District Human Development Report - 2017

Erode District

State Planning Commission
Tamil Nadu

ERODE

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Erode and
State Planning Commission, Tamil Nadu
in association with
Department Of Management Studies,
Kongu Engineering College (Autonomous),
Perundurai - 638 052.

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

It gives me immense pleasure to write this preface, that the Erode District Human Development Report has been brought out. This has been prepared by participatory process at district level, sub-district level and taluk level with the support of Kongu Engineering College, Perundurai.The objective of human development is to promote an environment which supports the development of people, so that they can lead productive and creative lives to fulfil their needs and choices.

Our Erode District has been ahead of other districts in embracing human development analysis at, district level as it is pivotal for people centric planning.

The District Human Development Report will be the "vision" document for district planning. The preparation of District Human Development Report has also contributed to improvement of data at the district and sub district level which will make district planning more relevant and human development oriented.

The District Human Development Report is highly useful to the policy makers and development authorities. It is helpful to Education, Health, Rural development and Economics & Statistical Departments etc. to prepare development plans.

I would like to thank one and all concerned who have put their effort to bring out the report successfully.

19/8/15
S.PRABHAKAR

ACKNOWLEDGEMENTS

The State of Tamil Nadu has a rich cultural and historical heritage. The State is excelling in all spheres under the leadership of the Chief Minister Puratchi Thalaivi Dr.J.Jayalalithaa. We are deeply indebted to thank the Honourable Chief Minister, for granting permission to carry out the preparation of the District Human Development Report, for all the districts of Tamil Nadu, simultaneously at a stretch. This will enable the authorities to identify the districts which are developed and those which need a special attention. This report would certainly help in assessing the strategies and area of concern for future attention.

The task of preparing the District Human Development Report was assigned to us by the State Planning Commission and the District Administration has to play an important role in providing and compiling the data from the different departments and from different places of the district . Since a voluminous data is involved in it, a separate action team was formed in the district level by the District Collector and the responsibilities were handed over to the team. Another team comprising the academicians of the resource institution was formed in order to collect the data from the district administration, for further analysis and report preparation. The whole process of preparing the DHDR was a very good learning exercise for the teams.

First of all I would like to extend my sincere thanks to **Tmt. Santha Sheela Nair, I.A.S.,** (Rtd), Former Vice Chairman, State Planning Commission, Government of Tamil Nadu for constantly reviewing the progress of this exercise and for supplementing with valuable suggestions.

We are deeply indebted to Thiru. M.Balaji, I.A.S and Dr.Sugato Dutt I.F.S, Former Member Secretaries, State Planning Commission, Chennai, who initiated the process first. We also would like to express our gratitude to Shri. Anil Meshram I.A.S, Member Secretary, for his vision and for his valuable inputs, in bringing out this report successfully. With the same spirit, We would like to place on record, our gratitude to Dr.S.Prabhakar, I.A.S, District Collector of Erode district , for kindly accepting and providing us this opportunity and recognizing our institute as a resource institution in this process. We are very much thankful to Ms.K.Krishnaveni, District Planning Officer Erode, Ms.T.Valarmathi, Technical Assistant, District Planning Office Erode, and other officials of Erode District Administration, for their great help in the preparation of DHDR Erode. We are highly indebted to thank The Correspondent, The Principal, Head of the Department and all the Faculty Members of the Department of Management Studies, Kongu Engineering College, Perundurai, for their constant support and motivation in preparing this report.

It is our duty to appreciate and thank the District Planning Officer, the officials of the department and officials of all the other departments, for extending their cooperation in providing the data for the report preparation. We must thank Dr.T.Mohanasundaram, Mr.N.Prakash, SDPO Dr.V.Krishnamoorthi, Dr.P.Karthikeyan, Dr.T.Dheepa, Dr.M.Umashankar, Prof.R.S.Rajan, Ms.N.Gayathri and Mr.P.Sivarajadhanavel, Faculty Members of the Department, who were the resource persons representing the institute in data collection and preparing the chapters of the report. We will be failing in our duty if we are not thanking our student friends, who worked with us in completing the report.

On the whole we would like to thank the UNDP, The Tamil Nadu State Planning Commission, The Erode District Administration, The Management of Kongu Engineering College, our faculty colleagues and student friends, for their support and encouragement in preparing the report.

Prof. Dr. D. MURUGANANDAM

Prof. V. ANANDAVEL

KONGU ENGINEERING COLLEGE

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CHAPTER 1
ERODE DISTRICT - A PROFILE

Introduction

Among the thirty two district s of Tamil Nadu, Erode is the one which is known for its agriculture potential and industrial progress. This chapter attempts to give an overview of the district by discussing the history, demography, geographical features and livelihoods such as agriculture, forestry, economy, natural resource endowments and other basic features with reference to the district.

Topography

Erode district lies on the extreme north of Tamil Nadu. It is bounded mostly by Karnataka State and also river Palar covers pretty long distance. To the East lies Namakkal, and Karur district s. Dindigul district is its immediate neighbour to the South and on the West; it has Coimbatore and Nilgiri district s, as its boundaries. Thus Erode district is essentially a land-locked area having no sea-cost of its own. Erode district is situated between 10 36" and 11 58" North Latitude and between 76 49" and 77 58" East Longitude.

The region comprised in the district can be portrayed as a long undulating plain gently sloping towards the river Cauvery in the south-east. The two major tributaries of river Cauvery viz. Bhavani and Noyyal drain the long stretch of mountains in the north. A part of the eastern boundary of the district is formed by river Cauvery, entering the district from Salem and flowing in a southerly direction.

History

Erode district was a part of Coimbatore, has its history intertwined with that of Coimbatore and because of its close linkage with the erstwhile Coimbatore district. It is very difficult to separately deal with the history of Erode region. Together with the area comprised in the Coimbatore district, it formed part of the ancient Kongu country known as "Kongu Nadu", history of which dates back to the Sangam era. It is found that in the early days, this area was occupied by tribes, most prominent among them being the "Kosars" reportedly having their headquarters at 'Kosamputhur' which is believed to have in due course become Coimbatore. These tribes were overpowered by the Rashtrakutas from whom the region fell into the hands of the Cholas who ruled supreme during the time of Raja Raja Chola. On the decline of Cholas, the Kongu Nadu came to be occupied by the Chalukyas and later by the Pandyas and Hoysalas. Due to internal dissension in the Pandian Kingdom, the Muslim rulers from Delhi interfered and thus the area fell into the hands of Madurai Sultanate. This region was later wrested by Vijaya Nagar rulers after overthrowing the Madurai Sultanate. For a few years, the area remained under Vijaya Nagar rule and later

under the independent control of Madurai Nayakas. The rule of Muthu Veerappa Nayak and later that of Tirumalai Nayak were marked by internal strife and intermittent wars which ruined the kingdom. As a result of this, the Kongu region in which the present Erode district is situated fell into the hands of the Mysore rulers from whom Hyder Ali took over the area. Later, consequent to the fall of Tippu Sultlan of Mysore in 1799, the Kongu region was ceded to the East India Company by the Maharaja of Mysore, who was restored to power by the company after defeating Tippu Sulltan. From then, till 1947 when India attained independence, the area remained under British control who initiated systematic revenue administration in the area.

Language

Tamil is the main language spoken in the district, but the use of English is relatively common in urban areas with sizable minorities of Hindi, Telugu, Malayalam, Kannada and Urdu speakers. English is the medium of instruction in most of the educational institutions and offices in the service sector.

Art, Architecture and Culture

The city is built around a demolished fort, which includes a temple for Arudra Kabaleeswar (Shiva) that praises the Saiva concept and another for Kasthuri Ranganatha Perumal (Vishnu) praising the Vaishnava concept of Hinduism. Thindal Murugan temple, situated 6 km (3.7 mi) from the city is the most prominent temple in Erode. Periya Mariamman temple, Natadreeswarar temple, the hillock temple are situated in the centre of the Kaveri river between Kudagu (origin) and Poompuhar, Sangameswarar temple, CSI Brough Church, Thowheeth mosque, Ravlathul Janna mosque, Bazaar Mosque and Jamia Pallivasal are some of the prominent religious destinations in the city. E.V.R Corporation museum and Thanthai Periyar Memorial House, a sociological museum, which depicts the life history of Periyar E. V. Ramasamy, are the prominent museums in the city. Jain temples at Erode, Vijayapuri and Aval Poondurai, Sankari Fort and Vellode Birds Sanctuary are other tourist attractions around the city.

There are nearly 487 temples in Erode district. They are situated in five taluks, Bhavani, Gobichettipalayam, Erode, Sathyamangalam and Perundurai. Of the 207 places recognised as "Padalpetrasthalam", there are two temples found in Erode district viz., Bhavani and Kodumudi.

Bhavani Sangameswarar temple is located at the junction of two rivers, Bhavani and Cauvery. It is known as South Prayag and is having a Pagoda of 120 inch in height. It is believed that Bhavani and Amudha (not visible now) join Cauvery at this junction, like Jamuna and Saraswathi (not visible join with

Ganges at Allahabad, Prayag). It is said to have existed even before the days of the first King Mahendravarma of Pallava dynasty. Thirugnanasambandar, one of the four Tamil saints, has sung in praise of this temple. Poet Vasudevan also gives the history of the temple in 'Bhavani Kudal Puranam' written in Sanskrit.

Bannari Mariamman temple is about 15 kms. from Bhavani Sagar town on the road to Mysore. It is a place of pilgrimage during the annual festival known as "Kundam" which takes place in the middle of March every year. Pilgrims on that particular day can roughly be estimated 5 lakhs hailing from Tamil Nadu, Kerala and Karnataka States. Kundam or the fire spot where walking takes place is 60 feet in length and nearly 25 cart loads of fire wood are piled and kindled. About a lakh of persons including men, women and children participate in this walking.

Sri Aggnigunda Kali or Kodanthu Kaliamman temple is another important temple situated 40 kms from Erode and 3 kms from Gobichettipalayam. Also it is famous for fire walking to be held in the month of January every year. More than a lakh of people will attend this festival. There is one Jain Temple at Vijayamangalam 25 kms from Erode. It was constructed by Jain King Konguvelir some 1,800 years back.

Chennimalali Sri Subramaniyaswamy Temple is situated on a hill about 1750 feet height and nearly 35 kms. from Erode. Arunagirinathar and Kalamegapulavar have sung in praise of Lord Subramania here. There is a cave and it is believed that Pinnakku Siddhar one of the 18 Siddhars of South, Saravanamunivar and Sathiamuni lived and performed yoga in this cave.

Sri Magudeeswarar and Veeranarayana Perumal temple at Kodumudi is situated in the bank of Cauvery river and it is nearly 40 kms. from Erode. Saints Thirugnanasambandar, Thirunavukkarasar and Sundarar visited this place and each one composed one "Thevaram" about this temple. The special feature of this shrine is that Tirumurtis viz., Lord Brahama, Vishnu and Siva together in one and the same place. The direct sun rays penetrate on the images of Swamy and Amman for four days during the months of Avani and Panguni (September and April). The Moolavar Sri Magudeeswararswamy is a Swayambu Lingam. It is a very old temple (more than 1500 years old). Pandiyan Kings made several renovations to this temple. Adiperukku (July - August), Chithirai and Panguni Uthiram (April - May) are the main festivals of this temple. At the time of Panguni Uthiram festival, devotees carry 'Kavadi' to Palani Temple from here. They used to take bath in the sacred Cauvery river and carry the sacred water in a kalasam to Palani Murugan temple. More than 5 lakhs of people come here for this festival every year and most of the devotees carry the Kalasam having the sacred Cauvery water, will walk the entire distance (nearly 120

kms.) to Palani.Towards the construction of temples in Erode district popularly known as Kongunad, Cholas, Hoysalas and Pandyas have contributed their mite.

Land Soil and Natural Resource Endowments

The soils of the district are mostly red sand and gravel with moderate amounts of red-loam and occasional black loam tracts. Vast stretches of the upland regions are mostly gravel. Red-loam occurs mostly in land under Kalingarayan channel and in beds of tanks in Erode Taluk and to some lesser extent in the valleys in Perundurai taluk. It also occurs in the hilly tracts of Bhavani taluk. Soils of Bhavani, Erode and Perundurai taluks are by nature gravelly, stony and sand of the red variety. Soils of Gobichettipalayam and Sathyamangalam taluks are mostly of the red sand variety. Red loam is prevalent mostly in Gobichettipalayam and Perundurai taluks.

Though the district cannot boost of great mineral wealth, it has a few varied items of significance. Both opaque and translucent varieties of fine quality of Feldspar are found abundantly in Erode taluk. Mica and Muscovite occur in Vairamangalam near Bhavani and near Punjai Puliampatti respectively. Asbestos is found to occur in a few places of Bhavani and Perundurai.

Doddan Combai forest in Gobichettipalayam is bestowed with rich iron ore. This ore is found to be of very fine quality and rich in metal. Traces of gold also have been found in a few auriferous veins in Gobichettipalayam.

