	12	22738	571
8	Oddanchatram	21	17259	519
9	Palani	46	31535	744
10	Rediyarchatram	18	14254	295
11	Shanarpatti	13	16979	150
12	Thoppampatti	9	11140	289
13	Vadamadurai	4	14526	262
14	Vedasandur	18	15226	240
District		**278**	**296460**	**5925**

***Source**: Backward Classes & Minority Welfare Office & Adi Dravidar and Tribal Devlp. Office.*

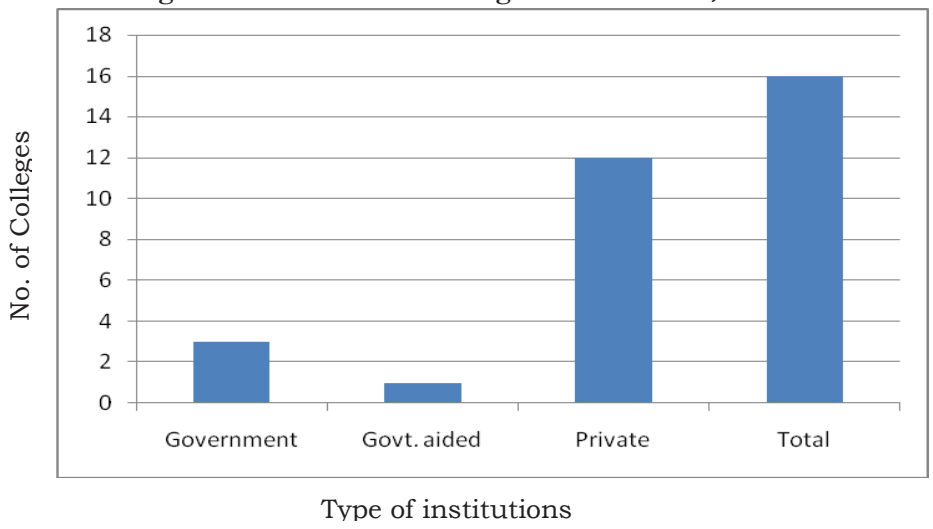
Box-5.5 Technology initiatives in Education sector

Technology has been playing critical role in the recent development in the field of education. Sarva Shiksha Abhiyan has practiced in many ways in Education System to make it more effective. One of the activity namely CAL ensures the students become more intellectual in their studies by promoting eagerness among the students in coming to school regularly. It also helps to bridge the gap between the urban and the rural students. Child centered Compact Discs were prepared in a way that all students can use them. Activity Based Learning (ABL) and Smart class rooms are found to be effective these days. Gone are the days, where the technology advancements are seen only in private managed schools. Now, government schools even in remote areas boast of new technology advancements that attract more enrollments to government schools thereby gaining the confidence of the parents. In recent years, the students of government schools start scoring higher marks thanks to the technology initiatives in the education sector.

Higher Education

In the Dindigul district, there is abundant scope for the students aspiring for higher education. Figure 5.2 shows the availability of various technical and arts and science colleges spread along the urban based blocks. Overall, there are 48 institutions functioning in the district, thus serving around 77335 students. It is noted that a considerable number of engineering colleges and polytechnic colleges are there that provides technical education with major attraction from the nearby districts like Theni, Karur, Madurai, Sivagangai. Government colleges for girls are also functioning at Dindigul and Nilakottai to cater the higher education needs of the rural girl children in the district apart from the private colleges across the district. The district is still deprived of a medical college for which demand is getting higher. Annai Theresa University at Kodaikanal and Gandhigram University are the two deemed universities which are the pride of the district.

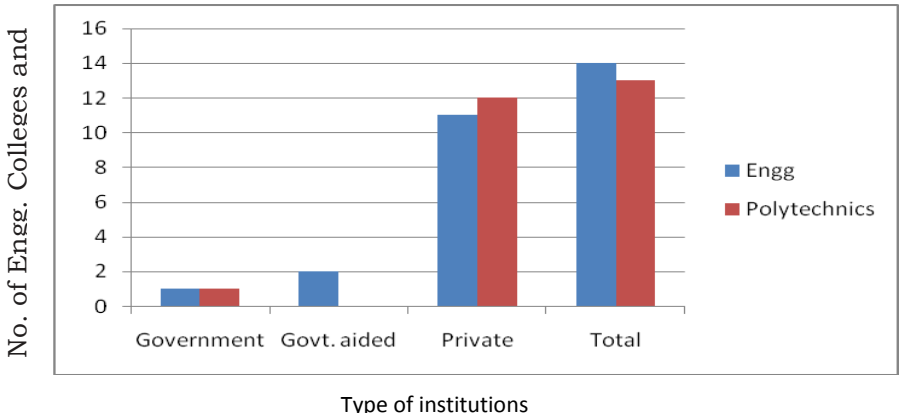
Fig 5.2 Arts and Science colleges in the district, 2013 - 14



Source: *www.collegesintamilnadu.com*

Technical education

Fig 5.3 Engineering Colleges and Polytechnics, 2013 - 14



Source: *www.collegesintamilnadu.com*

Summary and Conclusion

Concerted and all-round efforts were put in the district to improve the educational status with more focus on backward blocks. Due to these efforts, there had been significant achievements in the district in elementary education in terms of improvements in NER and GER in upper primary section. Blocks like Dindigul, Palani and Oddanchathram are enjoying better enrollment in the secondary level. For the year 2013-14, the GER for the district has a healthy rate of 100.32 when compared to 97.43 in 2012-13. This exhibits the intensive enrollment performance across the blocks in the district. The district administration and other actors need to be appreciated for giving high thrust for universalizing elementary education. But considering the goals of the SSA programme, a lot more to be done. Broadly speaking achievements in terms of quantitative improvements, though marginally below the goals of SSA, were very significant. The district enjoys good higher education infrastructure except that does not have a medical college and all efforts are being made to set a medical college for the districts at the earliest.

CHAPTER 6

GENDER

Chapter 6 Gender

Introduction

Gender is a social construct. It describes the roles performed by men and women in a society. Gender becomes a subject of concern when men and women are discriminated based on the social roles they perform which result in inequality in their social status.

Gender discrimination has deep rooted causes. When the barter system of primitive communities gave in to monetized economies, it resulted in a difference in valuation of goods and ultimately in the value of factors of production including labour. The ability of women to survive longer and withstand higher risks resulted in the availability of women in more numbers which made them dispensable. It is a proven fact that given equal opportunities, the number of women is more than the number of men. In simple words, in primitive societies, women were in more numbers than men, resulting in lesser productivity among women, which ultimately resulted in a reduction in the wages they earned. This became acute in the absence of mobility in occupation due to the social construct of gender roles. As the men were lesser in numbers, they commanded high productivity and so more wages. This resulted in a superior status of men to women. Since men were in few numbers the investment on men by way of imparting skills through education and training were considered to be profitable for the households. This has resulted in negligence of women for centuries.

Meanwhile, societies found ways of compensating for the low productivity of women by way of lesser investment in them and giving dowries during weddings which further reduced the status of women. The other more dangerous way of coping up resorted by the societies to increase the productivity (value of women?!) is by controlling their numbers which took several forms like female infanticides, foeticides (with due credit to the technologies) or just by the negligence of survival needs like food, health, etc. This has resulted in substantial reduction of female population compared to male.

However, this does not reflect todays situation where men are in more numbers yet continue to earn more than women. This is because, the practices that led to the reduction in the number of women also reduced the status of women in the minds of people and have been in practice for centuries that today's societies see them as a given/ natural phenomenon. However, governments are taking efforts to address this issue through various development programmes right from ensuring equal opportunities in education and employment, ownership rights on land, right to inherit property, offering access to institutional credit, reducing discrimination in the jobs for women, etc. which show positive signs of development.

Status of Women

The number of women in Dindigul district in absolute numbers has increased from 9,54,877 in 2001 to 10,78,837 in 2011. Correspondingly, the ratio of women to men in Dindigul district has increased from 986 in 2001 to 998 in 2011 whereas the child sex ratio is a concern. The female literacy rate has increased from 53.8% in 2001 to 68.33% in 2011 and with respect to female literacy gap it accounts for 15.90% in 2011 when compared to 20.88 % in 2001.

TABLE 6.1 COMPARATIVE STATUSES OF WOMEN

Sl. No	Details	District
1	Female population	1078837
2	Percentage in Total Population	49.95
3	Sex- ratio	998
4	Child sex ratio	933
5	Female literacy rate	68.33
6	MMR	43.17
7	Enrollment in secondary education	101.3
8	% of female workers in agricultural sector	57.4

Source: *Census 2011*

Box 6.1. : A Medical practitioner with Gandhian philosophy - "Hospitals expect the patient to listen to the Doctor; at Gandhigram the doctor listens to the patient." – Dr.R.Kousalya Devi (83 years) belongs to a Telugu family and was born in the year 1931 (16th June). Her father was a follower of Gandhiji. Her father used to tell her that "If you behave and is a good girl, God will come searching for you." She was expecting the same thing to happen but it did not. So, she complained to her father saying that "I waited for god still God did not come". In reply her father said that "God came every day, but you missed him. He came every time you gave food to someone in need. He also came in the form of the vegetable vendor." This incident formed a firm belief in her mind that the God is everywhere and is with all of us. She had a very high inclination towards the medical profession from her childhood. But she did her graduation in arts. Still the inclination was same after graduation. So, she switched over to medicine and did MBBS. She graduated from Madras Medical College in the year 1960. She preferred gynecology as her specialization. She worked in various hospitals in Tamil Nadu once she joined government service from March 1960 to November 1969. In due course of time she was flown and was very much involved in her work and made strong decision not to marry so that she can be available for others. About her marriage she says "I did not feel the need to marry and it gave me freedom to do many things." After she left the government service, she joined the Gandhigram Service. Presently, she is handling six responsibilities- as Managing trustee of Gandhigram Trust, Managing Trustee of Gandhigram Khadi and village Industry Public Charitable Trust, Advisor of Kasturba Hospital, Chairman of the Executive Committee of the Gandhigram Institute of Rural Health and Family Welfare Trust, Member of the State Advisory Committee on Adoption, Tamil Nadu. She also took the responsibility in implementing many programmes for the rural community with the support of Gandhigram Institute of Rural Health and Family Welfare Trust.

She is the managing trustee of Gandhigram Rural Trust and advisor of the Kasturba Hospital. She is working with the principle of Mahatma Gandhi in the rural hospital situated on the busy road of Madurai-Dindigul. She was very much influenced by Dr. T.S. Soundaram, one of the Gandhi activists and one of the earliest women doctors in India. She decided to leave the government job in the year 1969 in a marriage ceremony in Madurai. She was very much influenced by the work of Dr. T.S.Soundaram and decided to leave the government job and serve the deprived women and children. She works for more than fourteen plus hours a day and handles 250 patients. She feels that only being unmarried she is able to handle such work.

(Courtesy: Tata-DHAN Academy, Madurai)

Access and Control over resources

Empowerment of the women has a direct relationship with the access and control over important resources. The right to access and control over inherited assets are ensured by the property inheritance laws of the state which confers equal rights to progenies irrespective of gender. However, the access to institutional credit in the past had been a mirage for women as the access to this particular resource is often based on the proof of ability to repay or to redeem the debt by pledging another asset in the worst case. The ability to repay is based on the productivity of the labour enterprise owned by women. With the advent of Self help groups, women enhance their livelihoods and entrepreneurial skills in addition to the skills of financial planning and management. It makes them credit worthy.

In Dindigul district, there are 14893 self- help groups with a membership of 61,023 women members. Dindigul block has more number of SHGs followed by Athoor and Oddanchathram whereas the SHGs are not many like Shanarpatty, Guziliamaparai and Kodaikanal blocks. The above mentioned SHGs have mobilized a credit worth of Rs.106.35 crores to fulfill the basic credit needs such as consumption, asset purchase, education, housing and livelihood promotion.

Box 6.2. Self-Help Groups (SHGs) - Self Help Group is a homogeneous group of micro entrepreneurs with affinity among themselves, voluntarily formed to save whatever amount they can conveniently save out of their earnings and mutually agree to contribute to a common fund of the group from which small loans are given to the members for meeting their productive and emergent credit needs at such rate of interest, period of loan and other terms as the group may decide.

The objectives of the Self-help groups are as follows,

- To provide a separate line of credit for consumption and emergencies, through their own savings to prevent investment credit from liquidation.
- To move out of exploitative informal financial system especially from moneylenders.
- To establish a sound mechanism to regulate the households cash flow for managing the seasonality of income.
- To internalize the practice of treating external loan as their own fund.
- To formalize the indigenous savings and credit system to provide continuity to people's initiative and to recognize the potential of the local system.
- To localize the financial institution, managed by people to ensure 100 percent repayment and to reduce the lending and borrowing cost by linking with mainstream financial institution.

Pudhu Vaazhvu Project is a women empowerment and poverty alleviation project implemented by the Rural Development and Panchayat Raj Department of Government of Tamil Nadu with World Bank assistance. The project is implemented over a 6 year period extended up to September 2014 at an outlay of Rs 717 crores. The Project covers 2509 village panchayats in 70 Backward Blocks in 16 districts. The target population of this Project is the poor households, the most vulnerable sections including the physically challenged and the marginalized communities. The project follows the CDD approach wherein village communities identify their own needs, design and plan interventions and implement and monitor them by adopting key nonnegotiable principles of the project. There is a strong sense of ownership of the project among the community members.

Box. 6.3. Status of Gender Inequality Index in Dindigul District

The three dimension viz., Health, Empowerment and Labor market have been taken for computing the GII values for the blocks. These three dimensions have fourteen indicators to compute the GII. The nature of this gender inequality index is negative and thus the value closer to the 0 shows lower gender inequality and value closer to the 1, shows higher gender inequality. The gender inequality index is the negative index. Here, the value closer to the 0 shows lower gender inequality and value closer to the 1, shows higher the gender inequality. The status of GII indicators are given in Annexure - 2. The top three and bottom three blocks shows GII are given below,

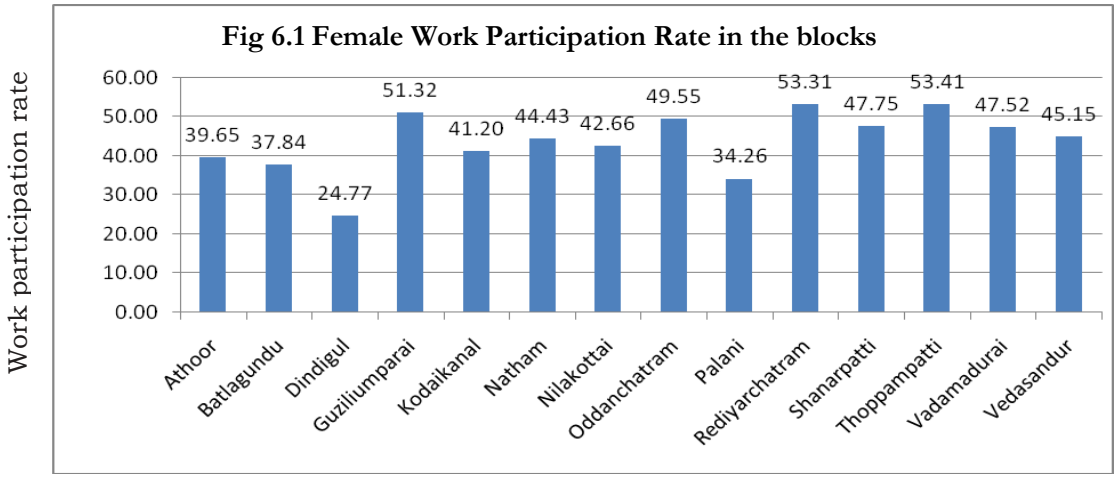
Top and Bottom three blocks in Gender Inequality Index, 2013

Top 3	Bottom 3
Vadamadurai (0.01)	Batlagundu (0.08)
Palani (0.01)	Guziliamparai (0.09)
Reddiarchathram (0.02)	Thoppampatti (0.09)
***Source**: Dindigul district indices computation*	

Out of 14 blocks in the district, Vadamadurai block shows lower GII value (0.01) followed by Palani and Reddiarchathram. Low MMR, more antenatal mothers' coverage, higher share of female elected representatives, the high presence of female children are could be the contributing factors for the better GII performance of the blocks. On the other hand, blocks like Batlagundu, Thoppampatty and Guziliamparai are showing higher GII values due to low female literacy, low female worker participation rate in non-agri sector, low female agricultural wages, high incidence of MMR etc.,

Employment

Women when employed, contribute to the economic prosperity of not only the households but also the society as a whole. The employment of women is encouraged by ways such as ensuring education of girl children in schools and reservation for women in higher education and employment in public sector organizations. While the reservation in State Government institutions including local bodies is 33%, it is not followed in Central Government and Private Institutions. Surprisingly, the overall employment including all the sectors accounts for 33% in Dindigul district. (The data does not include women who are self employed and wage labourers. If added, the overall ratio would change.) However, when women are almost equal in numbers in the population, the 33% employment shows that the efforts need to be more focused and intensified to encourage employment of women.



***Source**: Census 2011*

Trends in political participation

Political participation of women is encouraged by following reservation of 33% of total seats in all positions of local bodies for women. However this is not practiced for state assembly and lok sabha positions. Hence the percentage of women in local bodies is 40 percent while in State and Central assemblies it is only 14%. The overall women participation in governance is 39.79 percent. This shows the tendency of women to take part in local governance more enthusiastically over and above the choices created out of reservation.

Table 6.2 Membership in assembly and local bodies – 2011 - 12

Sl.	Block/ District	MP		MLA		Dist councilor		Mun. panchayat		Block pan Chayat		Town pan Chayat		Village pan Chayat		Total		% of Female	% of Male
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
1	Athoor			1		1	1			10	7	35	19	13	9	60	36	37.5	62.5
2	Batlagundu					1				7	5	33	18	9	8	50	31	38.3	61.7
3	Dindigul	1			1	1	1	17	16	9	10	19	14	8	6	55	48	46.6	53.4
4	Guziliumbarai					1				9	4	11	5	12	5	33	14	29.8	70.2
5	Kodaikanal					1		8	8	8	4	10	6	10	5	37	23	38.3	61.7
6	Natham			1		1	1			8	12	12	7	13	10	35	30	46.2	53.9
7	Nilakkotai			1		1	1			13	7	22	13	12	11	49	32	39.5	60.5
8	Oddanchatram			1		1	1	5	7	13	7	0	0	21	14	41	29	41.4	58.6
9	Palani						1	17	16	10	5	33	17	12	8	72	47	39.5	60.5
10	Reddiarchatram					1	1			9	9	20	12	17	7	47	29	38.2	61.8
11	Shanarpatti					1	1			11	8	0	0	14	7	26	16	38.1	61.9
12	Thoppampatti					1	1			12	8	11	5	24	14	48	28	36.8	63.2
13	Vadamadurai					1				8	4	17	15	7	8	33	27	45.0	55.0
14	Vedasandur			1		1	1			8	7	21	11	14	8	45	27	37.5	62.5
District		1		5	1	13	10	47	47	135	97	244	142	186	120	631	417	39.8	60.2

***Source**: PA, Rural development, Dindigu*

The top and bottom three blocks that are having higher and lower female membership respectively in local bodies are given below,

Top three blocks	Bottom three blocks
Dindigul (46.6%)	Guziliamparai (29.79%)
Natham (46.15 %)	Thoppampatty (36.84%)
Vadamadurai (45 %)	Athoor (37.50%)

Summary and Conclusion

Gender discrimination is an age old social practice entrenched in the patrilineal and patrilocal culture of Tamil Nadu. No report on human development can be complete unless and until it unravels gender inequities in human development, analyses the strengths and weaknesses of efforts to address these, and suggests possible strategies to bridge the gender gap in the future. This kind of discrimination has been in practice across various social groups including SC and ST. So SC and ST women face double burden of caste discrimination and gender discrimination. Gender discrimination is expressed through various means like inadequate recognition of women's contribution to GDP, lower wages than that of males, low asset ownership, inadequate intra-household nutrition share, etc. There is lot of similarities between discrimination based on caste and gender. Here too low social standing, perception of low personal worth, poor asset ownership, and high incidence of poverty and lack of bargaining power are witnessed and as in caste based discrimination, they reinforce each other and result in a vulnerability spiral. Women bear triple burden of reproduction, domestic work and productive labor.

Discrimination against women has led to their lack of autonomy and authority. Although equal rights are given to women, legality may not be well implemented. In practice, land and property rights are weakly enforced, with customary laws widely in practice in rural areas. Women do not own property under their own names and usually do not have any inheritance rights to obtain a share of parental property. With respect to Dindigul district, the areas like gender gap in female literacy, enrollment in secondary, declining child sex ratio, wage rate are the thrust areas that are considered as indicators of concern for gender issues though there has been improvement in absolute levels of literacy, their participation in politics and empowerment due to SHGs.

CHAPTER 7

SOCIAL SECURITY

Chapter 7
Social Security

Introduction

Human life in all its stages is blessed with growth and development. Old age is one of the significant stages of human life. In Indian culture, aged people are usually respected and treasured for their experience and wisdom. But transition of modern Indian society leads to the disintegration of the joint family system and has resulted in loss of significance of older people who played a greater role in the families by transmitting cultural, social and moral values and by providing guidance in the growth path of younger people. This has left the aged people in a condition characterized by isolation, lack of social security and lack of social bonds. The problems of the aged in the poor families are manifold. Besides high health hazards, they have to depend on their family members or others in their day to day needs. Moreover, most of the poor are in the unorganized sector. They neither have a formal retirement nor any retirement benefits. In the absence of an effective social security mechanism, it is important to devise a solution that involves participation of the community to prepare themselves for their old age besides strengthening the demand system to have increased access to social security measures of the State.

Social Security measures by governments are the tools intended to ensure equity in the well-being in the society. These measures are aimed at supporting those left out or lag behind the overall socioeconomic development processes. The social security measures generally are classified as promotional, protective and preventive measures. Promotional measures of social security include the welfare measures intended to increase income in short to medium term in order to promote resilience among the communities to handle the potential risks. These are ex-ante risk management measures which are taken before the incidence of risk. In the district of Dindigul, the promotional social security measures include SGSY, Skill development programmes, midday meal and scholarship for SC/ST students, etc.