Bhavani, Cauvery and Noyyal are the main rivers of the district. Other significant river is Palar in the North. Palar constitutes the boundary between Erode district and Karnataka State in the North. The Bhavanisagar main canal along with the above mentioned rivers provide proper drainage and facilities for assured irrigation in the district. Bhavani rises in the silent valley in Palghat ranges in the neighbouring State of Kerala after receiving Siruvani, a perennial stream of Coimbatore District and gets reinforced by the Kundah river before entering Gobichettipalayam in Erode district .

Bhavani is more or less a perennial river fed mostly by the South-West monsoon. North-East monsoon also supplements its water resources. This river runs for over hundred miles through Erode district traversing through Bhavani and Gobichettipalayam taluks. It feeds the Bhavanisagar reservoir which takes an easterly course flowing through Gobichettipalayam, Sathyamangalam and Bhavani taluks before it ultimately joins river Cauvery on the Salem borders.

Cauvery rising in the Coorg, is joined by many small tributaries. It turns through Karnataka and at Hogenakal fall takes a sharp turn, east to south. Before reaching this point, its main tributary, viz., river Kabini joins it. From here, it takes a south-easterly direction forming the boundary between Bhavani taluk of Erode district and Tiruchengode taluk of the neighbouring Namakkal district. After river Bhavani flows into it, the south-easterly course is continued forming the boundary between Erode taluk of Erode district and Tiruchengode taluk of Namakkal district.

Noyyal river is noted for its capricious nature. This is fed mostly by the South-West monsoon but the North-East monsoon brings copies rain and this very often results in floods. Inspite of its unpredictable character, the river helps to irrigate considerable areas in Palladam and Dharapuram taluks of Tirupur district.

Climate

The district in general is characterized with a scanty rainfall and a dry climate. Maximum rainfall is recorded in Gobichettipalayam and Bhavani taluks. The Palghat gap in the Western Ghats, which has a soothing effect in the climate of Coimbatore district, does not render much help in bringing down the dry climate in this area. The cool-wind that gushes out of the west coast through Palghat gap loses its coolness and becomes dry by the time it crosses Coimbatore district and reaches Erode region.

Unlike Coimbatore which is blessed with a health-aiding climate, Erode district has dry weather throughout except during the monsoon season. Generally the first two months of the year are pleasant, but in March, Mercury gains an upward trend which persists till the end of May. Highest temperature is normally recorded during May. The scanty showers during this period do not provide any relief to the oppressive heat. There is a light improvement in the climate during June-August period. During this pre-monsoon period, the mercury reverses its trend and by September, the sky gets overcast heavily but the rains are meagre. North-east monsoon sets in vigorously only during October-November and by December, the rains disappear rendering the climate clear but pleasant.

Population Trends

In 2011, Erode had population of 2,251,744 of which male and female were 1,129,868 and 1,121,876 respectively. In 2001 census, Erode had a population of 2,016,582 of which males were 1,024,732 and

remaining 991,850 were females. Erode district population constituted 3.12 percent of total Tamil Nadu population. In 2001 census, this figure for Erode district was at 3.23 percent of Tamil Nadu population.

As of the population totals of 2011 census, Erode urban agglomeration had a population of 1,157,976 with 577,475 males and 580,501 females. The sex ratio of the town was 993 females per 1,000 males; the child sex ratio stood at 953 in the year 2011. Literacy rate of Erode district stands at 72.58% with a male literacy of 80.42% and a female literacy of 64.71%.

As regards the population figures of the 2011 census, the total of 369483 people constituting 0.16% among the total population, belonged to Scheduled castes (SC) and 21880 people constituting 0.01% of the population to Scheduled tribes (ST).There were a total of 900463 main workers: 173376 cultivators, 331414 agricultural labourers, 76438 marginal workers. Percentage of main workers to that of total workers sums up to 92.18% in 2011, whereas it was 92.07% in 2001. When the percentage of marginal workers to total workers is considered, it was 7.82% which was 8.92 in the year 2001.

TABLE 1.1—DISTRICT BASIC DEMOGRAPHIC INDICATORS

Sl. No	Indicators	2001	2011
1	Population	2016582	2251744
2	Decennial Growth (%)	11.85%	11.66%
3	Density of population per sq.km	354	391
4	Urban population (%)	46.25%	51.43%
5	Sex ratio	968	993
6	Percentage of 0-14 year old	NA	24.12% (543020)

Source-Census documents 2001 and 2011

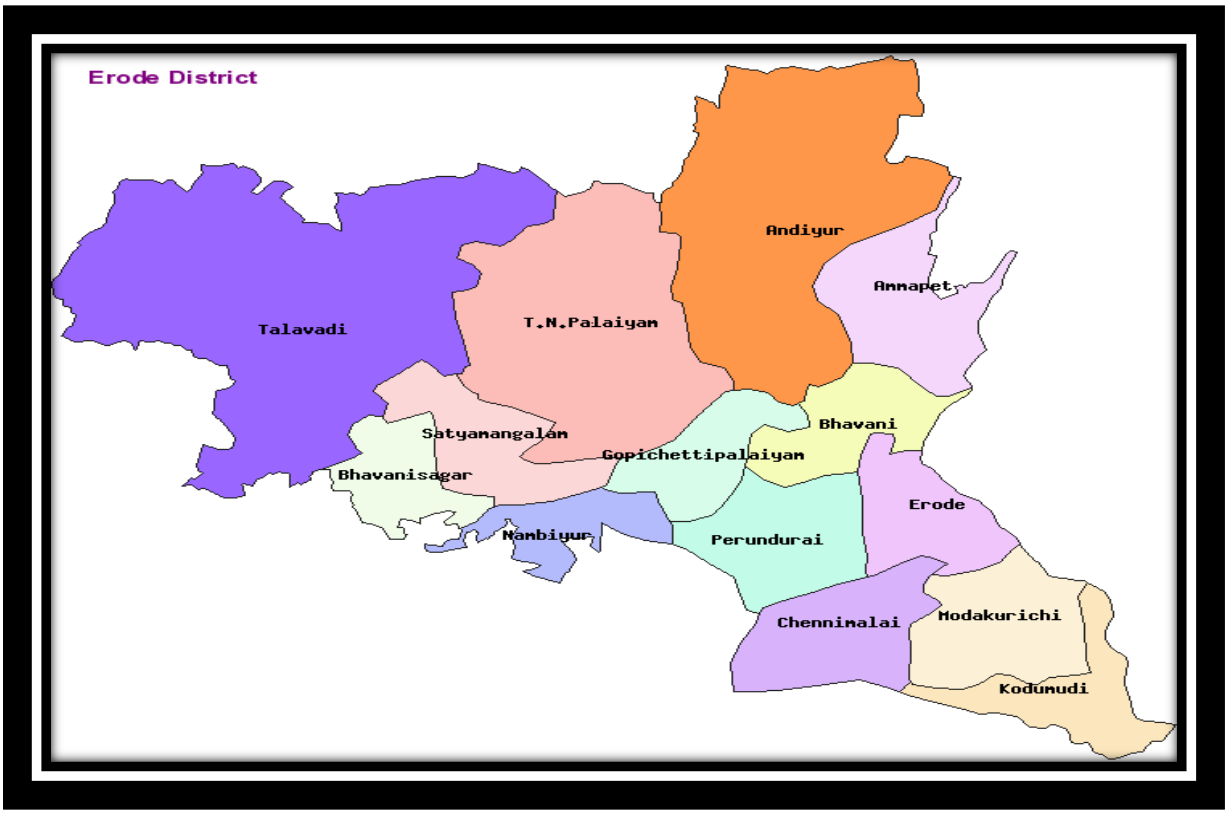
Extent of Urbanisation

Out of the total Erode population for 2011 census, 51.43 percent lives in urban regions of district. In total 1,157,976 people live in urban areas of which males are 577,475 and females are 580,501. Sex Ratio in urban region of Erode district is 1005 as per 2011 census data. Similarly child sex ratio in Erode district was 959 in 2011 census. Child population (0-6) in urban region was 102,959 of which males and females were 52,553 and 50,406. This child population figure of Erode district is 9.10 % of total urban population. Literacy rate in Erode district as per census 2011 is 79.39 % of which males and females are 86.17 % and 72.68 % literates respectively. In actual number 837,616 people are literate in urban region, of which, males and females are 452,326 and 385,290 respectively.

As per 2011 census, 48.57 % population of Erode district lives in rural areas of villages. The total Erode district population living in rural areas is 1,093,768, of which, males and females are 552,393 and 541,375 respectively. In rural areas of Erode district, sex ratio is 980 females per 1000 males. If child sex ratio data of Erode district is considered, the figure is 947 girls per 1000 boys. Child population in the age 0-6 is 92,254 in rural areas of which males were 47,390 and females were 44,864. The child population comprises 8.58 % of total rural population of Erode district. Literacy rate in rural areas of Erode district is 65.41 % as per census data 2011. Gender wise, male and female literacy stood at 74.45 and 56.21 percent respectively. In total, 655,046 people were literate of which males and females were 375,974 and 279,072 respectively.

District Map

FIG 1.1 DISTRICT MAP



Source: Website of Tamil Nadu Rural Development and Panchayat Raj Department. (http://www.tnrd.gov.in/)

Economy

Agriculture is the most important income source of this district. Paddy, Plantain, Groundnut, cotton, turmeric, coconut and sugarcane are some of the agricultural products. With 43% share, the district is the top turmeric producer in Tamil Nadu. Erode is also known as "The Turmeric City" as it is one of the largest turmeric producers in the world. Erode district is an important market centre for turmeric, a spice commonly used in curries. Turmeric is also used as a fabric dye. Erode district is also the leading producer of plantain, coconuts and white silk in Tamil Nadu.

Gobichettipalayam is well known for its white silk, cotton, plantain and coconut production. The country's first automated silk reeling unit is in Gobichettipalayam. Erode is also well known for handloom, power loom textile products and ready-made garments and hence called the *power loom city of India*. Products such as cotton sarees, bed spreads, carpets, lungies, printed fabrics, towels, dhotis are marketed there. In mid-2005, Bhavani Jamakkalam (Bhavani Bedsheets) is registered as a Geographical Indication by the Government of India. Chennimalai is also famous for textiles. Punjai Puliampatti has the second largest weekly shandy in Tamil Nadu and it is one of the leading tobacco producers in Tamil Nadu. Anthiyur and Modachur shandies are famous for cattle.

Agriculture

Though noted for trade and industry, the district is by no means backward in the field of agriculture. Close association and link with Coimbatore district which has the advantage of two premier agricultural Institutions viz., the Agricultural College and the Research Institute have helped the ryots to keep abreast of developments in agricultural methods and practices and also improved strains of seeds. The publicity and developmental activities launched by the agricultural institutions in Coimbatore penetrated far and wide in Erode district. Added to this was the propaganda and demonstration organized by the Agricultural Department. Availability of irrigation facilities coupled with the awareness of improved methods of farming helped the agriculturists to forge ahead. Though the soil is not the best, utilization of improved methods of cultivation and improved strains of seeds together have helped the agriculturists in the district to maximize their output. Paddy cultivation is maximum in the district. Corn stands second. Pulses are not much in cultivation in the district. Among condiments and spices, turmeric and chillies are significant.

In the year 2011, the total geographical area accounts to 3,46,178.1 hectares in which gross area sown sums up to 1,98,873.8 hectares, and 15574.19 hectares are sown more than once. And 183299.6

hectares are the net area sown. Among the non-food crops, oil seeds constitute the major item. 55.23 % of the total area under non-food crops is accounted for by oil seeds. A total of 95018 hectares is under oil seeds cultivation and of these ground nuts account for 55696 hectares while gingelly accounts for 24084 hectares. Ground nut is the most popular oil seed raised here (District website). Among other non-food crops raised here, the most important items are cotton, sugarcane and tobacco; sugarcane is raised in 30903 hectares. Cotton is grown in a few hectares while tobacco is raised in 4923 hectares in the district. In respect of all commercial crops also, improved varieties have been adopted by the farmers and this has helped them to maintain high yields.

Sources of irrigation

The sub-soil in most parts of the district being sandy and surface soil thin and of poor quality; the farmers have to depend heavily on irrigation facilities. The uncertain aspects of North-Eastern monsoon and not too favourable contribution from the South-West monsoon make the plight of local agriculturists miserable. The chief sources of irrigation in the district are the canals and wells and these constitute the mainstay of the farmers.

As noted earlier, the main sources of irrigation are the canals and wells. Percentage of gross irrigated area in average accounts to 0.43% in the year 2011, whereas it was 0.45% in 2001. Percentage of net irrigated area accounts to 0.37 in 2001 and it goes considerably high in the year 2011 with 0.40%, whereas percentage of cropping intensity is concerned, it has gone down from 1.26% in 2001 to 1.08% in 2011.

Rivers in the Western Ghats, fed mostly by the south-west monsoon are the chief sources of irrigation in the district. These rivers are Cauvery and Noyyal. Apart from these main rivers, there are a few uncertain jungle streams which also contribute towards better irrigation and drainage in a small way. The main irrigation project of consequence in the district is the Lower Bhavani project. The completion of Lower Bhavani project under First-Five-year Plan has boosted the irrigation resources considerably.