The preventive social security measures aim at preventing the communities from falling into deprivation. These measures include community health programmes, fully or partially subsidized social insurance programmes; and so on. These are also ex-ante risk management measures which are taken before the incidence of risk. Protective social security measures aim at protecting those segments of the population who are already under deprivation and are marginalized and discriminated due to various factors. These measures include cash transfer programmes including

pension for the old aged, widows, destitute, differently abled, mentally challenged and programmes aimed at the development of women etc.

This section deals with the state of vulnerable segments of the society and protective social security measures taken up in the district of Dindigul.

Demographic profiles of the Aged

As per 2011 census, the total aged population in Dindigul district is 236331 in absolute numbers which is 10.94 percent of the total population of the district and 3.14% of the total aged population of Tamil Nadu. The percentage of the district aged population is higher than that of state aged population like 10.41 percent, 10.13 percent and 10.69 percent in total aged population, male and female aged population respectively.

It is observed that the number of aged female is higher than the male counterparts in both Dindigul and in Tamil Nadu that indicates that the elderly female lives longer than the male in the district and as well as in the State. With respect to age wise category of the aged, 63.76% of the total aged population of the district fall under 60-69 category, followed by 27.35 % by 70-79 category and 8.9% of them are 80+category.

In the case of rural-urban divide, the elderly people are more prominent in rural (11.27% of the total rural population) than the urban areas (10.38% of the total urban population) at district level. This status is higher than the state average where the aged in rural is 10.87 % and that of urban is 9.97% of the respective total population.

TABLE 7.1 Demographic profile of aged (2011)

District/ State	Total population	Male	Female	Total population	Male	Female
	Numbers			Share of total population		
District	236331	117230	119101	10.94	10.85	11.04
State	75,09,758	36,61,226	38,48,532	10.41	10.13	10.69

***Source**: Census 2011*

Financial Security

Providing old age pension to the poor and for the vulnerable aged persons above 60 years is one of the important social security programme currently in operation. The programme is being implemented by the State with contributions from Central (40 percent) and the State Government (60 percent). Each eligible aged person gets Rs.1000 as a monthly pension. 32426 old age population is getting the benefit of old age pension from government. Out of 236,331 aged populations, hardly, 13.72 percent of the old populace is receiving OAP benefit. The District administrations need to concentrate to identify those eligible and really deserving for OAP benefit.

TABLE 7.2 FINANCIAL ASSISTANCE TO OLD AGE PEOPLE, 2013 - 14

Sl. No	Category	Coverage
1	OAP	32426
2	Destitute widows	21014
3	Disabled persons	5055
4	Mentally retarded persons	2450
5	Severely disabled person	480
6	Muscular dystrophy person	78
7	Leprosy persons	300

***Source**: Rehabilitation Officer and Social Security Officer, Dindigul*

Differently abled

Other than aged persons, the financial assistance for the mentally retarded has benefited 74% of the eligible persons; the percentage of beneficiaries for SDP, the MDP and leprosy persons were 94%, 91.5% and 100% respectively. It is noteworthy to make a special mention about the district administration on the special efforts for the benefit of the differently abled in the district. The 'district administration towards differently abled,' a novel scheme to take government schemes to the doorstep of differently abled has been effective in the district. The troubles faced by differently abled persons have been completely eliminated through this scheme. A team comprising Department of Differently Abled Welfare officials, VAO, and village secretary will meet differently abled at respective villages on Tuesdays, Thursdays and Fridays. The VAO will identify applicants eligible for monthly assistance and village secretary will issue necessary certificate. Similarly, they will also identify beneficiaries eligible for house pattas, Indira Gandhi memorial housing scheme and for green house schemes and send the list of beneficiaries to DRDA. Apart from this effort, the District Collector **Shri. N.Venkatachalam** has also shown personal interest in ensuring prompt services to the differently abled for which he has received a special award from the Tamil Nadu State Government during 15th August, 2014.

TABLE 7.3 ASSISTANCE TO DIFFERENTLY ABLED – 2013-14

S. No	Type	No.	Amount (Rs. In lakhs)
1	Maintenance assistance for mentally retarded persons	2200	142.67
2	Monthly assistance for the moderately affected differently abled persons	50	2.88
3	Monthly assistance for severely affected (75%) differently abled persons	394	22.75
4	Free bus pass for the differently abled	368	-
5	Monthly assistance for the unemployed differently abled persons	360	33.00

Source: *Source: Rehabilitation Officer and Social Security Officer, Dindigul*

Box-7.1 Marriage and Maternity Assistance Programme

At district level, a fair number of assistance programmes are offered by the State Government for the betterment of the deprived women's section of the society. Implementation of Dr. Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) under which an assistance of Rs.12,000 is given in three installments to pregnant women in poor families has resulted in a reduction of Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) in Tamil Nadu. The different types of programme are listed below in detail along with the other special programmes. In the year 2013-14, the following marriage and maternity assistance were given to the deserving women in the district.

S.No.	Scheme	No. of beneficiaries
1	Moovalur Ramamirdham Ninaivu Thirmana Thittam	9042
2	EVR Maniammai Ninaivu Widow's daughters Thirumana Thittam	190
3	Annai Theresa Destitute girls Thirumana Thittam	33
4	Dr.Dharmambal widow remarriage Thittam	7
5	Dr.Muthulakshmi Reddy Ninaivu inter-caste marriage Thittam	31
Total		**9303**
Total amount distributed (in lakhs)		**3051.50**

Source: *District Social Welfare Office, Dindigul*

Other services:

1. Supply of free sewing machines for poor widows, destitute and differently abled women
2. Free supply of Books and Notebooks to the school going Children of poor widows
3. The cradle baby scheme is implemented in the district since 2002 and at present there are 30 cradle units functioning with a reception point at Government hospital, Dindigul

As a measure to uplift the downtrodden women and to provide employment opportunity the following co-operative societies are functioning,

- Annai Sathya Women Tailoring Industrial Co-operative Society, Chinnalapatti.
- Annai Abirami Women Tailoring Industrial Co-op Society, Dindigul
- Dindigul District Stationery Manufacturing Women Development Industrial Co-op Society, Dindigul.

Crime against women

The Constitution of India confers equal rights to men and women. However, the practice of discriminating women from men exists in our society for ages. It has resulted in the low status of women, which sure is a barrier to the development of the nation. Gender disparity cuts across all the other forms of disparities in the country that arise from social, cultural and economic segmentation of the society due to caste, religion and economic class, etc. The gender disparity takes several forms right from eve teasing, harassment due to dowry, women beating to molestation & sexual harassment, rape and honour killings and so on. Like many social evils, gender discrimination starts from home and gets manifested in many spheres of the society. Stringent laws are being enacted to make the constitutional rights of women a reality. However, the effects are hard to realize.

One way of getting a view of the status of women in the society is to look at the data for cases registered relating to crimes against women. Table 7.4 shows the data on crimes against women recorded in Dindigul district during the year 2011.

TABLE 7.4 CRIMES AGAINST WOMEN

S.No	Category	Numbers of cases in 2011	Numbers of cases in 2013-14
1	Rape	17	15
2	Molestation Kidnapping and Abduction Women and Children	52	141
3	Dowry Death	2	4
4	Cruelty by Husband and his relatives	113	119
5	Importation of Girls	0	0
6	Dowry Prohibition Act	0	0
7	Sexual Harassment	0	0
8	TNPHW	33	0
9	Eve- teasing	0	0
District Total		**217**	**279**

***Source**: Office of District Superintendent, Dindigul*

In 2013–14, the crime against women of the district increased to 279 from 217 in 2011, mainly because of rising trend in molestation kidnapping and abduction to woman and children. There is only a marginal increase in the cruelty by husband and his relatives.

Summary and Conclusion

Social security is a fundamental right of each citizen. The International Labour Organization (ILO) has identified nine major benefits that should form a part of any social security system. They are medical care, sickness benefits, unemployment benefits, old age benefits, employment

injury benefits, family benefits, maternity benefits, invalidity benefits and survivor's benefits. This warrants experimentation on providing support to aged persons through micro pension initiatives above all. This is reiterated by the report of the United Nations, which states that 1.2 billion of the world's older population will be living without a safety net in 2050. The report urges upon developing nations, including India, to provide a pension offering benefit equivalent to the extreme poverty line of $1 a day.

It will be at our peril if we fail to leverage on the strengths of the traditional processes that our people had practiced in order to maintain social balance. It is appropriate to study the overall conditions of elderly. Current social and demographic trends as well as the projections indicate that the situation is much more appealing for women than men. Since female life expectancy is higher than that of men, the majority of the older persons in India will be women very soon (51% of the elderly population by 2016, and expected to rise rapidly), and the life expectancy for women at age 60 is higher than that for men. This means that the extremely dependent population of extremely old women will increase to much higher numbers in the years to come. Combined with this is the fact that a majority of these women are already widows and either living with sons and /or daughters or are on their own.

The present scenario of the current elderly generation implies that all of them are in the unorganized sector and have no savings or other financial means of supporting themselves. Some of them may receive the old age pension or the widow's pension of Rs.400/- per month. With age comes more and more dependence on families for emotional, physical and economic support. The aged person attempts to work as long as the physical health permits to do so and then hope for assistance from relatives and neighbours in the village. Economic insecurity is the most pressing situations for aged. Social security with the focus on economic security for the aged would be more appropriate to ensure a comfortable living to them. The concept of ensuring income security during old age is not known to the aged people of India and is almost not in existence too.

With respect to welfare programmes to women and other deprived sections who are destitute, orphans and differently abled persons, there is enough number of programmes at place. But the thing is that those entitlements should embrace them in time with great self pride and for which real social concern is the need of the hour.

CHAPTER 8

INFRASTRUCTURE

Chapter 8
Infrastructure

Introduction

Infrastructural facilities play a crucial role in facilitating attainment of various facets of human development. The impact of investment on different kinds of infrastructure varies widely. It is important for the policy makers make an informed choice as the resources are limited. The is empirical evidence in standard literature that the impact of investment on roads on poverty reduction was much higher than conventionally known investment priorities like health, education and irrigation in India. As the infrastructure has such impact on human development it is important to understand the current level of infrastructure in the district.

The infrastructure can be either private like a house or public in nature. Major public infrastructural facilities are road and transports, telecommunication, electrical, Insurance 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. This chapter focuses on the status of these types of infrastructure and their implication on human development.

Road Infrastructure

Road play very many roles in actualizing general development and so human development. The recent developments in the road infrastructures have greater influence in connecting the villages to the towns. The analysis of block wise road infrastructure indicates that there is a wide range of disparity among the blocks of Dindigul district as per the 2011 status. The block of Nilakottai has the lowest road infrastructure among all the blocks, closely followed by Batlagundu block. On the contrary, the highest surfaced road length in per 100 square Km of geographical area was observed in the block of Thoppampatty followed by the Odanchathiram block. The specific focus needs to be given to improve the road infrastructure in Nilakottai and Batlagundu. The district has an overall road length of 4930.35 kms of which 661.10 kms are of Mud type, 137.02 kms are of Water Bound Macadam (WBM) type, 3224.03 kms are of Bituminous Tar (BT) type and a meager 12.64 kms are of Cement Concrete (CC) type.

The total road length of the district is increased from 4930.4 km to 5418 km in 2011 to 2013-14. It creates positive vibration in human development. But the same time, the share of mud road is also increasing trend, mud road growth rate is higher than the BT road growth. It needs to be corrected in future.