Animal Husbandry

The district is rich in its natural cattle wealth and concerted efforts of the Animal Husbandry Department have further augmented the cattle wealth in the district. There are three major breeds of cattle in the district. They are the Burgur breed, the Kollegal variety and the Alanbodies. Burgur breed, though smaller in size, are well built and sturdy. Kollegal variety is noted for their road draught and is normally reared for transport purposes.

With varieties of breeds available, the district has made rapid progress in the field of animal husbandry. Erode has carved out an enviable position for itself in the field of dairy development industry in the State. The Tamil Nadu Milk Producers Federation has a milk collection centre and processing plant at Erode from where pasteurised milk is transported in cases to different parts of the State every day.

As per the data obtained from Animal Husbandry department, there are 247487 cows, 102928 buffaloes, 172501 sheep, 315328 goats, 4335 pigs, 3991500 cattle in the district in the year 2011 and 272175 cows, 100604 buffaloes, 226555 Sheep, 335721goats, 15327 pigs, 5044650 cattle in the district in the year 2013-14. To support the growing cattle wealth in the district, Animal Husbandry Department has taken various measures including opening and maintenance of 5 bull stations for the collection and supply of semen to various veterinary hospitals and artificial insemination centres

Rhinderpest Squad stationed at Erode, Rhinderpest Vigilance unit at Gobichettipalayam and Rhinderpest check-post at Dimbum are all engaged in the eradication of Rhinderpest disease in the district. The district can also boast of a sheep breeding co-operative society.

As regards poultry development, there are three Poultry Extension centres in the district. There are at Chengampalli, Polavakalipalayam and BhavaniSagar. The poultry diagnostic laboratory in the district facilitates early diagnosis of various diseases affecting the poultry. Thus it helps to prevent heavy losses due to poultry diseases. The activities of the Animal Husbandry Department are controlled by two Assistant Directors of Animal Husbandry functioning from Erode and Gobichettipalayam.

Sectoral distribution of Gross domestic product (Primary, Secondary and Tertiary)

The details of sectoral contribution of State and District Income during the period of 2008 to 2012 are as follows.

TABLE 1.2 – SECTORAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT AT CONSTANT (2004-05) PRICES

(Rs. In Lakhs)

Sl. No.	Year	District			State		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1	2008	179435	504417	670870	3150807	9151736	18213138
2	2009	185885	371441	732384	3079411	8962975	20136950
3	2010	197739	422344	766114	3279727	10857429	21525966
4	2011	239727	541340	858352	3516987	12542302	24282284
5	2012	252126	567699	927999	3872767	13039248	26411788

Source: DOES, TN

Primary sector includes the income originating from Agriculture, Forestry & Logging, Fishing & Mining and Quarrying. Secondary sector includes the income originating from Manufacturing (Registered & Un-registered) Electricity, Gas, Water supply and Construction. Tertiary sector includes the income originating from Transport, Communication, Storage, Trade, Hotel & Restaurants, Banking & Insurance, Real Estate, Ownership of Dwelling, Business and Legal Services and other services.

The district GDP at constant (2004-05) prices has a gradual increase from the period 2008 to 2012 and it reflects the equal proportionate change in the growth of state GDP. During the period of 2008 to 2012, the district primary sector contribution for the district GDP was 14.19% on average, the secondary sector contribution was 32.40% on average, and the tertiary sector contribution was 53.41% on average. It is evidence that there is no unusual increases or decreases in the sectoral distribution of gross domestic product at constant prices during the period of 2008 to 2012. Hence the economic growth of the district is balanced and also it shows the enhancement of growth rate of district GDP from year to year.

Industry

In the Industrial map of Tamil Nadu, Erode district has a place of unique importance with 40.32 percent of population depending on non-agricultural sector in the year 2011. Industries and trade naturally occupy a place of prominence in the economy of the district. Industries that flourished in early days in the area were handloom weaving, carpet manufacturing, cart manufacturing, oil-pressing, brass vessel manufacturing etc. Though these industries flourished well in the early days, the advent of modern times changed the fate of some of these well-established ancient industries. However, the industry still survives here and load carrying carts are still manufactured. Similarly, Bhavani which was noted the world over for its very beautiful carpets, has shrunk into insignificance and the industry is almost non-existent now. Bhavani, Erode and Gobichettipalayam contribute to occupy important place in the field of oil-pressing. The industry which has been able to totally withstand the onslaught of modernisation has been the handloom weaving. Erode, Chennimalai etc. still hold their sway and the district is noted for its handloom products, which include cotton sarees, bed-spreads, towels, and furnishing fabrics. Two other important production centres are Bhavani and Jambai.

The cotton textile industry in Coimbatore and handloom industry in Erode district have encouraged the growth of various ancillary industries to meet the needs of the textile mills. Chennimalai, Erode, Gobichettipalayam etc., are important centres where cotton ginning is carried on a large scale. There are also important dyeing works in Erode, Chennimalai and Bhavani. A number of factories engaged in cotton fabric printing are functioning in Erode.

Rice milling is yet another industry which has been able to hold its own. Erode, Bhavani and Perundurai are the centres where a number of rice mills are flourishing. These mills carry on lucrative trade in the west coast. A number of lorries carrying boiled rice ply between the centres and the delivery points in Kerala. There are a number of leather tanneries in Erode area. Large quantities of leather are brought here for tanning and later exported to foreign countries.

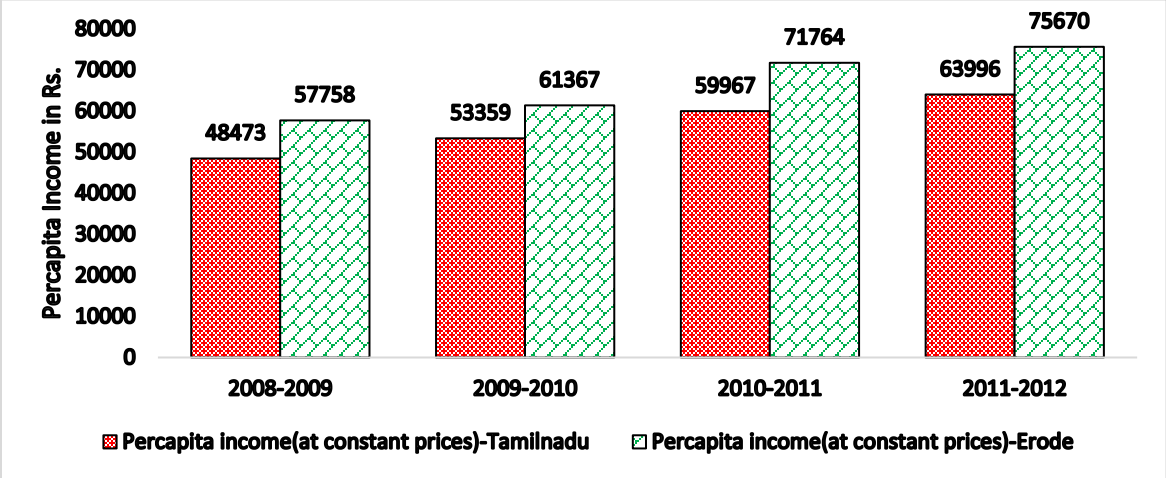
The Government has also come forward to provide incentives to small entrepreneurs. Industrial estates have been set up at Erode and other places where full facilities are offered to small industrialists. Small units have been set up here for the manufacture of steel furniture, nuller screen, etc. There is also a unit at Erode for the manufacture of bolts and nuts and screws.

Both manufactured items as well as agriculture commodities are included in the trade items. Major items of export from the District are handloom products, dairy products, raw cotton, rice etc, while the items brought are mostly oil seeds, coal etc. A large number of trucks, carrying various items into and from the district ply day in and day out and no detailed statistics are available regarding the flow of trade from and to the district.

Income and Poverty

Tamil Nadu's per capita income and its district s' per capita income was below the national average during the 1980s but crossed the all-India average marginally in 1991–92. Ever since the early 1990s this higher per capita income has been maintained. Tamil Nadu ranks fourth among major States in terms of per capita income.

FIG 1.2 – PER CAPITA INCOME FOR STATE AND DISTRICT AT CONSTANT (2004-05) PRICES



Source: DOES, TN

From the chart, it is understood that the district per capita income is comparatively higher than the state's per capita income. It depicts that the standard of living of people in the district is comparatively higher than that of the total state and nationwide. When considering the growth rate of per capita income for the year 2010-11, the state's growth rate stands at 12.89% and the district's growth rate stands at 13.16% which is comparatively better than the growth rate for the previous year of state and district which is 9.73% and 6.49%. It shows the average growth rate from year 2008-09 to 2010-11 for the state and district as 9.825% and 11.31% respectively, whereas the growth rate for the year 2011-12 for the state stands at 19.6% and for the district at 22.78%.

Percentage of BPL families

There is no doubt that a significant number, both in percentage and absolute terms, the number of people living below the poverty line has declined significantly over the last few decades. Total number of families that are below poverty line is 141792 (2003) and accounts to 33.1% as the percentage from total number of households in the district. And for the year 2013, the number of families that are below poverty line (166538) accounts to 30.97% out of the total number of households in the district (537670).

Social Sector
Health

Medical facilities are provided by the District Headquarters Hospital at Erode and taluk hospitals at each taluk headquarters. Public health activities are guided and supervised by the District Health Officers, Erode and Joint Director of Medicals at Erode. There is a Medical College at Perundurai run by the Road Transport Corporation. There are 74 Primary Health Centres under the control of District Health Officer at Erode. These institutions provide succour to the suffering people. There are 277 Primary Health Sub-centres under the control of District Health Officers at Erode.

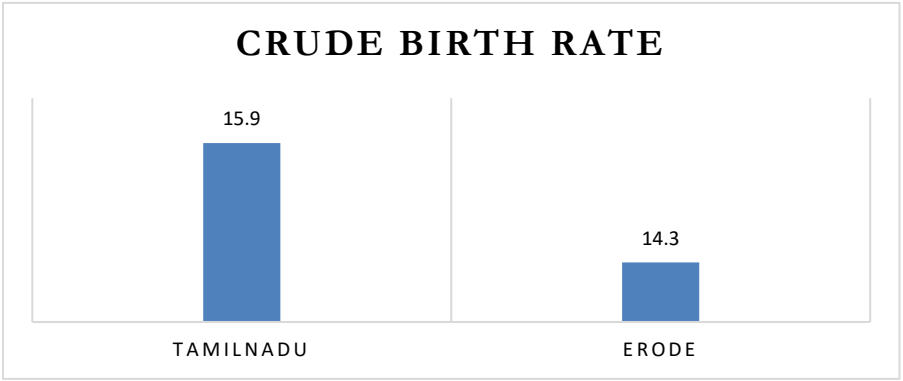
Life expectancy, crude birth rate and crude death rate

Life expectancy at birth has long been recognized as a summary measure of global average life expectancy at birth. Normally women outlive men. In countries with high income, women on an average live longer by six years than men. In countries with lower income, they live only two years longer. In Erode district, the Life Expectancy for Male is 66.8 and Female is 69.3 in 2011. The Life expectancy of the district stands at 68.05 and for the year 2013-14, it stands at 71.8 for male, 73.7 for female and 72.7 on average. The life expectancy of the state is 71.8 for male, and for female it is 75.2 and the average is

73.4. The life expectancy at birth for female has shown a steady increase in the district , reflecting the achievements made in health sector.

Crude Birth Rate indicates the number of live births occurring during the year, per 1,000 population estimated at midyear. Crude Birth Rate stands 14.67 in the district for the year 2011. And for the year 2013-14 it is reported as 14.3 in the district.

FIG 1.3 – CRUDE BIRTH RATE OF STATE AND DISTRICT (2013 -14)



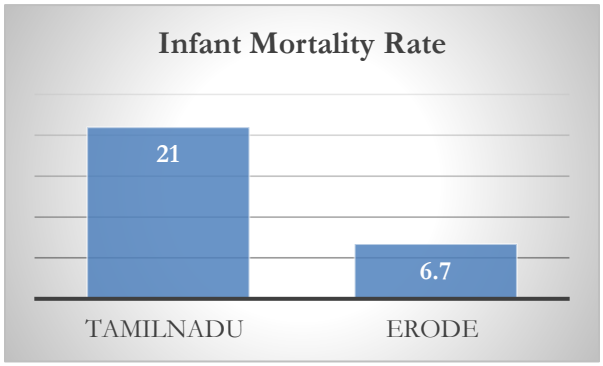
Source: DD Health Services, Erode

Crude death rate indicates the number of deaths occurring during the year, per 1,000 population estimated at midyear. Crude death rate stands at the rate of 7.34 in the district. For the year 2013-14 crude death rate fallen and stands at the rate of 6.5 in the district.

IMR and MMR status

An analysis of the causes of maternal mortality rate in the district brings out the fact that a large number of these are preventable. While there are well identified direct and indirect obstetric causes for maternal death, socioeconomic factors also play a crucial role, for instance, patriarchal attitudes, the enormous burden of hard toil and poor nutrition, the lacunae in transport and communication facilities, delay in accessing proper health facilities and the lack of and/or poor quality of essential and emergency obstetric services. Maternal Mortality Rate stands at 64 in the district.

FIG 1.4 INFANT MORTALITY RATE (2013 -14)



Source: Directorate of Public Helath

These figures, though comparatively lower when compared to other districts, are still high enough to warrant corrective action. Women need to be healthier, nutritionally speaking, to improve their own physical conditions. This is also required in the interest of the next generation.

The prevalence of low birth weight is a cause for continuing concern. The aim should be to eliminate cases of low birth weight since it is costly to the sufferers and to society. For this, one may have to look at not only maternal malnutrition, but also to step back to focus on the growth patterns of adolescent girls. Instead of waiting for an undernourished and anaemic woman to get pregnant and then intervene, growth promotion among adolescent girls during their rapid growth spurt is likely to lead to healthier mothers in the future.

Development in the indicator, MMR have a positive impact on improving the Infant Mortality Rate (IMR) which is the indicator actually used in the HDI index. The IMR is a sensitive indicator, not just of the state of health, nutrition and caring accessible to infants below one year of age, but also of the general well-being of society.

Literacy and Education

The literacy rate of the district has been increasing progressively and is performing much better on par with the state literacy rate. As per census records the literacy rate for the year 2011 stands at 63 percent which was 55 percent in 2001. Male literacy rate grew from 64 to 71 percent and female literacy from 46 to 56 percent in the same year. The district is progressively increasing the gross enrolment rate (GER) through effectively bringing the children into school. The GER is in increasing trend and the district has to pave out ways to be ahead of 100 percent. The enrolment of girls in primary schools had also substantially increased as a result of schemes such as the Kasturba Gandhi Balika Vidyalaya (KGBV) initiative that provides a residential school with boarding facilities for girls. A minor percent of dropouts

occurs at every stage due to poverty and low level of literacy rate of parents. This needs a support system that should be designed for such children as well as the teachers which would help them and ensure that they attend school regularly. The Literacy rate and enrolment rate for girls are fairly good. Both in terms of initial enrolments and decelerated dropouts, overall attainment of school education is in rational terms. Literacy rate is found to be increased considerably in 2011 compared to that of 2001.

In the field of education also, Erode district has recorded remarkable achievement. There are a number of well-established schools and colleges preparing students for the usual degree and post-graduate degree courses in various branches of science and humanities. Apart from these institutions, there are a number of Polytechnics and other institutions which provide technical education. Erode district has several facilities for higher education including a Medical College at Perundurai and many engineering, arts and science colleges. The district is divided into two educational district s Gobichettipalayam and Erode.

Summary

This chapter has attempted fairly to give an overview of the profile and status of the Erode district with other basic summations in diverse dimensions of development. The district is doing considerably well in terms of economy, agriculture, health, literacy in comparison to the overall states' performance. Further, necessary instruments can be brought in to enhance the execution as whole. With this background, the subsequent chapters would cover the various magnitudes of Human development in the district which is believed to throw light on existing specific problems within the district and would help in understanding and appreciating the environmental and socio-economic conditions at grass-roots level.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

Introduction

The human development approach, is a major advance in the difficult exercise of understanding the successes and deprivations of human lives, and in appreciating the importance of reflection and dialogue, and through that advancing fairness and justice in the world." — Nobel Laureate Amartya Sen, 2013 Human Development Report, The Rise of the South: Human Progress in a Diverse World.

The conception of human development reveals that the principal purpose of development is to enhance people's choices and to construct human competence. The word "choices" denotes the following: Better access to knowledge; good nutrition and health services; tenable livelihoods; protection against crime and physical violence; pleasing leisure hours; political and cultural sovereignty; intuition of chipping in community deeds. The intention of the development is to facilitate the people with an ambience to lead long, healthy and creative lives with dignity and prosperity. The core concept places the beings at the centre of development, makes it participate and put the susceptible segments in the process of change and equity in advancement.

Human Development Index Background

HDI is a composite index, comprising longevity measured by Life Expectancy at Birth (LEB), educational attainment computed as a combination of adult literacy and enrolment ratios at the primary and tertiary levels and standard of living as measured by per capita real GDP adjusted for Purchasing Power Parity in dollars (PPP$). All these parameters are considered as of equal importance for human development and hence, they are given equal weightage to construct a composite index, fixed minimum and maximum values have been assigned for each of these indicators to construct an index. The HDI is calculated as an average of the three indices that include the life expectancy index, the gross enrollment index and the GDP.

Need for the District Human Development Report

The State Planning Commission proposes that District Human Development Reports need to be prepared to gain deeper understanding of the issues at the district and sub-district level. As the 73rdand 74thconstitutional amendments mandate the preparation of district level plans, it is envisaged that this DHDR will give an opportunity for preparing district plans from a human development perspective. In other words, it would do so by analysing the status of human development attainment and key human development challenges faced with a special focus on efficiency of delivery systems and

financial allocations. The DHDR is viewed as an instrument for policy making on social development expenditure to improve the HD indices.

The DHDR of Erode district is a comprehensive report that comprises of the indices calculated, based on a common method arrived at, so that all the DHDRs are similar. These indices are the indicators of different blocks of the district in particular and the district in general. One can view the indices and infer about the performance of a particular block in that district and it can also be compared with the district average in turn. A comparison of these two will give a clear picture about a particular block, in comparison with the other blocks. The following are the indices which are the indicators of the human development in a particular district. They are:

- ✓ HDI – Human Development Index
- ✓ GII – Gender Inequality Index
- ✓ CDI – Child Development Index
- ✓ MPI – Multidimensional Poverty Index.

Human Development Index – Inter – Block Variations

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

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

Though our state's human development index is better than the national index, it will be of interest to know about the human development in Erode district. Measurable indicators are playing useful roles in identifying problems, determining trends and suggesting pragmatic strategies. In particular, human development index (HDI) is the most used index giving a summary measure of human development and allowing for comparison between different geographical areas. HDI is a three dimensional composite index obtained as a mean of three indicators weighted equally, (viz) Standard of living, Health and Education. Index value falls to 0 to 1. The human development index is a positive index. Here closer to 1 i.e., higher the index value, higher the human development and if the value is closer to 0 i.e., lower the index value, lower the human development.

TABLE 2.1 TOP THREE BLOCKS AND BOTTOM THREE BLOCKS IN HUMAN DEVELOPMENT INDEX

Top 3 Blocks		Bottom 3 Blocks	
Erode Municipal Corporation	(0.95)	Thalavadi	(0.28)
Erode	(0.79)	Bhavanisagar	(0.43)
Kodumudi	(0.71)	Nambiyur	(0.45)
Source: Erode district Computation of Index.			

The above table portrays the top three blocks and bottom three blocks in Human Development Index. When we take into consideration, the overall HDI index and try to rank the blocks, based on it, Erode Municipal Corporation gets the first position in HDI. It is followed by Erode block and Kodumudi block grabbing the second, third places respectively. But if we take into consideration, the bottom three blocks of the district in HDI ranking, Thalavadi is the bottom most block in the HDI. The index score of this block is just 0.28. This shows us the vast difference that is existing between these two figures and how far the Thalavadi block needs to be steered into the growth path. Bhavanisagar and Nambiyur are the other blocks in the district which occupy the fourteenth and the thirteenth place respectively. This means that all these blocks fall into the bottom three blocks in HDI ranking.

In the health dimension of the HDI, Erode Municipal Corporation holds the first position, followed by Erode block and Modakuruchi block. But the bottom three blocks show that Thalavadi block lacks in this dimension too. Thalavadi is followed by Chennimalai and Nambiyur blocks; all the three blocks have got an index score value of 0.23, 0.25 and 0.32 respectively. In the education dimension of the HDI, again the Erode municipal corporation leads, followed by Perundurai and Gobichettipalayam blocks with an index score value of 1.00, 0.84 and 0.80 respectively. The Thalavadi blocks is a loser in this

dimension too, followed by Anthiyur and Nambiyur blocks with an index score value of 0.52, 0.55 and 0.62 respectively.

Thalavadi is a block which is backward in all the dimensions of the HDI like standard of living, health and education. And one can also see the status of the other blocks in all the dimensions of the HDI. It is a fact to be taken into consideration by the district administration and strategies are to be taken by the authorities, to uplift these blocks so that these blocks are not deprived and which will attain a simultaneous growth along with the other blocks.

Gender inequality index

The gender disparity is another dimension of human development. Along with HDI, UNDP constructed the gender –related development index (GDI) to analyze the gender disparities across the member countries. Tamil Nadu Human Development Report also made attempts to construct GDIs at the district level. GDI, mainly, captures achievements in basic human development adjusted for gender inequality in the three basic parameters. The **Gender Inequality Index (GII)** is a new index for evaluation of gender disparity that has been initiated in the 2010 Human Development Report of the UNDP.

Gender inequality in Erode district – Inter – Block Variations

There are three important dimensions which are used to measure gender inequality. They are health, empowerment and labour market. These three dimensions have fourteen indicators to compute the GII. 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

Dimensions	Indicators
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 gender inequality index is the negative index. Here, the value closer to 0 (zero) shows lower gender inequality and value closer to 1, shows higher gender inequality.

If the GII rank is less than the HDI rank in a Block, it shows that women in the Block suffer lower achievement than men. If the HDI and GII ranks are the same in a block, it is indicative of gender equality in human development. This is the appreciable stage and the disparity within the block and between the blocks should be overcome through implementing human and gender development measures.

TABLE 2.2. TOP THREE AND BOTTOM THREE BLOCKS IN GENDER INEQUALITY INDEX, 2013 -14

Bottom 3 blocks		Top 3 blocks	
Thukkanaikenpalayam	(0.01)	Erode	(0.06)
Bhavanisagar	(0.01)	Erode Municipal Corporation	(0.06)
Kodumudi	(0.01)	Perundurai	(0.05)
Source : Erode district indices computation			

From the table, it is understandable that the blocks Thukkanaikenplayam, Bhavanisagar and Kodumudi blocks stands first, second, third, with index value of 0.01 respectively. And it outstrips the other blocks in terms of Gender Equality under various factors like reproductive health, empowerment and labour. It has been recognized that these blocks are doing predominantly well in terms of gender equality and has the gender inequality index value much lower than the district gender inequality index of 0.02.

Addressing the reproductive health needs of women is a prerequisite to achieve the gender equality, but despite state and district commitments, actual progress on this front has been slow and remains a blight on human development. Improving reproductive health outcomes and gender equality

outcomes are inextricably linked. Women may not participate in the labour market in the blocks for several reasons, including exclusion, unequal pay and incentives, household duties or caring for relatives, and pregnancy and childcare. The level of women's participation reflects several aspects, including possibilities and permission to work, which in turn includes labour market opportunities, and the capability of women to combine productive work with duties of care and reproductive responsibilities. Clearly this is affected also by men's complementary activities in the household. Thalavadi, Ammapet, Anthiyur blocks are desperately positioned in terms of empowerment. There is a great deal of literature that finds women's access to education may reduce the child mortality rates within a region. Although women's representation in Parliament has been increasing in the district, women have been disadvantaged in representation of parliament with a poor average.

In spite of the progress made, there still persists significant gender gaps between women and men that should be addressed in order to improve the human development. Government, civil society and the general public should continue paying attention to reproductive health, education and labour force participation of women mainly at block level than at the district as a whole.

Child Development Index

The child development index (CDI) is an index merging performance measures, particularly to children's education, health and nutrition. Index value falls between 0 to 1. The higher the index value, (i.e.) closer to 1 (one) would be the best in child development. The lower the index value, i.e. closer to zero, the worse the children faring. The child development index for Erode district has been computed based on eight indicators prescribed by MIDS through SPC. Indicators and values used for CDI computation given in Annexure. Indicators used for CDI computation are furnished below.

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

The CDI as referred earlier is an index combining performance measures specific to children - education, health and nutrition. The district average Child Development Index stands at 0.70.

TABLE 2.3. TOP THREE AND BOTTOM THREE BLOCKS IN CHILD DEVELOPMENT INDEX, 2013-14

Top 3 blocks		Bottom 3 blocks	
Erode Municipal Corporation	(0.91)	Thalavadi	(0.59)
Erode	(0.87)	Anthiyur	(0.50)
Perundurai	(0.82)	Sathyamangalam	(0.46)
Source : Erode district indices computation			

Table 2.3 shows that Erode Municipal Corporation tops the blocks in terms of child development with the index value of 0.91 much higher than the district average, mainly because it is doing chiefly well in terms of education. The block has the highest enrolment both in primary and secondary education. The block also does well in terms of health and has the lowest U5MR in the district. Sathyamangalam block stands at the bottom in the child development with the CDI 0.46. Because of the reason that the block has more malnourished children, the block also has the lower enrolment rate in secondary education. The other blocks that stand behind are Thalvadi and Anthiyur. Here also the malnourishment among the children is highly prevalent. Thus the CDI provides another instrument, for the formulation and monitoring of public policies targeted toward early childhood in the district, which is ultimately targeted towards tomorrow's societal enrichment.