TABLE 8.1 DISTRIBUTION OF TOTAL ROAD LENGTH (in km)

S. No	Block	Total road length		Mud		WBM		BT		CC	
		2011	2013-14	2011	2013-14	2011	2013-14	2011	2013-14	2011	2013-14
1	Athoor	244.9	263	66.6	86	11.6	17	155.3	160	0.3	0
2	Batlagundu	170.7	206	29.9	42	11.0	20	129.6	143	2.2	0
3	Dindigul	223.1	284	70.5	105	4.9	12	140.7	165	1.1	3
4	Guziliumbarai	274.7	474	6.5	166	37.6	0	162.4	307	0.0	1
5	Kodaikanal	248.9	249	63.4	58	1.0	1	182.0	188	2.5	3
6	Natham	513.6	964	199.6	450	19.4	46	283.3	465	2.3	3
7	Nilakkottai	167.6	168	1.0	17	5.2	5	144.6	145	0.5	0
8	Oddanchatram	604.1	520	59.1	144	8.2	4	331.5	370	0.0	1
9	Palani	359.0	395	119.5	143	15.6	13	222.6	237	0.0	2
10	Rediyarchatram	292.7	269	76.4	36	2.6	3	208.1	230	0.3	1
11	Shanarpatti	295.4	297	71.0	47	1.8	1	220.4	246	2.3	2
12	Thoppampatti	741.7	742	104.69	168	5.0	2	546.0	571	0.0	0
13	Vadamadurai	479.4	275	0.6	63	4.6	30	304.2	181	1.0	0
14	Vedasandur	314.4	314	90.0	101	8.7	9	193.3	204	0.2	0
District		**4930.4**	**5418**	**661.1**	**1626**	**337.0**	**164**	**3224**	**3611**	**12.6**	**17**

Source: *BDO, MC, EO, TP, Dindigul*

Among the blocks, the figure for mud road length is higher in the Natham block (199.61 kms) followed by Palani, Thoppampatty and lower in Vadamadurai block (0.60 kms). In respect of WBM road, the length of the road in the Guziliamparai block is 37.57 kms and in Kodaikanal block it is 1.0 km. Thoppampatty block has a higher figure for length of BT road with 545.9 kms and lower in the case of Batlagundu block with 129.59 kms. Cement Concrete (CC) roads are available to a length of 2.5 km in Kodaikanal block, whereas no such roads are available in Guzilumparai, Odanchathiram, Palani and Thoppampatty blocks.

Electrification

Electrification has been seen as a prominent development indicator in a living situation. It is very vital for many livelihoods like agriculture, cottage industries and other small scale industries thereby enhancing the local economy. In Dindigul district, both the rural and urban blocks have very good population coverage in terms of electrification. Electrification has been done to 3084 hamlets, 23 town panchayats and 123 wards of the four municipalities with population coverage of 14.57 lakhs in the district thereby erecting more than 5,000 street lights.

TABLE 8.2 STATUS OF ELECTRIFICATION, 2013 - 14

S. No	Blocks	No of Village Panchayats	No of Hamlets	Population covered	No. of street lights
1	Athoor	22	152	107752	4654
2	Batalagundu	17	100	77449	8372
3	Dindigul	14	307	151204	3886
4	Guziliamparai	17	411	78231	5149
5	Kodaikanal	15	145	70018	4984
6	Natham	23	216	133051	3671
7	Nilakkotai	23	184	124478	2496
8	Oddanchatram	35	234	106517	3005
9	Palani	20	116	99024	2437
10	Rediyarchatram	24	238	102682	4115
11	Shanarpatti	21	217	123227	5650
12	Thoppampatti	38	173	108541	3946
13	Vadamadurai	15	209	78859	4779
14	Vedasandur	22	382	96379	382
District		**306**	**3084**	**1457412**	**57526**

Source: *Ad Panchayat, EE & MC, Dindigul*

As per 2013-14 data, the electrification is high in Dindigul block with coverage of 151204 population and lower in case of Kodaikanal with about 70018 population. Lack of electrification of individual house was also a very good indicator of various dimensions of poverty as it negatively influences the current living condition of the household and also the future well-being through hampering education of the children.

Communication system

Home telephone was considered a household amenity of the affluent a decade earlier. But now it has attained a status of essential amenity even among low income classes indicating the need for connectivity. This became very visible once low investment mobile telephone services became available. It is one of the fastest penetrating technologies even in the rural areas. Telephones that way do not stop with serving as communication devices, but go beyond that by serving many other purposes like a tool for livelihood.

As data was not available for mobile telephone penetration, data pertaining only to the fixed phone services is used for analysis. At district level, there are 33 telephone exchanges with 548 PCOs and 87 mobile towers. With heavy increase in the usage of mobile phones, there is a downfall in the landline connections for households. In Dindigul taluk, landline connection was more with 8729 and low in Vadamdurai with 344 connections.

TABLE 8.3 TELECOMMUNICATION SYSTEMS, 2013 - 14

Sl. No	Taluks	No. of Tel. Exchange	No. of PCO	No. of land lines	Number of Mobile Phone towers
1	Dindigul	7	228	8729	21
2	Athoor	2	92	1545	6
3	Rediyarchatram	5	90	927	9
4	Kodaikanal	3	54	584	9
5	Natham	4	4	850	12
6	Vedasandur	5	25	1048	9
7	Vadamadurai	3	40	344	9
8	Guziliamparai	4	15	440	12
District		**33**	**548**	**14467**	**87**

***Source**: BSNL, Dindigul*

A wide variation in terms of availability of PCOs was observed among the taluks of Dindigul. But the concentration of PCOs was very less in Guziliamparai with 15 PCO, but high on Dindigul block with 228 PCOs. The telecommunication has witnessed an increasing trend in 2013 – 14, the number of telephone exchange are 33. There are 548 PCOs in the district, 14467 landlines and 87 mobile phone towers.

Financial Institutions

The details relating to commercial banks and Cooperative societies, and their access in terms of number of accounts are given in table 8.4. From the table we could find that in Dindigul district through 106 commercial banks and its 245 branches cover the financial needs of 38216336 account holders. The data on population served per cooperative society shows that the lowest number of serving in the block of Reddiyarchatram (11) and more numbers in Dindigul about 39. Comparatively less number of persons was also served by per bank branch in the block of Reddiyarchatram 15320 persons and more in Dindigul about 48720 members. It indicates that banking network is much better in these areas. But the concentration of bank branches in terms of population was very less in the Reddiyarchatram. But Palani block has more number of account holders with 23330 members and Reddiyarchatram has less number of account holders with just 8780 members. Canara bank has been serving as lead bank in Dindigul district. There are 197 bank branches in the district having 682926 members and 2110132 account holders in the commercial banks. Financial literacy and counseling centre is also available in the district that provides enough literacy and awareness on banking operations to the rural people.

TABLE 8.4 COMMERCIAL BANKS AND COOPERATIVE SOCIETIES 2013 - 14

Sl. No	Block	No. of co-operative societies	Number of Members	Commercial Banks	Branch	No. of account holders
1	Athoor	39	49232	8	16	2769676
2	Batlagundu	18	20520	5	14	1977314
3	Dindigul	11	15492	13	59	11680974
4	Guziliumbarai	17	20117	5	6	894330
5	Kodaikanal	16	18724	8	17	1769405
6	Natham	13	19983	6	13	1642704
7	Nilakkotai	21	29014	6	13	2540747
8	Oddanchatram	36	45076	13	21	2494900
9	Palani	21	36523	10	25	4664494
10	Rediyarchatram	21	35670	7	12	1730963
11	Shanarpatti	13	24648	7	10	820463
12	Thoppampatti	16	22984	6	18	2304774
13	Vadamadurai	17	22697	7	11	1299043
14	Vedasandur	23	27665	5	10	1626549
District		**282**	**388345**	**106**	**245**	**38216336**

***Source**: Lead District Bank, Dindigul*

More than availability, utilization gives a better picture of access to infrastructure. The data on households availing banking services indicates that the overall level of utilization of banking services is poor both in the district. The percentages of households availing banking services in the district was marginally lower than that of the state. The banks should take necessary steps to reach the currently unreached households. Initiatives are needed in two directions, one is making available financial products that are attractive to a large section of the population and the other is to change institutional forms of delivering banking service. The banks have been moving in the second direction in the last one decade by routing credit through SHG's. The efforts by the district administration to facilitate housing credit through banks and SHG network for disadvantaged families is a promising step in this direction.

Likewise, in 2013–14, the total number of cooperative societies and commercial banks, branches are 282 and 245 with the membership of 388,345 in cooperative societies and 3,82,16,336 account holders which includes savings, credit, fixed deposit and recurring deposits accounts respectively. The total number of commercial banks offering services in Dindigul district is 106.

Insurance

Insurance plays a major role in protecting livelihoods from sudden, unexpected losses and thereby giving continuity to livelihoods, even after the incidence of accidents and other such situations. It is also an instrument any individual or business can use strategically to protect themselves in a proactive manner. In 2011 United India Assurance Company, there are 6 branches with 52953 members, Oriental insurance company with 5 branches with 21000 policies issued and LIC had 4 branches and issued 48450 policies.

In 2013-14 while there was remarkable increase in the number of policies issued United India Assurance Company and Oriental Insurance Company the policies issued by LIC declined. There is need for a closure look at it for necessary corrective measures to increase the policies issued by LIC.

TABLE 8.5 INSURANCE COMPANIES

Sl. No	Name of the Companies	No. of branches		Policies Issued	
		2011	2013 - 14	2011	2013 - 14
1	United India Assurance	6	**8**	52953	125030
2	Oriental Insurance Company	5	**6**	21000	31553
3	LIC	4	**4**	48450	42834
4.	NIC	-	**1**	-	16554
Total		**15**	**19**	**122403**	**215971**

***Source**: Insurance Companies, Dindigul*

The situation in Dindigul typically reflects the situation in rural India. In the district, the penetration had been very poor. The number of policies was nowhere closer to the needs. 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 penetration of various insurance products.

Transport facilities

Dindigul district boasts of very good transport facilities as it is highly connected with nearly seven districts. It has National highways (NH47) of 186 kms, State highways of 2340 kms, Municipal roads of 350 kms, Town Panchayat roads of 724 kms and Panchayat union/Panchayat roads of 4424 kms thus supporting the men and materials to have effective transport facilities. With respect to rail services, Dindigul junction is the key connecting area of the southern

districts where it is highly effective for the industrialists, traders and the tourists. There are as many as 56 trains passing through Dindigul junction that reflects the thick rail network in the district. There are 11 railway stations in the district to cater to the transport needs of the people of the Dindigul district.

Summary and Conclusion

On the infrastructure front the district had fared well in the case of roads, electrification of villages and transport facilities. The recent effort to identify infrastructural needs and planning for the same at the village level through various schemes is a very positive move. Attempts towards community ownership of the assets created and maintenance by the community are highly appreciated.

But there is lot of variation across the blocks regarding roads and their distribution. It is important to find the specific reasons for the poor performance in the blocks and based on that necessary interventions need to be planned. As far as the road infrastructure is concerned, it is time to look beyond the availability of roads to quality of available roads. 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 is poor. As far as insurance is concerned, much need to be done to make it serve as an important instrument for vulnerability reduction in various spheres of life and thereby making it significantly contributing for 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. Initiatives are needed in two directions, one is making available financial products that are attractive to a large section of the population and the other is to change institutional forms of delivering banking service. The banks have been moving in the second direction in the last one decade by routing credit through SHG's.

It is time to review the role played by post offices in connecting people and take necessary measures to make them more relevant. As the postal network has wide presence in the district, they can be made to function as multi-service points in collaboration with other entities.

CHAPTER 9

SUMMARY AND WAY FORWARD

Chapter 9

Summary and Way Forward

The earlier chapters of this DHDR have attempted to summarize the human development gains on various aspects in the Dindigul district and to identify the challenges to be overcome in the coming years. It has became clear from these discussions that the district is moving fast on the social development path with considerable gains in human development. These positive changes can be attributed to strong social development focus of the district administration, exclusive attention given by the State Government in terms of various schemes due to the backwardness of the district, involvement of civil society and improved local governance. The following section summarizes the achievements made in various sectors and other development aspects in the district and also suggests ways for overcoming the current challenges.

Status of Human development in Dindigul district

According to the 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. Development is thus about expanding the choices people have to lead lives that they value."

- The Human Development Index was constructed for the 14 blocks in the district. As per the indicators of standard of living, health and education the index value ranges between 0.84 and 0.31. Dindigul block ranks the top owing to its urban nature and Guziliamparai ranks low in the category due to its low performance in health and education indicators.
- The second ranked Oddanchathram is a municipality oriented block wherein both the standard of living and health indicators have strong influence. In contrast, apart from low ranked Guziliamparai, the other low ranked blocks like Vadamadurai and Natham have poor HDI values because of lack of access to basic amenities and health services.
- Out of 14 blocks in the district, Vadamadurai block shows lower GII value (0.01) followed by Palani and Reddiarchathram. Low MMR, more antenatal mothers' coverage, higher share of female elected representatives, the high presence of female children could be the contributing factors for the better GII performance of the blocks.
- On the other hand, blocks like Batlagundu, Thoppampatty and Guziliamparai are showing higher GII values due to low female literacy, low female worker participation

rate in non-agri sector, low female agricultural wages, high incidence of MMR.

- In Dindigul district, out of 14 blocks, Dindigul block performs better in CDI due to low percentage of malnourished children and higher school enrollment rate, whereas, Kodaikanal block seems to faring low due to high under-five mortality and low school enrollment at higher secondary level.

- Among the 14 blocks in the Dindigul district, Dindigul block shows lower MPI followed by Oddanchatram and Palani. This may be attributed the fact that these blocks are urban in nature and hence the standard of living is high that has resulted in low MPI. On the other hand, blocks like Vedasandur, Guziliamparai and Natham have higher MPI owing to their poor access to health and educational infrastructure.

- It is interesting to quote that majority of the rankings obtained have coincided with the reality of the respective blocks. For instance, the Dindigul block owing to its urban nature established its supremacy in three indices except GII that seeks attention. Similarly, backward blocks like Thoppampatty and Vadamadurai has gained lower ranks as they matched with the ground situation.

- An anomalous feature is that Guziliamparai that is at the bottom of the table has not been declared as the backward block, whereas Reddiarchathram that has better performance find itself in the backward block list. Measures can be taken by the district administration to include Guziliamparai as one of the backward blocks that badly needs attention on all fronts.

Employment, Income and Poverty

- It is a well known fact that employment, income and poverty are interrelated and they have significant influence over human development. So analysing changes pertaining to these aspects is very important to understand what is happening regarding human development. The serious development issue India (and Tamil Nadu) is facing that the decline in share of the primary sector in national income is not being accompanied by a significant shift in the share of primary sector employment to secondary and tertiary sectors.
- With respect to Dindigul district, the secondary sector has a superior trend than the primary and tertiary sector that need to be capitalized for stabilizing and constant growth. On the other hand the tertiary sector has also seen marked improvement over the years that indicates there emerging new opportunities in trade and business sector.

Demography, Health and Nutrition

- The measurement of aspects related to demography, health and nutrition forms an important constituent in determining the human resource development of the population. In the tracking of demography, the important elements that are recorded and monitored include population, sex ratio, crude birth rates and death rates, life expectancy rates, infant mortality rates, maternal mortality rates, institutional deliveries and immunization.

- On the other hand, the extent of malnutrition, and incidence of life-threatening diseases are important elements for tracking nutrition. In respect to demography, the population of Dindigul district is 2159775 with male population of 1080938 and female population of 1078837.

- In the years between 2011 and 2001, the district has shown a population increase of 12.3 percent, as compared to the population increase of 15.6 percent in the state of Tamilnadu. The highest increase (18.2 percent) in population in percentage terms was recorded for the Natham block, while the lowest increase (6.5 percent) was recorded for Thoppampatti block. With respect to sex ratio, Dindigul district has 998 females per 1000 males against the state ratio of 995. This was slightly lower than that of state in 2001. Athoor, Vedasandur, Oddanchathram, Dindigul and Palani are the top five blocks having sex ratio more than 1000 and blocks like Vadamadurai, Batlagundu and Natham are the bottom three blocks having less sex ratio in 2011.

- When all the blocks in the district show increased trend of sex ratio, blocks like Natham and Vadamadurai show decreased trend. Dindigul district has shown a decrease in population density to the extent of 32 percent between the years 2001 and 2011. All the blocks of Dindigul district show a decrease in population density, except for the Shanarpatti block, which has shown an increase of 27 percent in population density.

Literacy and Education

- Literacy and education have a great instrumental role in improving the capabilities, thereby improving the freedom of choice of human beings which is the basis of human development.
- Tamil Nadu, given its rich heritage in education, is in the forefront with regard to several educational indicators such as literacy, school enrolment, infrastructure, access and achievement.
- Dindigul being a backward district, lot of attention was bestowed by the State on education in the recent past. In this chapter progress in literacy, school education and higher education are discussed. Elementary education is examined as an indicator of the present level of human development as well as a means for greater human development in the future.
- Concerted and all round efforts were put in the district to improve the educational status with more focus on backward blocks. Due to these efforts there had been significant achievements in the district in elementary education in terms of improvements in NER and GER in upper primary section.
- Broadly speaking achievements in terms of quantitative improvements, though marginally below the goals of SSA, were very significant. But on the quality front, there is so much to be achieved as the gap from the desired level is quite significant. The district enjoyed only limited higher education infrastructure and there were no professional colleges except for engineering. There should be thrust in the following areas to bring in significant improvements in the educational status in the district.
- Sustaining the special attention given to Guziliamparai.
- **Identifying the hot spots of poor education** in terms of villages, social groups and occupational groups and taking necessary action.
- **Building strong accountability in the system.** This need to be done through instituting supervision mechanism that reinforce good teacher management and through periodical evaluation of learning outcomes of the students.

- **Institute a system of monitoring and evaluation of student learning**. Grover et al, (2002) recommended administering standardized assessments to a sample of students in standard V in every four years and establishing a common examination paper for all standards from III to V.
- **Ensuring community ownership and greater role for local bodies**. They should have a role in supervising the service delivery and the outcome of the educational system. The widespread presence of the SHGs in the district needs to be capitalized for this.
- Learning from the success stories and taking that learning to other areas.
- The thrust given both for absorbing all the children into the education system and bringing back both children and adults lying outside into the system need to be continued, as the district is still far below the acceptable level of literacy, particularly female literacy.

Gender

- Gender discrimination is an age old social practice entrenched in the patrilineal and patrilocal culture of Tamil Nadu. This kind of discrimination has been in practice across various social groups including SC and ST. So SC and ST women face double burden of caste discrimination and gender discrimination. Gender discrimination is expressed through various means like inadequate recognition of women's contribution to GDP, lower wages than that of males, low asset ownership, inadequate intra-household nutrition share, etc.
- Discrimination against women has led to their lack of autonomy and authority. Although equal rights are given to women, legality may not be well implemented. In practice, land and property rights are weakly enforced, with customary laws widely practice in rural areas. Women do not own property under their own names and usually do not have any inheritance rights to obtain a share of parental property.
- With respect to Dindigul district, the areas like gender gap in female literacy, enrollment in secondary level, declining child sex ratio, wage rates are the thrust areas that are considered as indicators of concern for gender issues though there has been improvement in absolute levels of literacy, their participation in politics and empowerment due to SHGs.

Social security

- Social security measures by governments are the tools intended to ensure equity in the well-being in the society. These measures are aimed at supporting those left out or lag behind the overall socioeconomic development processes.
- In the district of Dindigul, the promotional social security measures include SGSY, Skill development programmes, midday meal and scholarships for SC/ST students, etc.
- The district administration has fared well in ensuring the entitlements to the differently abled people of various types and was well recognized by all the stakeholders in the district. The same has to be intensified to all the sections of the vulnerable population for the holistic development of the district.

Infrastructure

- On the infrastructure front the district had fared well in the case of roads, electrification of villages, transport facilities etc., The recent effort to identify infrastructural needs and planning for the same at the village level through various schemes is a very positive move. Attempts towards community ownership of the assets created and maintenance by the community are highly appreciated.
- The penetration of banking services, insurance and telephone services is poor. As far as insurance is concerned, much need to be done to make it serve as an important instrument for vulnerability reduction in various spheres of life and thereby making it significantly contributing for 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. Initiatives are needed in two directions, one is making available financial products that are attractive to a large section of the population and the other is to change institutional forms of delivering banking service. The banks have been moving in the second direction in the last one decade by routing credit through SHGs.

Way Forward

The outcomes of the DHDR have to be sensitized and disseminated in an effective way to the local bureaucracy and to the other related stake holders. Dindigul being the drought prone district needs to concentrate more on rain water harvesting technologies both for irrigation and also for the drinking purpose. The key areas like water and sanitation have to be given enormous focus as most of the diseases are of water-borne. The people have to be sensitized such that equal importance has to be given sanitation aspects as that of water supply and PDS supply. Local bodies and appropriate NGOs should be involved in bringing behaviour changes among the people. Female education in the backward blocks needs to be concentrated as the district's gender gap ratio in literacy is higher than the state average. SSA has been implementing enormous special activities in bringing down the dropout rates in the backward blocks, but the efforts need to be constantly taken to acquire the desired results. The identified top three and bottom three blocks in each indicators of the human development index has to be carefully assessed and adequate steps need to be taken by the relevant stake-holders to address the backwardness of the blocks in the district.