Multidimensional poverty Index

The Multidimensional Poverty Index (MPI) is a new measure designed to confine the exact shortages that the public look at the similar time. 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	Drop out in the primary Drop out in secondary
Standard of living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to pucca houses Access to electricity

The Multidimensional Poverty Index (MPI) uses different factors to determine poverty beyond income-based lists. It shows the number of people who are multi-dimensionally poor.

TABLE 2.4. TOP THREE AND BOTTOM THREE BLOCKS IN MULTIDIMENSIONAL POVERTY INDEX, 2013-14

Top Three blocks with Lower MPI value		**Bottom Three blocks with Higher MPI value**	
Erode Municipal Corporation	(0.03)	Thalavadi	(0.87)
Erode	(0.24)	Sathyamangalam	(0.62)
Bhavanisagar	(0.31)	Bhavanisagar	(0.60)

Thalavadi has the highest MPI of 0.87 which means, it is the most multi-dimensional poverty block among all the blocks in Erode district . Sathyamangalam has the second highest MPI of 0.62 which is closely followed by Bhavanisagar (0.60) while Erode Municipal Corporation is having the lowest MPI of 0.03 which is far-off followed by Erode block with an index score value of 0.24. The productive and improved measures may be taken for the blocks based on the criteria or dimension in which they lag. Thalavadi is located in hills and the livelihood of the entire population depends almost only on agriculture. There are no major industries and schools located in Thalavadi due to lack of accessibility and poor infrastructure. The people in Thalavadi also lack adequate skills to be employed in industries. This pulls them back from migrating to other places where the cost of living is higher than Thalavadi. The Government should give a special care for Thalavadi to remove the regional imbalances within the district. Sathyamangalam is another block located at the foot of the hill which comes just behind Thalavadi block in Multidimensional Poverty index.

TABLE 2.5 CONSOLIDATION OF HDI, GII, CDI AND MPI INDICES, 2013 - 14

S. No.	Block	HDI		GII		CDI		MPI	
		Index Value	Rank	Index Value	Rank	Index Value	Rank	Index Value	Rank
1	Ammapet	0.535	12	0.01	9	0.70	8	0.53	11
2	Anthiyur	0.604	9	0.01	2	0.50	14	0.55	12
3	Bhavani	0.667	7	0.04	10	0.69	9	0.41	7
4	Bhavanisagar	0.434	14	0.06	15	0.65	12	0.60	13
5	Chennimalai	0.536	11	0.01	7	0.66	10	0.31	3
6	Erode	0.786	2	0.01	1	0.87	2	0.24	2
7	Gobichettipalayam	0.619	8	0.05	11	0.75	6	0.42	8
8	Kodumudi	0.706	3	0.01	8	0.82	3	0.33	5
9	Modakurichi	0.677	6	0.05	13	0.75	4	0.36	6
10	Nambiyur	0.455	13	0.01	4	0.66	11	0.51	10
11	Perundurai	0.682	5	0.01	6	0.75	5	0.43	9
12	Sathyamangalam	0.556	10	0.01	3	0.46	15	0.62	14
13	Thalavadi	0.275	15	0.06	14	0.59	13	0.87	15
14	Thukkanaickenpalayam	0.687	4	0.01	9	0.70	7	0.32	4
15	Erode Municipal Corporation	0.949	1	0.01	2	0.91	1	0.03	1

Sources: Computed

Table 2.5 clearly illustrates the disparities among the blocks. Inter and intra-block disparities are high in Erode district. Erode Municipal Corporation, Erode and Kodumudi blocks perform well in the HDI. Access to industries, good standard of living and high income level are all the factors which have made these blocks to perform better. Kodumudi is a block which is based mainly on agriculture and many small and tiny industrial units also exist. This block is famous for turmeric cultivation and we can say it as the turmeric hub of Erode district. Blocks having a better GII mean that there are lower disparities between men and women in these blocks, when compared to the other blocks. In the CDI, the dimensions relating the CDI are well taken care of by those blocks which have good score and have got good rankings.

Summary

This chapter dealt with the essential indices indicating the development of Erode district in various parameters namely HDI, GII, CDI and MPI. One can get to know the stance of various blocks in terms of these indices. The district administration can frame various intervention strategies for the betterment of the district and to enrich the living standards of the people in the district.

CHAPTER 3

EMPLOYMENT, INCOME AND POVERTY

Chapter 3

Employment, Income and Poverty

Introduction

It is an eminent fact that employment, income and poverty are interconnected and they have substantial effect over human development. Human Development computation consists of various parameters. Among these, the quality of employment, percentage of people involved in productive work, the amount of remuneration received by the working group of population etc. are the key determinants. The status of employment, income and poverty indicates the well-being of the people. Interestingly, all these three viz., employment, income and poverty are having a strong relationship. More specifically, employment has an exclusive influence on income and poverty as fruitful employable opportunity results in better income level and standard of living which in turn pushes down the poverty level of the population.

Indian Economic Survey 2011-12 indicates, 28.71million people were employed in organised public and private sectors in 2010 and it was 26.46 million in 2005. The share of service sector employment is on rise and the share of agriculture sector employment is on a fall which is a characteristic feature of a developing economy. It is also a well proven fact that the income of the people depending on the agricultural sector is considerably less than that of those working in secondary and tertiary sectors.

Tamil Nadu has 4.0 percent of India's geographical area and constitutes 5.96 percent of India's population 1210 million as per the 2011 population census. In Tamil Nadu, 48 percent of the population is living in urban areas. The per capita income (PCI) at constant prices of Rs. 53,507 in 2010-11 for Tamil Nadu is higher than national per capita income of Rs. 36,342 in the same period. From the NSS 61st round results, it is learnt that, in terms of providing employment in rural areas, Tamil Nadu (52.8%) stood in third position, next to Andhra Pradesh (54.4%) and Karnataka (54.2%).

Erode district is popularly known for its turmeric market. it is also well-known for marketing of textile products of handloom, power loom and readymade garments. The handloom and power loom products such as cotton sarees, bed Spreads, carpets, towels, and dhotis are marketed here in bulk. To understand better association between employment, income and poverty in Erode, this chapter carries out a meticulous analysis of the employment situation, income and poverty level changes which have taken over time in the district.

Employment

Employment is important for any economy as it is a major source of income for a majority of the population, which provides goods and services for them. Employment of an economy is significant as unemployment of people who are willing and capable to work, are the valuable resources that go unused. It is a great challenge for any government to create a meaningful job. Given the importance of employment for poverty reduction, employment creation should occupy a central place in national poverty reduction strategies. Many employment generation strategies framed such as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) are often related to agricultural and rural development. To achieve a greater human development in an economy, a special consideration is to be given to the key social problems like employment, empowerment of weaker segments of society and poverty reduction.

Workers' Participation Rate

The working population (Employee and Employer), being a primary factor of production, the size of working population is of a great importance for the level of economic activity in the district. The working population in Erode district was 11.96 lakhs out of the population of 22.52 lakhs in 2011. The workforce accounted for 53.10% of total population. Work Participation Rate (WPR) is a measure of the active portion of an economy's labour force which refers to the number of people who are either employed or are actively looking for work. The number of people who are no longer actively searching for work would not be included in the participation rate. Due to an economic slowdown, many workers often get discouraged and stop looking for employment, as a result, the participation rate decreases. The work participation rate (WPR), that is the proportion of total workers to total population in 2011, has registered a marginal decline in 2011(53.10%) compared to 2001(54.54%).

TABLE 3.1 – TOTAL WORKERS, NON-WORK AND WORK PARTICIPATION RATE

Sl. No.	Block wise	Total workers		Main Workers		Marginal Workers		Non-Workers		Total Population		Workers Participation Rate in Percentage	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ammapet	77236	75800	68661	72338	8575	3462	46104	53340	123340	129140	62.62	58.70
2	Anthiyur	72763	78172	66999	71454	5764	6718	52200	60222	124963	138394	58.23	56.49
3	Bhavani	94166	102837	89039	96959	5127	5878	81239	89146	175405	191983	53.68	53.57
4	Bhavanisagar	51867	57100	48132	50211	3735	6889	43316	46890	95183	103990	54.49	54.91
5	Chennimalai	59976	58751	57500	56666	2476	2085	37711	46719	97687	105470	61.4	55.70
6	Erode	196791	30999	189554	28833	7237	2166	259557	28606	456348	59605	43.12	52.01
7	Gobichettipalayam	102404	105458	94999	98002	7405	7456	85516	92437	187920	197895	54.49	53.29
8	Kodumudi	64527	65993	62007	63518	2520	2475	40572	44348	105099	110341	61.4	59.81
9	Modakurichi	84725	88076	79953	83700	4772	4376	60357	65838	145082	153914	58.4	57.22
10	Nambiyur	57473	56486	48855	50934	8618	5552	31508	37431	88981	93917	64.59	60.14
11	Perundurai	79550	85376	72672	81103	6878	4273	60302	75260	139852	160636	56.88	53.15
12	Sathyamangalam	77782	87992	68061	72853	9721	15139	61466	72100	139248	160092	55.86	54.96
13	Thalavadi	28935	33989	17297	27153	11638	6836	24239	29370	53174	63359	54.42	53.65
14	Thukkanaickenpalayam	51569	49872	48856	46739	2713	3133	32731	34667	84300	84539	61.17	58.99
15	Erode M Corp.	-	218872	-	210588	-	8284	-	279597	-	498469	-	43.91
District		1099764	1195773	1012585	1111051	87179	84722	916818	1055971	2016582	2251744	54.54	53.10

Source: District Census Handbook Erode, 2001 and NIC DATA 2011.

Among the blocks, Erode Municipal Corporation has the largest population, workers and also non-workers. Erode Municipal Corporation has been created recently by segregating from Erode block. Due to this segregation, total population, workers and non-workers are less in Erode block in 2011 compared to 2001. In all other blocks, there is an increase in workers with increase in population during the period 2001 to 2011. The number of marginal workers in Bhavanisagar and Sathyamangalam have increased significantly from 2001 to 2011 whereas in Thalavadi, Ammapet and Perundurai blocks, the size of marginal workers fell down during the same period. The total population of the district registered 11.66% growth from 2016582 in 2001 to 2251744 in 2011 whereas the total workers registered a growth rate of only 8.73% from 1099764 in 2001 to 1195773 in 2011. Though this has resulted in lesser work participation rate, the major reason for this is a large number of grown up children in the district are pursuing education than earlier which help them for a better future. The continuous encouragement of state government by providing various educational amenities for the poor students including free laptops, uniforms etc. are one of the major reasons behind higher number of students pursuing education as it reduces the cost of education and motivates them in getting quality education.

Work Participation Rate (WPR) for 2001 and 2011 is also explained in tables 3.1. Though, there is an increase in total workers in 2011 compared to 2001, the district's worker participation rate (WPR) i.e., percentage of total work to total population shows a marginal decline from 54.54% to 53.10% during the same period. Even though, Nambiyur block continues to have the highest WPR, the rate has decreased from 64.59 percent (57473/88981) in 2001 to 60.14 percent (56486/93917) in 2011. Erode Municipal Corporation registered the lowest WPR of 43.91 percent (218872/498469) in 2011. Though, WPR is low in Erode Municipal Corporation, it stands first in Human Development Index (including Standard of Living Index). The primary reason for this is Erode Municipal Corporation has large number of industrial and business units where the average income of the person is high compared to agricultural sector. This higher earning capacity of the principal person of the family reduces the necessity for other members to involve in active employment, whereas in blocks like Nambiyur, Ammapet, Thukkanaickenpalayam and Thalavadi, the WPR is high but they find themselves in a lower position in Human Development Index (HDI) as their income is largely coming from agriculture and allied sectors where the average income of principal person of the family is less which forces other family members to actively involve in employment. Thalavadi in particular, being a hilly area the Income earning potential is limited for the workers which results in backwardness of that block in major aspects like health, education, and human development.