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	
		2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14	
				(habitation)						Census	Edcn Dept	Edcn Dept	
1	Athoor	40.87	41.41	98.82	91.58	90.00	13.40	23.99	7.0	78.86	100.11	79.51	
2	Battlagundu	21.31	55.48	91.61	87.71	83.00	10.10	38.00	4.4	76.93	100.14	119.61	
3	Dindigul	56.84	64.86	98.17	96.54	92.00	12.40	32.59	5.5	85.51	100.19	124.89	
4	Guziliamparai	14.00	36.57	97.07	83.05	80.00	7.60	119.95	7.3	67.69	100.16	82.70	
5	Kodaikanal	35.97	72.76	100.00	84.99	85.00	2.40	64.88	5.1	79.59	100.07	82.40	
6	Natham	13.60	66.05	99.68	79.27	86.00	15.70	75.08	5.1	72.30	100.10	95.41	
7	Nilakkotai	35.82	64.57	93.69	90.42	90.00	11.00	65.28	6.2	75.78	100.14	91.22	
8	Oddanchadram	49.39	65.60	100.00	92.15	85.00	7.90	26.44	7.5	73.50	100.11	93.35	
9	Palani	57.79	33.23	98.55	93.59	90.00	11.90	22.80	6.2	77.50	100.13	99.80	
10	Rediyarchatram	26.73	62.74	97.33	90.38	85.00	17.70	0.00	7.2	71.85	100.16	81.56	
11	Shanarpatti	17.77	73.58	100.00	88.93	87.00	16.90	23.46	7.6	70.50	100.15	90.21	
12	Thoppampatti	35.11	66.41	96.88	83.44	87.00	5.10	50.80	6.9	69.39	100.13	91.52	
13	Vadamadurai	22.58	57.37	99.60	86.23	81.00	16.20	25.38	7.8	70.17	100.04	87.93	
14	Vedasandur	30.00	52.05	98.66	86.07	84.00	11.90	35.82	8.9	74.73	100.07	115.11	
Maximum		57.79	73.58	100.00	96.54	92.00	19.47	131.94	9.79	85.51	100.19	124.89	
Minimum		12.24	29.91	82.45	71.35	72.00	2.40	0.00	91	60.92	90.04	71.56	

Human Development Indicators (contd.,),

Human Development Index																
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	Athoor	0.63	0.26	0.93	0.80	0.90	0.36	0.82	0.52	0.73	0.99	0.15	0.65	0.53	0.48	0.55	9
2	Battlagundu	0.20	0.59	0.52	0.65	0.55	0.55	0.71	1.00	0.65	1.00	0.90	0.46	0.73	0.84	0.66	4
3	Dindigul	0.98	0.80	0.90	1.00	1.00	0.41	0.75	0.80	1.00	1.00	1.00	0.93	0.63	1.00	0.84	1
4	Guziliamparai	0.04	0.15	0.83	0.46	0.40	0.70	0.09	0.46	0.28	1.00	0.21	0.25	0.31	0.39	0.31	14
5	Kodaikanal	0.52	0.98	1.00	0.54	0.65	1.00	0.51	0.87	0.76	0.99	0.20	0.71	0.76	0.53	0.66	3
6	Natham	0.03	0.83	0.98	0.31	0.70	0.22	0.43	0.87	0.46	0.99	0.45	0.35	0.44	0.59	0.45	13
7	Nilakkotai	0.52	0.79	0.64	0.76	0.90	0.50	0.51	0.67	0.60	1.00	0.37	0.71	0.55	0.61	0.62	6
8	Oddanchadram	0.82	0.82	1.00	0.83	0.65	0.68	0.80	0.42	0.51	0.99	0.41	0.81	0.61	0.59	0.67	2
9	Palani	1.00	0.08	0.92	0.88	0.90	0.44	0.83	0.67	0.67	0.99	0.53	0.56	0.63	0.71	0.63	5
10	Rediyarchatram	0.32	0.75	0.85	0.76	0.65	0.10	1.00	0.48	0.44	1.00	0.19	0.63	0.37	0.44	0.47	11
11	Shanarpatti	0.12	1.00	1.00	0.70	0.75	0.15	0.82	0.41	0.39	1.00	0.35	0.58	0.37	0.51	0.48	10
12	Thoppampatti	0.50	0.84	0.82	0.48	0.75	0.84	0.62	0.54	0.34	0.99	0.37	0.66	0.65	0.50	0.60	7
13	Vadamadurai	0.23	0.63	0.98	0.59	0.45	0.19	0.81	0.37	0.38	0.99	0.31	0.52	0.39	0.48	0.46	12
14	Vedasandur	0.39	0.51	0.92	0.58	0.60	0.44	0.73	0.17	0.56	0.99	0.82	0.58	0.38	0.77	0.55	8

Annexure – 2
Gender Inequality Index, Dindigul

	Data														
	Health			Empowerment						Labour					
Sl. No	**1**	**2**	**3**	**4**	**5**			**6**	**7**	**8**	**9**			**10**	**11**
Indicators	**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 Worker Participation Rate**	**Male Worker Participation Rate**	**Female Worker Participation Rate in Non-Agri Sector**	**Male Worker 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**	**%**	**%**	**%**	**%**	**%**		**%**	**%**	**%**	**%**	**%**	**%**
Athoor	24.0	100.0	99.3	71.6	86.6	47.9	52.1	40.9	59.1	39.7	60.0	39.7	53.2	100	300
Batlagundu	38.0	100.0	98.3	69.7	84.0	48.5	51.5	47.0	52.9	37.8	59.3	24.5	45.9	100	300
Dindigul	32.6	99.9	99.9	80.3	90.8	48.3	51.7	42.9	57.1	24.8	58.6	73.3	86.3	100	250
Guziliamparai	120.0	100.0	89.0	57.3	78.2	47.3	52.7	33.3	66.7	51.3	64.9	19.0	36.2	100	225
Kodaikanal	64.9	100.0	93.0	72.7	86.4	49.4	50.6	35.3	64.7	41.2	62.0	32.4	44.9	160	300
Natham	75.1	99.8	104.9	62.6	81.9	48.8	51.2	43.5	56.5	44.4	61.4	18.3	33.2	120	250
Nilakkotai	65.3	100.0	99.3	68.0	83.5	48.3	51.7	39.1	60.9	42.7	60.5	23.8	41.4	100	250
Oddanchatram	26.4	100.00	100.0	64.1	83.0	47.5	52.5	40.0	60.0	49.6	66.0	16.6	38.1	120	250
Palani	22.8	99.9	97.4	70.4	84.7	49.0	51.0	40.0	60.0	34.3	61.4	36.4	59.5	130	200
Rediyarchatram	10.0	99.8	99.3	62.3	81.4	48.7	51.3	33.3	66.7	53.3	63.9	15.7	31.3	120	200
Shanarpatti	23.5	99.6	102.1	61.4	79.6	48.0	52.0	33.3	66.7	47.8	61.1	31.3	41.4	120	250
Thoppampatti	50.8	100.0	92.3	59.6	79.2	48.4	51.6	39.5	60.5	53.4	66.8	16.2	31.3	94	250
Vadamadurai	25.4	100.0	95.0	60.2	80.0	48.2	51.8	46.7	53.3	47.5	61.2	22.5	39.7	100	200
Vedasandur	35.8	100.0	95.3	65.6	84.2	47.2	52.8	36.4	63.6	45.2	62.9	37.3	51.8	100	250
													Max	160	300
													Min	85	180

Gender Inequality Index, Dindigul (contd.,)

	Data														
	Health			Empowerment						Labour					
Sl. No	1	2	3	4	5			6	7	8	9			10	11
Indicators	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 Representativies in RLBs and ULBs	Female Worker Participation Rate	Male Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector	Male Worker Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
Athoor	0.42	1.00	0.99	0.72	0.86	0.48	0.52	0.41	0.59	0.40	0.60	0.40	0.53	0.20	1.00
Batlagundu	0.26	1.00	0.98	0.70	0.84	0.49	0.51	0.47	0.53	0.38	0.59	0.25	0.46	0.20	1.00
Dindigul	0.31	1.00	1.00	0.80	0.91	0.48	0.52	0.43	0.57	0.25	0.59	0.73	0.86	0.20	0.58
Guziliamparai	0.08	1.00	0.89	0.57	0.78	0.47	0.53	0.33	0.67	0.51	0.65	0.19	0.36	0.20	0.38
Kodaikanal	0.15	1.00	0.93	0.73	0.86	0.49	0.51	0.35	0.65	0.41	0.62	0.32	0.45	1.00	1.00
Natham	0.13	1.00	1.05	0.63	0.82	0.49	0.51	0.43	0.57	0.44	0.61	0.18	0.33	0.47	0.58
Nilakkotai	0.15	1.00	0.99	0.68	0.83	0.48	0.52	0.39	0.61	0.43	0.60	0.24	0.41	0.20	0.58
Oddanchatram	0.38	1.00	1.00	0.64	0.83	0.48	0.52	0.40	0.60	0.50	0.66	0.17	0.38	0.47	0.58
Palani	0.44	1.00	0.97	0.70	0.85	0.49	0.51	0.40	0.60	0.34	0.61	0.36	0.59	0.60	0.17
Rediyarchatram	1.00	1.00	0.99	0.62	0.81	0.49	0.51	0.33	0.67	0.53	0.64	0.16	0.31	0.47	0.17
Shanarpatti	0.43	1.00	1.02	0.61	0.80	0.48	0.52	0.33	0.67	0.48	0.61	0.31	0.41	0.47	0.58
Thoppampatti	0.20	1.00	0.92	0.60	0.79	0.48	0.52	0.39	0.61	0.53	0.67	0.16	0.31	0.12	0.58
Vadamadurai	0.39	1.00	0.95	0.60	0.80	0.48	0.52	0.47	0.53	0.48	0.61	0.23	0.40	0.20	0.17
Vedasandur	0.28	1.00	0.95	0.66	0.84	0.47	0.53	0.36	0.64	0.45	0.63	0.37	0.52	0.20	0.58

Gender Inequality Index, Dindigul (contd.,)

Blocks	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
Athoor	0.75	1	0.52	0.71	0.28	0.77	0.48	0.82	0.61	0.87	0.62	0.53	0.66	0.08	11
Batlagundu	0.64	1	0.57	0.67	0.28	0.77	0.47	0.80	0.59	0.82	0.62	0.52	0.64	0.08	12
Dindigul	0.67	1	0.59	0.72	0.22	0.58	0.45	0.75	0.56	0.84	0.65	0.40	0.60	0.08	10
Guziliamparai	0.42	1	0.44	0.72	0.32	0.49	0.39	0.71	0.50	0.71	0.58	0.41	0.55	0.09	13
Kodaikanal	0.52	1	0.51	0.75	0.64	0.79	0.55	0.84	0.67	0.76	0.63	0.71	0.70	0.05	7
Natham	0.52	1	0.52	0.68	0.46	0.60	0.50	0.74	0.60	0.76	0.60	0.53	0.62	0.04	6
Nilakkotai	0.53	1	0.52	0.71	0.30	0.59	0.43	0.75	0.55	0.77	0.61	0.44	0.59	0.07	9
Oddanchatram	0.72	1	0.51	0.71	0.48	0.62	0.56	0.76	0.65	0.86	0.61	0.55	0.66	0.02	4
Palani	0.75	1	0.53	0.71	0.45	0.32	0.57	0.61	0.59	0.88	0.62	0.39	0.60	0.01	2
Rediyarchatram	1.00	1	0.46	0.74	0.50	0.33	0.61	0.62	0.62	1.00	0.60	0.41	0.63	0.02	3
Shanarpatti	0.76	1	0.45	0.73	0.47	0.60	0.55	0.76	0.63	0.88	0.59	0.54	0.65	0.03	5
Thoppampatti	0.57	1	0.48	0.69	0.26	0.62	0.41	0.76	0.53	0.78	0.59	0.44	0.59	0.09	14
Vadamadurai	0.72	1	0.53	0.65	0.31	0.32	0.49	0.59	0.54	0.86	0.59	0.32	0.54	0.01	1
Vedasandur	0.64	1	0.49	0.73	0.30	0.61	0.46	0.76	0.57	0.82	0.61	0.45	0.61	0.06	8

Annexure - 3

Child Development Index, Dindigul

Block name	Health			Education					Health		Percentage of Malnourished Children						Index Value	Rank
	U5 MR	Juvenile Sex Ratio	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Childrens Never Enrolled in Schools	Transition Rate from Primary to Upper Primary	Transition rate from Upper Primary to Secondary	U5MR	Juvenile Sex Ratio		Enrollment in Primary	Enrollment in Secondary	Childrens Never Enrolled in Schools	Transition Rate from Primary to Upper Primary	Upper Primary to Secondary		
Athoor	7.0	918	14.19	100.1	79.5	0.00	99.1	98.39	0.42	0.29	0.71	0.47	0.00	1.00	0.64	0.10	0.45	10
Batlagundu	4.4	943	12.45	100.1	119.6	0.00	99.3	98.42	1.00	0.59	0.78	0.67	0.88	1.00	0.81	0.13	0.73	2
Dindigul	5.5	934	8.33	100.2	124.9	0.00	99.0	99.02	0.76	0.49	0.95	1.00	1.00	1.00	0.43	0.57	0.77	1
Guziliamparai	7.3	899	14.52	100.2	82.7	0.06	99.4	98.47	0.36	0.05	0.69	0.80	0.07	0.81	0.96	0.16	0.49	9
Kodaikanal	5.1	976	31.48	100.1	82.4	0.34	99.1	98.26	0.84	1.00	0.00	0.20	0.06	0.00	0.58	0.00	0.34	14
Natham	5.1	952	24.55	100.1	95.4	0.00	99.4	98.33	0.84	0.71	0.28	0.40	0.35	1.00	0.98	0.06	0.58	3
Nilakkotai	6.2	933	21.12	100.1	91.2	0.00	99.4	98.27	0.60	0.48	0.42	0.67	0.26	1.00	1.00	0.01	0.55	5
Oddanchatram	7.5	905	8.57	100.1	93.4	0.02	99.4	99.02	0.31	0.13	0.94	0.47	0.30	0.93	0.91	0.57	0.57	4
Palani	6.2	960	15.53	100.1	99.8	0.26	99.1	98.84	0.60	0.81	0.65	0.60	0.45	0.23	0.53	0.43	0.54	6
Rediyarchatram	7.2	950	12.87	100.2	81.6	0.00	98.7	98.96	0.38	0.68	0.76	0.80	0.05	1.00	0.09	0.53	0.53	7
Shanarpatti	7.6	923	22.02	100.2	90.2	0.01	99.2	98.25	0.29	0.36	0.39	0.73	0.24	0.96	0.65	0.00	0.45	11
Thoppampatti	6.9	938	24.07	100.1	91.5	0.00	98.9	98.49	0.44	0.53	0.30	0.60	0.26	1.00	0.30	0.17	0.45	12
Vadamadurai	7.8	931	7.02	100.0	87.9	0.00	98.6	98.85	0.24	0.46	1.00	0.00	0.19	1.00	0.00	0.45	0.42	13
Vedasandur	8.90	894	10.48	100.1	115.1	0.00	98.8	99.60	0.00	0.00	0.86	0.20	0.78	1.00	0.19	1.00	0.50	8

Maximum	8.9	976	31.5	100.2	124.9	0.34	99.43	99.60
Minimum	4.4	894	7.0	100.0	79.5	0	98.62	98.25

Annexure - 4

Multidimensional Poverty Index, Dindigul

	Health			Education		Living Standards				
Block Name	**IMR**	**HOB**	**Malnourshied Children**	**Drop out in primary**	**Drop out 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	9	10
Athoor	13.40	9.1	14.19	1.27	4.57	40.87	41.41	98.82	90.00	91.58
Batlagundu	10.10	5.4	12.45	0.96	2.88	21.31	55.48	91.61	83.00	87.71
Dindigul	12.40	7.6	8.33	0.84	1.88	56.84	64.86	98.17	92.00	96.54
Guziliamparai	7.60	7.50	14.52	1.34	11.06	14.00	36.57	97.07	80.00	83.05
Kodaikanal	2.40	9.6	31.48	1.30	2.93	35.97	72.76	100.00	85.00	84.99
Natham	15.70	21.7	24.55	1.53	6.57	13.60	66.05	99.68	86.00	79.27
Nilakkotai	11.00	8.2	21.12	0.58	5.26	35.82	64.57	93.69	90.00	90.42
Oddanchatram	7.90	3.80	8.57	0.44	3.92	49.39	65.60	100.00	85.00	92.15
Palani	11.90	5.30	15.53	1.00	3.76	57.79	33.23	98.55	90.00	93.59
Reddiyarchatram	17.70	8.80	12.87	0.43	5.91	26.73	62.74	97.33	85.00	90.38
Shanarpatti	16.90	13.90	22.02	0.52	5.75	17.77	73.58	100.00	87.00	88.93
Thoppampatti	5.1	3.8	24.07	0.41	6.29	35.11	66.41	96.88	87.00	83.44
Vadamadurai	16.20	14.50	7.02	0.26	5.56	22.58	57.37	99.60	81.00	86.23
Vedasandur	11.90	7.8	10.48	1.19	8.44	30.00	52.05	98.66	84.00	86.07
Maximum	17.70	21.7	31.48	1.53	11.06	57.79	73.58	100.00	92	96.54
Minimum	2.40	3.8	7.02	0.26	1.88	13.60	33.23	82.45	80.00	71.35

Multidimensional Poverty Index (contd.)

Block Name	Health			Education		Living Standards					Overall index	Rank
	IMR	HOB	Malnourshied 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		
Athoor	0.28	0.70	0.71	0.20	0.71	0.62	0.20	0.93	0.83	0.80	0.40	7
Batlagundu	0.50	0.91	0.78	0.45	0.89	0.17	0.55	0.52	0.25	0.65	0.43	9
Dindigul	0.35	0.79	0.95	0.55	1.00	0.98	0.78	0.90	1.00	1.00	0.17	1
Guziliamparai	0.66	0.79	0.69	0.15	0.00	0.01	0.08	0.83	0.00	0.46	0.63	13
Kodaikanal	1.00	0.68	0.00	0.18	0.89	0.51	0.98	1.00	0.42	0.54	0.38	6
Natham	0.13	0.00	0.28	0.00	0.49	0.00	0.81	0.98	0.50	0.31	0.65	14
Nilakkotai	0.44	0.75	0.42	0.75	0.63	0.50	0.78	0.64	0.83	0.76	0.35	5
Oddanchatram	0.64	1.00	0.94	0.86	0.78	0.81	0.80	1.00	0.42	0.83	0.19	2
Palani	0.38	0.92	0.65	0.42	0.80	1.00	0.00	0.92	0.83	0.88	0.32	3
Reddiyarchatram	0.00	0.72	0.76	0.87	0.56	0.30	0.73	0.85	0.42	0.76	0.40	8
Shanarpatti	0.05	0.44	0.39	0.80	0.58	0.09	1.00	1.00	0.58	0.70	0.44	10
Thoppampatti	0.82	1.00	0.30	0.88	0.52	0.49	0.82	0.82	0.58	0.48	0.33	4
Vadamadurai	0.10	0.40	1.00	1.00	0.60	0.20	0.60	0.98	0.08	0.59	0.44	11
Vedasandur	0.38	0.78	0.86	0.27	0.29	0.37	0.47	0.92	0.33	0.58	0.48	12

Annexure 1.1

Crude Birth Rate

Sl.No	Block Wise / District / State	CBR			
		2009	2010	2011	2014
1	Athoor	13.8	13.7	13.6	12.7
2	Battlagundu	15.4	15.2	15.1	14.5
3	Dindigul	16.7	16.6	16.5	15.7
4	Guziliamparai	18.5	18.1	17.8	19.9
5	Kodaikanal	16.7	16.3	15.7	14.8
6	Natham	18.3	18.2	18.1	17.3
7	Nilakkotai	16.9	16.9	16.8	15.3
8	Oddanchadram	17.5	16.2	14.7	16.6
9	Palani	18.5	16.2	15.6	14.3
10	Rediyarchatram	16.5	16.5	16.3	13.7
11	Shanarpatti	19.2	19.2	19.1	17.3
12	Thoppampatti	14.8	13.1	12.5	12.4
13	Vadamadurai	16.8	16.9	17.9	17.1
14	Vedasandur	18.2	17.5	16.7	16.1

***Source**: Health Department, Dindigul*

Annexure – 4.1

Crude Birth Rate (CBR) and Crude Death Rate (CDR)									
Sl.No	**Block**	**CBR**				**CDR**			
		2009	**2010**	**2011**	**2014**	**2009**	**2010**	**2011**	**2014**
1	Athoor	13.8	13.7	13.6	12.7	6.6	6.5	6.4	6.9
2	Battlagundu	15.4	15.2	15.1	14.5	5.5	5.5	5.4	5.4
3	Dindigul	16.7	16.6	16.5	15.7	5.8	5.7	5.6	5.9
4	Guziliamparai	18.5	18.1	17.8	19.9	6.9	7.4	6.7	9.6
5	Kodaikanal	16.7	16.3	15.7	14.8	4.1	4.2	5.1	0.66
6	Natham	18.3	18.2	18.1	17.3	5.8	5.8	5.7	5.7
7	Nilakkotai	16.9	16.9	16.8	15.3	7.2	7.1	7	6.1
8	Oddanchadram	17.5	16.2	14.7	16.6	6.8	7.1	6.2	6.4
9	Palani	18.5	16.2	15.6	14.3	6.8	6.2	6.1	6.1
10	Rediyarchatram	16.5	16.5	16.3	13.7	7.4	7.4	7.3	7.7
11	Shanarpatti	19.2	19.2	19.1	17.3	7.5	7.4	7.3	8.4
12	Thoppampatti	14.8	13.1	12.5	12.4	7	7.2	6.4	7
13	Vadamadurai	16.8	16.9	17.9	17.1	5.6	5.7	5.6	7.9
14	Vedasandur	18.2	17.5	16.7	16.1	7.1	7.3	7.1	5.5
District		**17.0**	**16.5**	**16.2**	**15.5**	**6.4**	**6.5**	**6.3**	**6.4**
***Source**: DDHS, Dindigul, Palani*									

Annexure – 4.2

Infant Mortality Rate		
Sl.No	**Block**	**2013-14**
1	Athoor	13.4
2	Batlagundu	10.1
3	Dindigul	12.4
4	Guziliamparai	7.6
5	Kodaikanal	2.4
6	Natham	15.7
7	Nilakkotai	11
8	Oddanchatram	7.9
9	Palani	11.9
10	Rediyarchatram	17.7
11	Shanarpatti	16.9
12	Thoppampatti	5.1
13	Vadamadurai	16.2
14	Vedasandur	11.9
***Source**: Vital events survey, 2009*		

Annexure – 4.3

Sl.No	Block	No of Domi	No of delv in Sub Health Centre	No Of delv in Primary Health Centre	No Of delv in GH	No of delv in Private Hospitals	Total deliveries	% of Inst deliv
1	Athoor	0	1	672	699	680	2052	100.00
2	Batlagundu	0	3	264	952	586	1805	100.00
3	Dindigul	3	10	806	2518	2060	5397	99.90
4	Guziliamparai	0	0	400	466	649	1515	100.00
5	Kodaikanal	0	1	377	749	626	1753	100.00
6	Natham	4	4	1284	1049	482	2823	99.80
7	Nilakkotai	0	2	821	844	771	2438	100.00
8	Oddanchatram	0	0	503	279	1105	1887	100.00
9	Palani	2	4	634	937	566	2143	99.90
10	Rediyarchatram	2	4	528	604	546	1684	99.80
11	Shanarpatti	7	1	1031	756	348	2143	99.60
12	Thoppampatti	0	0	415	340	567	1322	100.00
13	Vadamadurai	0	0	773	753	433	1959	100.00
14	Vedasandur	0	1	452	601	620	1674	100.00