TABLE: 3.2 – MALE AND FEMALE WORK PARTICIPATION RATE IN 2011

Sl. No.	Block	Total Population		Total Workers		Male Workers Participation Rate	Female Workers Participation Rate
		Male	Female	Male	Female	Male	Female
1	Ammapettai	65937	63203	42964	32836	65.16	51.95
2	Anthiyur	70200	68194	45070	33102	64.20	48.54
3	Bhavani	97177	94806	61621	41216	63.41	43.47
4	Bhavanisagar	52284	51706	34539	22561	66.06	43.63
5	Chennimalai	54027	51443	34866	23885	64.53	46.43
6	Erode	29888	29717	19367	11632	64.80	39.14
7	Gobichettipalayam	97976	99919	64210	41248	65.54	41.28
8	Kodumudi	54633	55708	37045	28948	67.81	51.96
9	Modakurichi	76697	77217	51437	36639	67.07	47.45
10	Nambiyur	46789	47128	32391	24095	69.23	51.13
11	Perundurai	80243	80393	51854	33522	64.62	41.70
12	Sathyamangalam	80663	79429	52427	35565	65.00	44.78
13	Thalavadi	31522	31837	19895	14094	63.11	44.27
14	Thukkanaickenpalayam	41926	42613	28391	21481	67.72	50.41
15	Erode M Corp.	249906	248563	156006	62866	62.43	25.29
District		1129868	1121876	732083	463690	64.79	41.33

Source: Census operations Tamil Nadu, 2011

The work participation rate of male workers is higher than the female workers in all the blocks. Male workers participation rate is 64.79% whereas female workers participation rate is 41.33% for the district. Female workers along with male workers are actively contributing in the productive employment. Female work participation in Kodumudi (51.96%) and Ammapettai (51.95%) are higher than the WPR of other blocks. Female work participation of 25.29% in Erode Municipal Corporation is lower among all the blocks. Erode Municipal Corporation mostly provides employment opportunities in industry and tertiary sectors where the income per person is significantly higher than in other blocks which provide most of the employment in agricultural sector. The higher female participation helps in women empowerment and reduces their dependence of males. Overall, higher work participation rate helps in economic growth and human well-being.

Among the total population in the district, 48.57% (1093768/2251744) lives in rural area and 51.43% (1157976/2251744) lives in urban area. In rural areas, the total work participation rate is 58.07%. Male work participation rate in rural areas is 65.85% whereas, female participation rate is 50.12%. In urban area the total work participation rate is 48.42%. Male work participation rate in urban areas is 63.78% whereas, female work participation rate is only 33.14%. Table 3.3 indicated that more rural population (58.07%) are engaged in productive work than urban population (48.42%). The higher percentage of total work participation in rural areas than urban is caused almost exclusively by the difference in female participation rate in rural (50.12%) and urban areas (48.45%).

TABLE 3.3 – RURAL AND URBAN WORK PARTICIPATION RATE (2011)

Total/Rural/Urban	Persons/Male/Female	Population	Workers	% of Participation
Rural	Male	552393	363773	65.85
	Female	541375	271331	50.12
	Persons	1093768	635104	58.07
Urban	Male	577475	368310	63.78
	Female	580501	192359	33.14
	Persons	1157976	560669	48.42
Total	Male	1129868	732083	64.79
	Female	1121876	463690	41.33
	Persons	2251744	1195773	53.10

Source: Census operations Tamil Nadu, 2011

The reason behind the higher female participation in rural areas is primarily due to lower wage income, for principal workers in rural areas, compared to urban areas, which force females

to participate in employment to support family welfare. Moreover, agriculture being the primary source of employment in rural areas, provides considerably lesser income than that of urban workers working in the secondary and tertiary sectors.

Box 3.1 – Child Labour Decline in Erode

Child labour is the practice of having children engaged in economic activities on part or full-time basis. Employment of children under a specified age in an occupation is banned by law as it deprives them of educational opportunities and hampers their productive capacity to a greater degree. India is sadly the home to the largest number of child labourers in the world. According to UNESCO's Education for All (EFA) Global Monitoring Report on out-of-school population, India has 1.4 million out of school children aged Six to Eleven. SSA survey 2003, the survey of child labour in Erode district has identified 2243 child labourers. Out of these 1183 are boys and 1060 are girls. Substantial number of child workers has been identified in Bhavani (283), Erode panchayat union (186), Gopichettipalayam (191), Modakurichi (214) and Sathiyamangalam (427). Among the child labourers, 34% belongs to SC, 47.4% belongs to MBC and 15.5% belongs to BC and 2% belongs to ST communities (Source: http://www.tnchildlabour.tn.gov.in /analysis.htm#Erode). Social group of the children plays a key role in Child labour as backward communities have larger Child labourers. In October 2012, a team rescued 38 children from two units of yarn processing mills in Erode. All those children were from the economically backward areas of Dharmapuri, Krishnagiri, Thiruvannamalai, Salem and Vilupuram districts (Source:http://www.thehindu.com/todays-paper/tp-national/tp-TamilNadu/child-labour-rampant-in-erode-say-rights-activists/article4007985.ece). The prevalence of child labour is higher in unorganised sector. However, due to strict vigilance by Labour Department and the office of the Inspector of Factories with the help of some NGOs, Child labour numbers in Erode district have drastically fallen.

More boys are employed as child labour than girls in Erode district. Perundurai block has the most child labour report of 7 (4 boys and 3 girls) which is followed by Erode which has 5 child labourers (3 boys and 2 girls). Greater level of business activities and lesser wage rate for workers in these blocks may be a reason for higher child labour. The National Child Labour Project (NCLP) should organise more raids regularly against child labour for rescuing the children employed in industries, commercial establishments and houses. NCLP may also concentrate on the blocks with high school drop-out ratio as it has a direct relationship with the child labour.

Sectoral Composition of Workers

TABLE 3.4 – PERCENTAGE OF EMPLOYEES IN ORGANIZED SECTOR AND UNORGANISED SECTOR

Year	Total Number of workers	No. of workers		% of employees	
		In organised sector	In unorganised sector	In organized sector	In unorganised sector
2010-2011	1195773	35156	1160617	2.94	97.06
2013-2014	1434405	44816	1389589	3.12	96.88

Source: Inspector of Labour, Erode and NIC data 2011

Table 3.4 indicates the size of workers in organised and unorganised sectors in 2010-2011 and 2013-2014. One of the important structural indicators of employment is the extent of organized sector employment. The total organised sector workers in 2010-2011 are only 2.94% in Erode and the same has risen to 3.12% in 2013-2014. This clearly indicates that the unorganised sector has a major influence on working population in Erode. The overall scenario suggests that unorganised sector plays a key role in providing the employment opportunities in Erode while organised sector accounts for only a tiny percentage of total employment. The major livelihood of Erode district comes from the unorganised sector.

Out of the total workforce, Erode district has 14.50% (173376/1195773) of workforce as cultivators in 2011. The share of cultivators to total workforce has come down rigorously from 17.84% in 2001 to 14.50% in 2011. Agriculture labourers contribution to total workers in 2011 is 27.72% (331414/1195773) compared to 29.42% (323597/1099764) in 2001. Agricultural labourers and cultivators form of the major working force in almost all the blocks. However, it is also observed there had been a steep decline in cultivators from 2001 to 2011 in all the blocks other than Thalavadi and Nambiyur.

TABLE: 3.5. WORKERS IN AGRICULTURE SECTOR

Sl. No	Block	Total workers		Cultivators		Agri. Labourers	
		2001	2011	2001	2011	2001	2011
1	Ammapettai	77236	75800	18679	15037	33508	38101
2	Anthiyur	72763	78172	18116	16714	27340	27372
3	Bhavani	94166	102837	13271	11705	28589	30900
4	Bhavanisagar	51867	57100	9836	9417	13944	13331
5	Chennimalai	59976	58751	10549	8840	12052	11750
6	Erode	196791	30999	8259	3381	14235	6794
7	Gobi	102404	105458	15219	12497	38009	33963
8	Kodumudi	64527	65993	17093	15804	26480	26764
9	Modakkurichi	84725	88076	21603	18564	31884	31888
10	Nambiyur	57473	56486	14589	14622	17316	16251
11	Perundurai	79550	85376	16689	14106	19701	21264
12	Sathyamangalam	77782	87992	16196	14499	27141	27787
13	Thalavadi	28935	33,989	7871	8663	6258	13970
14	Thukkanaickenpalayam	51569	49,872	8224	6525	27140	24676
15	Erode M Corp.	-	2,18,872	-	3002	-	6603
District		1099764	1195773	196194	173376	323597	331414

Source: District Census Handbook 2001 and Census 2011

The reason behind Erode block's steepest fall in cultivators (59.06%) from 8259 in 2001 to 3381 in 2011 is segregation of Erode Municipal Corporation from Erode block. As a result of this segregation, the total population, workers and cultivators largely decreased in Erode block. However, considering both Erode block and Erode Municipal Corporation together, the total workers are higher than 2001 but the number of cultivators and agriculture labourers decreased. In general, despite an increase in population and workers, the number of cultivators declined in most of the blocks. The reason for drastic decrease in cultivators is due to lack of adequate profitability i.e. average income earned by cultivators is less than the average income earned by other sector workers. The other reasons are poor monsoon in the recent past and drastic increase in cultivation cost. Adding to this, the present younger generation are not showing interest in cultivating their lands as their focus is either towards an industrial employment or to start a business. There is no drastic change in agricultural labour like cultivators in most of the blocks. However, better industrial growth and other employment opportunities spreading widely in Erode has the potential to create decline in agricultural labour force in the coming years. The

government's immediate intervention in ensuring profitability in cultivation will certainly help the agricultural sector continue to provide larger employment in rural areas.

Workers in Non-Agricultural Sector

Table 3.6 indicates that 58.34% of male employees and 38.64% of female employees are actively engaged in non-agricultural sector employment. Among this females (25324) are largely employed in household industries than male workers (23626). Higher level of female participation always results in reducing the gender inequality in employment and in turn creates an economic well-being. It is also noted that smaller percentage of workers are employed in non-agricultural activities in Thalavadi (male – 14.88% and female – 11.06%) compared to other blocks. This proves agriculture is the primary source of employment and income in that block and other businesses or industries are not developed in Thalavadi. This higher dependence on agriculture and lack of other employment opportunities hindered the economic growth of this block. Majority of workers in Erode, Perundurai and Bhavani are actively involved in non-agricultural work.

TABLE: 3.6 WORKERS IN NON-AGRICULTURAL SECTOR (2011)

Sl. No.	Block	Total Workers			HH Industries			Other Workers			Non-Agricultural Workers (HH Industries + Others Workers)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Ammapettai	42964	32836	75800	989	1379	2368	13004	3828	16832	13993	5207	19200
2	Anthiyur	45070	33102	78172	2271	2510	4781	16111	6476	22587	18382	8986	27368
3	Bhavani	61621	41216	102837	3675	5209	8884	33082	12388	45470	36757	17597	54354
4	Bhavanisagar	34539	22561	57100	2106	1680	3786	16778	6899	23677	18884	8579	27463
5	Chennimalai	34866	23885	58751	1587	1500	3087	22271	10718	32989	23858	12218	36076
6	Erode	19367	11632	30999	375	539	914	12593	5151	17744	12968	5690	18658
7	Gobichettipalayam	64210	41248	105458	1828	1948	3776	34551	13215	47766	36379	15163	51542
8	Kodumudi	37045	28948	65993	1111	1130	2241	13443	5266	18709	14554	6396	20950
9	Modakkurichi	51437	36639	88076	904	998	1902	22909	8437	31346	23813	9435	33248
10	Nambiyur	32391	24095	56486	1069	1084	2153	12442	5466	17908	13511	6550	20061
11	Perundurai	51854	33522	85376	1941	1467	3408	29638	12687	42325	31579	14154	45733
12	Sathyamangalam	52427	35565	87992	2061	1542	3603	19846	7118	26964	21907	8660	30567
13	Thalavadi	19895	14094	33989	247	382	629	2714	1177	3891	2961	1559	4520
14	Thukkanaickenpalayam	28391	21481	49872	1513	1078	2591	9388	3559	12947	10901	4637	15538
15	Erode M.Corp.	156006	62866	218872	1959	2878	4837	144698	51448	196146	146657	54326	200983
District		732083	463690	1195773	23636	25324	48960	403468	153833	557301	427104	179157	606261

Source: Census 2011

Registration and Placement Status

Registration and Placement status shows number of people registered with and placed in jobs through the district employment office, Over the span of five years from 2007 to 2011, out of 1, 53,830 persons registered with the Erode district employment office only 5, 283 got placed through employment office which accounts for a mere 3.43%.

TABLE 3.7 – REGISTRATION AND PLACEMENT

Sl. No	Year	Registration	Placement
1	2007	30528	1848
2	2008	30922	2002
3	2009	33972	536
4	2010	28642	445
5	2011	29766	452
6	2013-14	41115	1288
Total		153830	5283

Source: District Employment Office

From table 3.7 we find that registration and placement in Erode district was good in 2008. However, economic slowdown along with monsoon failure in 2009 has a greater impact in the form of non-functioning of units, unemployment etc. There was 73.23% decline in placement during 2009 compared to 2008 as the number of placements declined from 2002 to 536. There was another 17% decline in 2010 placements as the number of placements further fell from 536 in 2009 to 445 in 2010. The higher rate of registration along with the lower placement is a serious concern. The Placement to Registration ratio in Erode for 2011 is just 1.52% (452/29766). However, with the continuous implementation of Skill development programmes for unemployed youth and other employment generation measures, it is expected to have a higher placement to registration ratio in the coming years.