Annexure - 4.4

Nutritional status of children below 5 years							
Sl. No	Block Wise / District / State	2013 - 14					
		Normal	SUW	MUW	Total	Mal	%
1	Athoor	8735	5	1644	10384	1649	15.88
2	Battlagundu	6649	10	1475	8134	1485	18.26
3	Dindigul	21250	24	2677	23951	2701	11.28
4	Guziliamparai	4938	3	917	5858	920	15.71
5	Kodaikanal	5411	34	2422	7867	2456	31.22
6	Natham	9532	69	3271	12872	3340	25.95
7	Nilakkotai	9163	124	2984	12271	3108	25.33
8	Oddanchadram	5356	7	755	6118	762	12.46
9	Palani	10282	4	2491	12777	2495	19.53
10	Rediyarchatram	6302	13	1594	7909	1607	20.32
11	Shanarpatti	8285	18	2132	10435	2150	20.6
12	Thoppampatti	3876	1	2710	6587	2711	41.16
13	Vadamadurai	7855	3	851	8709	854	9.806
14	Vedasandur	5715	11	1280	7006	1291	18.43
District		**113349**	**326**	**27203**	**140878**	**27529**	**19.54**

***Source**: ICDS, Dindigul*

Annexure – 4.5

Percentage of Habitations provided with safe Drinking Water				
Sl. No	**Block**	**Total Number of Habitations**	**Number of HHs provided with drinking water**	**% of HHs provided with safe Drinking water**
1	Athoor	278	272	97.84
2	Battlagundu	160	146	91.25
3	Dindigul	264	214	81.06
4	Guziliamparai	375	342	91.20
5	Kodaikanal	197	191	96.95
6	Natham	272	200	73.53
7	Nilakkotai	219	201	91.78
8	Oddanchadram	282	166	58.87
9	Palani	190	180	94.74
10	Rediyarchatram	271	190	70.11
11	Shanarpatti	302	255	84.44
12	Thoppampatti	229	130	56.77
13	Vadamadurai	238	175	73.53
14	Vedasandur	347	262	75.50
District		**3624**	**2924**	**80.68**
***Source**: Nation RuralDrinking Water Programme (www.mdws.gov.in)*				

Annexure 5.1

Percentage of Literacy							
Sl.No	**Block Wise / District / State**	**2001 Percentage**			**2011 Percentage**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
1	Athur	82.02	62.37	72.11	86.35	71.57	78.86
2	Batlagundu	77.53	59.53	68.68	84.04	69.71	76.93
3	Dindigul	87.57	73.00	80.31	90.78	80.32	85.51
4	Guziliumbarai	72.25	46.99	59.67	78.15	57.28	67.69
5	Kodaikanal	84.06	66.30	75.36	86.44	72.69	79.59
6	Natham	75.93	50.40	63.18	81.92	62.56	72.30
7	Nilakkotai	78.63	58.87	68.86	83.47	68.03	75.78
8	Oddanchatram	78.24	53.37	65.75	83.03	64.11	73.50
9	Palani	81.16	62.58	71.91	84.65	70.43	77.50
10	Rediyarchatram	76.21	52.49	64.32	81.40	62.34	71.85
11	Shanarpatti	74.40	49.42	61.93	79.61	61.41	70.50
12	Thoppampatti	75.63	49.72	62.72	79.20	59.55	69.39
13	Vadamadurai	72.75	48.10	60.51	79.99	60.19	70.17
14	Vedasandur	80.44	55.44	67.84	84.15	65.56	74.73
Total		**79.76**	**58.87**	**69.35**	**84.23**	**68.33**	**76.26**

***Source**: Census 2011 and 2001*

Annexure 5.2 and 5.3

Higher Education -2013 - 14											
Sl.No	Block Wise / District / State	Art / Science		Engg		Poly tecnics		Other institutions		Total	
		No	Students	No	Students	No	Students	No	Students	No	Students
1	Athoor	-	-	-	-	1	726	-	-	1	726
2	Battlagundu	1	410	-	-	1	620	-	-	2	1030
3	Dindigul	5	7264	4	23040	5	1605	9	750	23	32659
4	Guziliamparai	-	-	-	-	1	420	-	-	1	420
5	Kodaikanal	-	-	1	5760	-	-	-	-	1	5760
6	Natham	1	1470	1	5760	2	842	-	-	4	8072
7	Nilakkotai	3	2280	-	-	1	320	-	-	4	2600
8	Oddanchadram	2	2130	1	5760	1	420	-	-	4	8310
9	Palani	3	5124	1	5760	2	442	-	-	6	11326
10	Rediyarchatram	1	672	1	5760	-	-	-	-	2	6432
11	Shanarpatti	-	-	-	-	-	-	-	-	-	-
12	Thoppampatti	-	-	-	-	-	-	-	-	-	-
13	Vadamadurai	-	-	-	-	-	-	-	-	-	-
14	Vedasandur	-	-	-	-	-	-	-	-	-	-
District		**16**	**19350**	**9**	**51840**	**14**	**5395**	**9**	**750**	**48**	**77335**
***Source**: College of Education, Madurai*											

Annexure – 6.1

Female work participation rate in the block							
Sl.No	Block	2001 Percentage			2011 Percentage		
		Male	Female	Total	Male	Female	Total
1	Athur	82.02	62.37	72.11	86.35	71.57	78.86
2	Batlagundu	77.53	59.53	68.68	84.04	69.71	76.93
3	Dindigul	87.57	73.00	80.31	90.78	80.32	85.51
4	Guziliumbarai	72.25	46.99	59.67	78.15	57.28	67.69
5	Kodaikanal	84.06	66.30	75.36	86.44	72.69	79.59
6	Natham	75.93	50.40	63.18	81.92	62.56	72.30
7	Nilakkotai	78.63	58.87	68.86	83.47	68.03	75.78
8	Oddanchatram	78.24	53.37	65.75	83.03	64.11	73.50
9	Palani	81.16	62.58	71.91	84.65	70.43	77.50
10	Rediyarchatram	76.21	52.49	64.32	81.40	62.34	71.85
11	Shanarpatti	74.40	49.42	61.93	79.61	61.41	70.50
12	Thoppampatti	75.63	49.72	62.72	79.20	59.55	69.39
13	Vadamadurai	72.75	48.10	60.51	79.99	60.19	70.17
14	Vedasandur	80.44	55.44	67.84	84.15	65.56	74.73
Total		**79.76**	**58.87**	**69.35**	**84.23**	**68.33**	**76.26**

***Source**: Census 2011*

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 = $(I_1 \times . I_2 \times \ldots . I_n)^{(1/n)}$.

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)

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

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
AIDS	-	Acquired Immuno Deficiency Syndrome
ADL	-	Activities of Daily Living
ALM	**-**	Adults Learning Mathematics
ASER	-	Annual Status of Education Report
ANC	-	Ante Natal Care
BPL	-	Below Poverty Line
BT	**-**	Bituminous Tar
BMI	**-**	Body Mass Index
BG	-	Broad Gauge
CDI	**-**	Child Development Index
CR	-	Completion Rate
CPR	-	Couple Protection Rate
CBR	-	Crude Birth Rate
CDR	-	Crude Death Rate
DOES	-	Department of Economics and Statistics
DDHS	-	Deputy Director of Health Service
DHAN	**-**	Development of Humane Action
DVD	**-**	Digital Video Disc
DHDR	**-**	District Humane Development Report
DIC	**-**	District Industries Centre
DISE	-	District Information System of Education
DLHS	-	District Level Household Survey
DPC	-	District Planning Cell
DPEP	-	District Primary Education Programme
DRDA	**-**	District Rural Development Agency
DSO	-	District Supply Officer
DR	-	Dropout rate
EER	**-**	Elementary Education Register
GII	**-**	Gender Inequality Indices
GAR	-	Gross Access Rate
GDP	-	Gross Domestic Product
GER	-	Gross Enrollment Ratio
HSC	**-**	Health Sub Centre
HUD	-	Health Unit District
Hb	**-**	Hemoglobin
HH	-	Household
HDI	-	Human Development Index
HDR	-	Human Development Report
HIV	-	Human Immuno Deficiency Virus

IRI	-	Industrial Training Institute
IMR	-	Infant Mortality Rate
ICDS	-	Integrated Child Development Scheme
ILO	-	International Labor Organization
IFA	-	Iron and Folic Acid
KAP	-	Knowledge, Attitude and Practice
LEB	-	Life Expectancy at Birth
LIC	-	Life Insurance Corporation of India
LPG	-	Liquefied Petroleum Gas
LBW	-	Low Birth Weight
MIDS	-	Madras Institute of Development Studies
MGNREGA	-	Mahatma Gandhi National Rural Employment Guarantee Act
MMR	-	Maternal Mortality Rate
MG	-	Metre Gauge
MDG	-	Millennium Development Goal
MNP	-	Minimum Needs Programme
MPCE	-	Monthly Per Capital Expenditure
MPI	-	Multi-dimensional Poverty Index
NABARD	-	National Bank for Agriculture and Rural Development
NCBI	-	National Centre for Biotechnology Information
NFHS	-	National Family Health Survey
NH	-	National Highways
NOAP	-	National Old Age Pension Scheme
NRDWP	-	National Rural Drinking Water Programme
NRHM	-	National Rural Health Mission
NSSO	-	National Sample Survey Organisation
NMR	-	Neonatal Mortality Rate
NDDP	-	Net District Domestic Product
NER	-	Net Enrolment Ratio
NSA	-	Net Sown Area
NGO	-	Non Governmental Organisation
NRSTC	-	Non Residential Special Training Centre
NMP	-	Noon Meal Programme
OAP	-	Old Age Pension
PRI	-	Panchayat Raj Institution
PTA	-	Parents Teacher Association
PTR	-	People Teacher Ratio
PHC	-	Primary Health Centre
PDS	-	Public Distribution System
PVP	-	Pudhu Vaazhvu Project
RMSA	-	Rashtriya Madhyamik Shiksha Abhiyan
RSVY	-	Rashtriya Sam Vikas Yojana
RCH	-	Reproductive and Child Health

RSTC	**-**	Residential Special Training Centre
RTE	**-**	Right To Education
SSA	**-**	Sarva Shiksha Abiyan
SC	**-**	Scheduled Caste
ST	**-**	Scheduled Tribes
SHG	-	Self Help Group
SABL	**-**	Simplified Active Learning Method
SBGF	**-**	State Balanced Growth Fund
SPC	**-**	State Planning Commission
SBR	**-**	Still Birth Rate
STEP	**-**	Support for Training & Employment Programme for Women
SRI	**-**	Systemic Rice Intensification
TN	**-**	Tamil Nadu
TINP	**-**	Tamil Nadu Integrated Nutrition Project
TWAD	**-**	Tamilnadu Water supply and Drainage Board
TFR	**-**	Total Fertility Rate
U5MR	**-**	Under Five Mortality Rate
UN	**-**	United Nations
UNDP	**-**	United Nations Development Programme
WBM	**-**	Water Board Macadam
WPR	**-**	Work Participation Rate

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