Box 3.2: Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The largest and most ambitious social security and public works programme in the world, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) plays a vital role in ensuring livelihood security by providing at least 100 days of guaranteed wage employment in a financial year. Modakurichi block has a largest registration of households under MGNREGA (27,973 HHs) but only 9,574 (34.23%) of the households provided with jobs under MGNREGA. Similarly, Erode block recorded only 22.39% of households provided with employment under MGNREGA even though the blocks like Thalavadi (76.31%) and Kodumudi (66.89%) have higher percentage of households provided with employment. It is understandable that Thalavadi being a hill area and backward in economic development compared to other blocks got more coverage under MGNREGA than any other block in the district. In most of the blocks, HHs provided employment under MGNREGA is less than 50%. Higher productive coverage under the scheme not only enhances the standard of living of the poor but also the economic development as a whole.

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was conceptualized as an Act in the Parliament in September 2005 to give a statutory backing to the scheme. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aims at enhancing the livelihood security of people in rural areas by guaranteeing hundred days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work. This scheme has provided employment to 2.31 crore HHs person days across India(Source: nrega.nic.in). In Tamil Nadu, the Scheme was first notified in 2006 for six districts and subsequently extended to other districts in a phased manner. The Scheme was first notified to Erode district under phase-III in 2008. In 2013-2014, 1,90,087 households in Erode district provided employment under this scheme. MGNREGA in Erode helps in uplifting the socio economic conditions. MGNREGA has generated 90 lakh man-days and helped in completing 1749 works in Erode till 31st march 2011 (Source: tnrd.gov.in). The wage rate under MGNREGA per day per person is Rs.119 till 2011-12 and has increased to Rs.132 per day per person for the year 2012-13. Union Budget 2014-15 indicates that Government of India is committed to provide wage and self-employment opportunities in rural areas through works that are more productive, asset creating and substantially linked to agriculture and allied activities. Erode district known for its turmeric, sugarcane and other agricultural product cultivation is expected to benefit out of this modified MGNREGA. No doubt, ambitious social security and public works programme MGNREGA has improved the quality of rural livelihood and it is expected to do the same in the coming years also.

Income

The District income statistics present a glimpse of the district s' entire economy. It provides information on various income groups such as producers, and wage earners. The district income statistics reveals the overall economic performance of the district. Inter-comparison of different district s' income gives an idea about where one district stands in relation to others. Similarly, comparing the income statistics of particular district over a period of time enables us to know whether the economy is growing or not. The district income statistics show the contribution made by the various sectors of the economy, such as agriculture, manufacturing industry, trade, etc.

Per capita income or average income is the total income of a country divided by its total population. PCI is useful because it is widely known, easily calculated and produces a useful statistic for comparing different territories.

TABLE 3.8 –PER CAPITA INCOME IN RUPEES (AT CONSTANT PRICES)

Year	District	State
2008-09	57758	48473
2009-10	61367	53359
2010-11	71764	59967
2011-12	75670	63996

Source: Statistical Handbook 2013, Department of Economics and Statistics

The Erode district per capita income at constant prices in 2011-12 is Rs.75,670 which is considerably higher than the state per capita income of Rs.63,996. This clearly shows that the district is enjoying better income and standard of living than most of the other districts.

Gross Domestic Product (GDP) is an annual measure of the economic output of a nation. The GDDP (Gross District Domestic Product) at constant prices is an index of the total productive output of the district for the year.

TABLE 3.9 –SECTORWISE GROSS DOMESTIC PRODUCT AT CONSTANT (2004-05) PRICES

(Rs. in Lakh)

Year	District						State					
	Primary		Secondary		Tertiary		Primary		Secondary		Tertiary	
	Rs. in Lakhs	%	Rs. in Lakhs	%	Rs. in Lakhs	%	Rs. in Lakhs	%	Rs. in Lakhs	%	Rs. in Lakhs	%
2010-11	239727	14.62	541340	33.02	858352	52.36	3516987	8.71	12542302	31.09	24282284	60.19
2011-12	252126	14.43	567699	32.48	927999	53.09	3872767	8.94	13039248	30.10	26411788	60.96

Source: Department of Economics and Statistics, Tamil Nadu

The contribution of tertiary sector to the economy is high, which is a common scenario for any developing country. The primary sector of an economy is the sector making direct use of natural resources. This includes agriculture, forestry, fishing, mining, and extraction of oil and gas. This is contrasted with the secondary sector which produces manufactured goods. The tertiary sector produces services. In 2011-12, the primary sector contribution of Erode district to the state primary sector is 6.51 percent (252126/3872767). Erode district's secondary and tertiary sectors contributed 4.35 percent (567699/13039248) and 3.51 percent (927999/26411788) respectively to the state's secondary and tertiary sector. The primary sector contributes 14.43 percent to the GDDP whereas, secondary sector and tertiary sector contributes 32.48 percent and 53.09 percent respectively to the GDDP in 2011-12. The Erode district's primary sector and secondary sector are contributing more to the district's GDP compared to primary sector and secondary sector of the state to GSDP (Gross State Domestic Product).

Poverty

Poverty is generally considered as lack of income due to which people are deprived of basic goods. The people who are in poverty are said to be a resource-poor in terms of assets, skills and credit availability. This makes their earnings to be dismally small. In India, more than 30% of the population still lives below the poverty line. It is also to be noted that a significant number, both in percentage and absolute terms of people living below poverty line has declined considerably over the last few decades. In general, the poverty is a problem with some grave dimensions. The people below poverty line either did not produce or produce very little economic value, so that their income remained low for a level of consumption expenditure that can lift them above their miserable living.

TABLE 3.10 - PERCENTAGE OF BPL HOUSEHOLDS (2003)

Sl. No.	Block	% of BPL Families
1	Ammapet	36.89
2	Anthiyur	32.79
3	Bhavani	29.82
4	Bhavanisagar	28.55
5	Chennimalai	33.21
6	Erode	24.96
7	Gobichettipalayam	29.40
8	Kodumudi	29.67
9	Modakurichi	27.63
10	Nambiyur	24.89
11	Perundurai	30.75
12	Sathyamangalam	30.98
13	Thalavadi	41.12
14	Thukkanaickenpalayam	40.20
15	Erode M Corp.	30.42
District		31.42

Source: Collected from BDO, RD & PR department, T.P., Municipality & Corporation

Table 3.10 presents the percentage of BPL households in 2003 for all the blocks in Erode district. Thukkanaickenpalayam (40.20%) and Thalavadi (41.12%) are having higher percentage of below poverty line families. Anthiyur, Ammapet are also having higher level of BPL households. As a result, these blocks are far away behind in education, employment and human development in comparison with other blocks of the district. Proper access to education and productive employment will help the poor population of these blocks to come out of the vicious circle of poverty.

Public Distribution System

Table 3.11 presents the households provided with family cards in 2014 for all the blocks in Erode district. More number of family cards have been issued in Erode (including Municipal Corporation) block.

TABLE 3.11 - PUBLIC DISTRIBUTION SYSTEM: ERODE DISTRICT (2014)

S. No.	Block	Households provided with Family cards
1	Ammapet	32,583
2	Anthiyur	39,232
3	Bhavani	59,841
4	Bhavanisagar	31,204
5	Chennimalai	19,214
6	Erode (Including Erode Municipal Corporation)	1,63,609
7	Gobichettipalayam	65,210
8	Kodumudi	39,189
9	Modakurichi	49,925
10	Nambiyur	30,636
11	Perundurai	27,352
12	Sathyamangalam	32,611
13	Thalavadi	17,916
14	Thukkanaickenpalayam	29,284
Total		637,806

Source: DSO

Summary

Erode has been placed reasonably well in socio-economic development status of the state. Despite the declining trend in agricultural workers, agriculture is the major source of mass employment in the district. The primary sector significantly contributes to the district income. Urban female work participation rate is much lesser than the rural female work participation rate. More female self-employment ventures such as food processing, small scale household business like handicrafts etc. may be encouraged through special schemes.

- Miniature self-employment plays the vital role for the livelihood of many people. To give confidence on this, more number of skill development programmes may be offered to youth.
- Appropriate policies on self-employment and training will facilitate the younger generation to start the venture with more confidence.
- Thalavadi block of the district is not faring as expected and is staying back in economic development. Alternative employment such as animal husbandry, horticulture etc., may help to improve the living standard.
- Erode has a potential to shape itself as a major tourism spot to make this a reality, specific policies on tourism development have to be devised exclusively for Erode.
- Area of cultivation is decreasing mainly due to water scarcity for irrigation. To improve the ground water level, construction of check dams where ever possible and creation of ponds in every village may be carried out.

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

Introduction

In the Human Development Index (HDI), Life Expectancy at Birth (LEB) is the indicator which is imagined to seize the overall health condition of the population. Nonetheless, health is much more than just life expectancy; it includes queries of fertility, morbidity, mortality and nutrition. The Health sector is seen as a vital unit for major policy decision to be held out for the benefit of the masses. Good health is an invaluable asset for better economic productivity, both at the individual and national level, but above all it is valued by those who own it as a prerequisite for a better quality of life and better standard of living.

The demographic profile of the population in terms of its size and composition is important in setting the degree of growth. With the paradigm switch in development discourse, it is nowadays widely admitted that the health condition of the people is also an important indicator of growth. Parameters like mortality, fertility and nutritional levels reflect the status of health in a society. Therefore, various governments want to improve the health status of the people as well as human development. The government of Tamil Nadu is also moving forward in this way. Smallpox has been eradicated; the state is free from plague and guinea worm and the incidence of polio has been considerably reduced. A widespread infrastructure of health and medical institutions comprising of primary health centres providing basic services to state-of-the-art super-specialty hospitals with a national, and even international reputation, is now in position.

This chapter documents the demographic changes, critical issues, and health and nutrition status of Erode district. It analyses the causes and changes in health and nutrition indicators within the district, the effectiveness of government policies and programmes and the role that societal norms and culture play in influencing health effects.

Demographic Trends and Health Indicators

Population and Demographic Transition

Erode district (previously known as Periyar district) was a part of Coimbatore district before its bifurcation on September 17, 1979 and was renamed as Erode district in 1996. Erode district in Tamil Nadu is a very important market centre for turmeric and also the district is well known for marketing of textile products of handloom, power loom and ready-made garments.

According to 2011 census, Erode district had a population of 2,251,744 with a sex-ratio of 993 females for every 1,000 males, much above the national average of 929. A total of 195,213 were under the age of six, constituting 99,943 males and 95,270 females. Scheduled Castes and Scheduled Tribes accounted for 16.41% and .97% of the population respectively. The average literacy of the district was 66.29%, compared to the national average of 72.99%. The district had a total of 658,071 households. There were a total of 1,195,773 workers, comprising 173,376 cultivators, 331,414 main agricultural labourers, 48,960 in house hold industries, 557,301 other workers, 84,722 marginal workers, 4,794 marginal cultivators, 38,798 marginal agricultural labourers, 5,362 marginal workers in household industries and 35,768 other marginal workers.

There was change of 11.66 percent in the population compared to population as per 2001. In the previous census of India 2001, Erode district recorded increase of 11.85 percent to its population compared to 1991.

TABLE 4.1 DEMOGRAPHIC PROFILES

Sl. No.	Block wise	Total Population		Scheduled Castes		Scheduled Tribe	
		2001	2011	2001	2011	2001	2011
1	Ammapet	123,340	129,140	22476	24780	3361	1610
2	Anthiyur	124,963	138,394	18338	22155	1858	3753
3	Bhavani	175,405	191,983	22127	26027	473	210
4	Bhavanisagar	95,183	103,990	19512	23479	149	159
5	Chennimalai	97,687	105,470	14175	16422	9	25
6	Erode	456,348	59,605	50952	10612	424	25
7	Gobichettipalayam	187,920	197,895	28757	31765	262	59
8	Kodumudi	105,099	110,341	17105	19557	31	30
9	Modakurichi	145,082	153,914	26361	30330	269	133
10	Nambiyur	88,981	93,917	16821	18801	16	9
11	Perundurai	139,852	160,636	21095	26502	16	123
12	Sathyamangalam	139,248	160,092	23720	28086	5320	7757
13	Thalavadi	53,174	63,359	10312	12444	3347	5900
14	Thukkanaickenpalayam	84,300	84,539	15050	16647	1277	1463
15	Erode M Corp.	--	498,469	--	61876	NA	624
Total		2016582	2251744	306801	369483	16812	21880

Source: 1. District Census Handbook Erode 2001, 2. NIC Data 2011

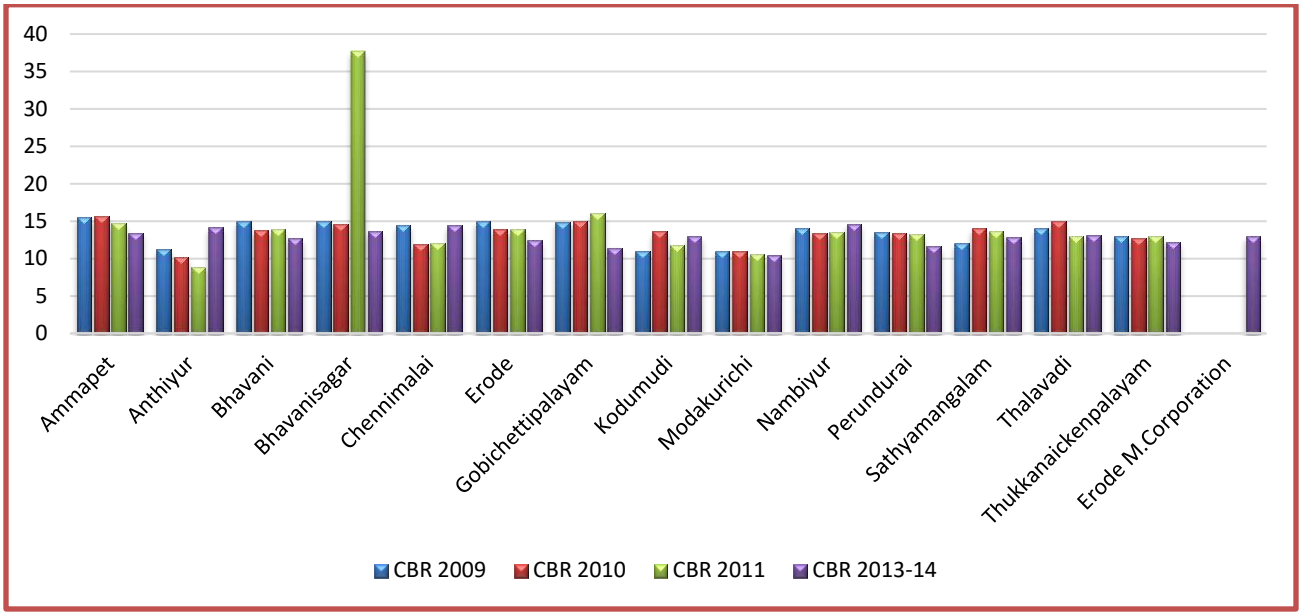
The male population is marginally higher than the female, male population forms 50.18 per cent of the entire population of the district. Overall, female population increased by 13.11 per cent and the male population by 10.26 per cent in the district from 2001 to 2011. Among 15 blocks, Erode Municipal Corporation is the largest block with the total population of 4, 98,469. Block-wise changes in the population in 2001 and 2011, shows that the population increased by 19% in Thalavadi followed by 15% in Perundurai and Sathyamangalam but it shows that the population decreased in Erode block from 4,56,348 to 59, 605 due to the emergence of Erode Municipality Corporation block from the previous Erode block.

Erode Municipal Corporation block has the highest SC population (17%). The decadal growth of scheduled caste population in the district is noted as 20% in 2011, over the figure of the 2001 census. Overall, the scheduled tribe population is noted to have increased by about 30% during the period of 2001 and 2011. Block-wise comparison of the total scheduled tribe population shows that Sathyamangalam has the largest ST population.

Crude Birth Rate (CBR) and Crude Death Rate (CDR)

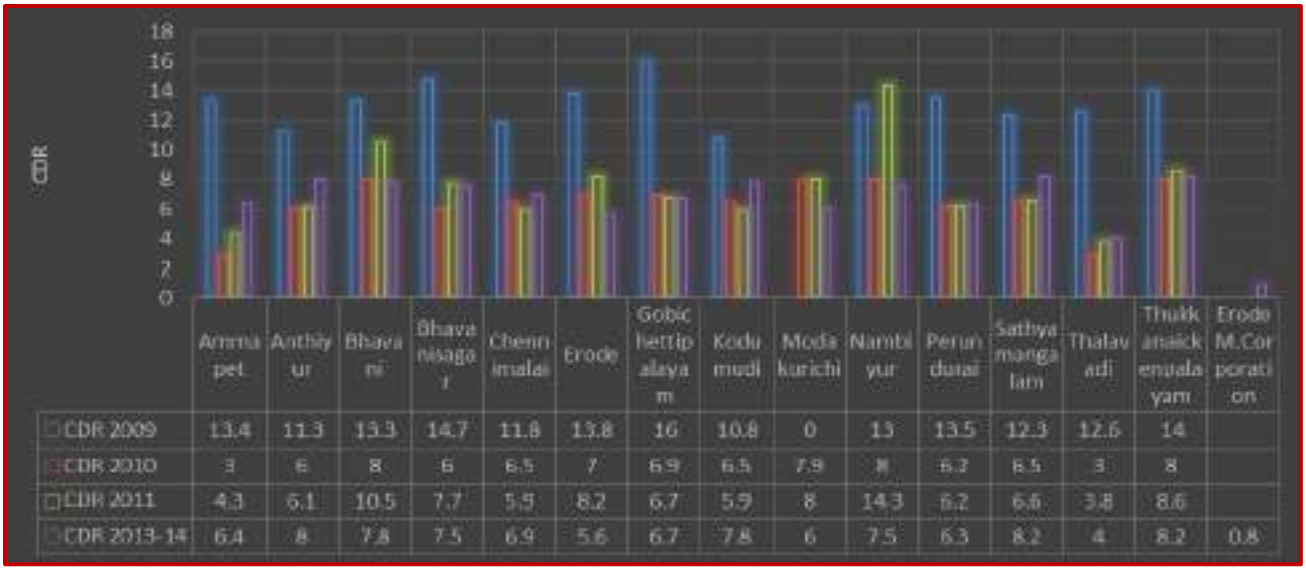
The Crude Birth Rate (CBR) and Crude Death Rate (CBR) are statistical values that can be utilized to measure the growth or decline of a population. The CBR in the district marginally increased from 12.64 to 12.84 between 2009 and 2014. Among the blocks, Modakurichi has the lowest CBR of 10.4, while Nambiyur has the highest CBR of 14.6 in 2011. The few blocks which have a higher CBR, show that the health schemes should be implemented in these blocks intensively to reduce the CBR.

FIGURE 4.1 TRENDS IN CBR



Source: D.D.Health Services, Erode

FIGURE 4.2 TRENDS IN CDR



	Ammapet	Anthiyur	Bhavani	Bhavanisagar	Chennimalai	Erode	Gobichettipalayam	Kodumudi	Modakurichi	Nambiyur	Perundurai	Sathyamangalam	Thalavadi	Thukkanaickenpalayam	Erode M.Corporation
CDR 2009	13.4	11.3	13.3	14.7	11.8	13.8	16	10.8	0	13	13.5	12.3	12.6	14	
CDR 2010	3	6	8	6	6.5	7	6.9	6.5	7.9	8	6.2	6.5	3	8	
CDR 2011	4.3	6.1	10.5	7.7	5.9	8.2	6.7	5.9	8	14.3	6.2	6.6	3.8	8.6	
CDR 2013-14	6.4	8	7.8	7.5	6.9	5.6	6.7	7.8	6	7.5	6.3	8.2	4	8.2	0.8

Source: D.D.Health Services, Erode

The CDR for this district declined from 12.17% to 6.5 % between 2009 and 2014. Among the blocks, Thalavadi has the lowest CDR of 4 %, while Sathyamangalam and Thukkanaickenpalayam have a higher CDR.

Sex Ratio

The indicator used to assess society's treatment of women is sex ratio of the population. The sex ratio represents the number of females for every 1000 males. The district's sex ratio has improved marginally from 968 to 993 (by 2.5%) between 2001 and 2011. The sex ratio for Gobichettipalayam, Kodumudi, Thalavadi, Thukkanaickenpalayam, Modakurichi, and Perundurai blocks exceeded 1000. The sex ratio has registered a marginal increase in most of the blocks.

TABLE 4.2 SEX RATIO

Sl. No.	Block wise	Sex Ratio (No. of females for 1000 males)		Increase (or) Decrease
		2001	2011	
1	Ammapet	930	959	29
2	Anthiyur	944	971	27
3	Bhavani	966	976	10
4	Bhavanisagar	954	989	35
5	Chennimalai	960	952	-8
6	Erode	961	994	33
7	Gobichettipalayam	991	1020	29
8	Kodumudi	992	1020	28
9	Modakurichi	972	1007	35
10	Nambiyur	985	1007	22
11	Perundurai	981	1002	21
12	Sathyamangalam	971	985	14
13	Thalavadi	996	1010	14
14	Thukkanaickenpalayam	977	1016	39
15	Erode M Corp.	NA	995	-
District Ratio		**968**	**993**	**25**

Source: 1. District Census Handbook Erode 2001, 2. NIC DATA 2011

Child Sex Ratio

The child sex ratio for the district has increased slightly from 939 to 956 from the year 2001 to 2011. Ammapet has the lowest child sex ratio of 931 and Thalavadi has the highest ratio of 998. The main factor responsible for discrimination against the girl child, is preference for a male child is higher. A considerable attention has been paid by the government on this issue. Male child preference can be effectively reduced if daughters are considered for the inheritance. Programmes that aim to reduce the excessive male child preference and increase the value of the girl child to their parents may be given priority.

TABLE 4.3 CHILD SEX RATIO

Sl. No.	Block wise	Population in the age group of 0-6				Sex-ratio (No. of female children for 1000 males children)	
		Male		Female			
		2001	2011	2001	2011	2001	2011
1	Ammapet	6895	5845	5806	5441	842	931
2	Anthiyur	7209	6775	6606	6348	916	937
3	Bhavani	9182	8315	8534	7855	929	945
4	Bhavanisagar	4809	4761	4564	4524	949	950
5	Chennimalai	4734	4146	4418	3894	933	939
6	Erode	24475	2647	23010	2565	940	969
7	Gobichettipalayam	9057	7883	8601	7511	950	953
8	Kodumudi	4586	4097	4191	3894	914	950
9	Modakurichi	7102	6257	6560	5935	924	949
10	Nambiyur	4295	3920	4179	3872	973	988
11	Perundurai	7131	6807	6424	6556	901	963
12	Sathyamangalam	7196	7446	7052	6994	980	939
13	Thalavadi	2963	3037	3059	3031	1032	998
14	Thukkanaickenpalayam	4173	3342	4042	3256	969	974
15	Erode M Corp.	NA	24665	NA	23594	NA	957
District Ratio						**939**	**956**

Source: 1. District Census Handbook Erode 2001, 2. NIC DATA 2011

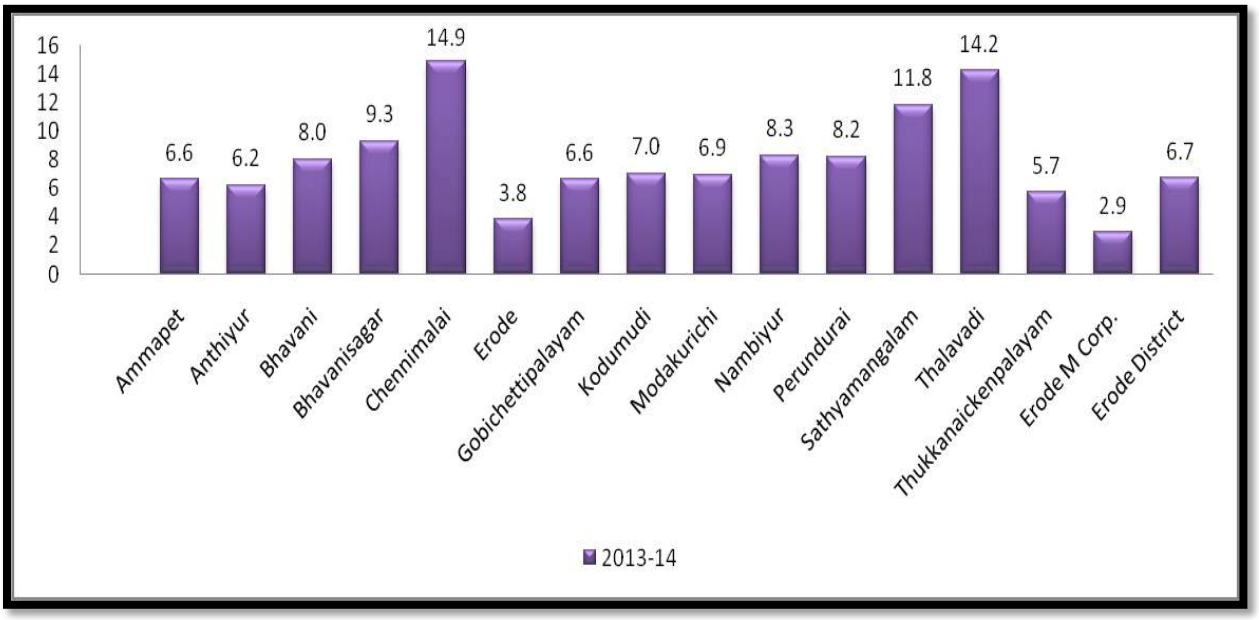
Life Expectancy at Birth

Life expectancy is the expected (in the statistical sense) number of years of life remaining at a given age. Expectation of life at birth is the most comprehensive index of health, in the sense that good health status which translates into higher life expectancy. The District Life Expectancy at Birth (LEB) is 72.7 during 2013-14. The male LEB was 71.8 years and female LEB was 73.7 years. A steady supply of highly nutritious food will increase the life expectancy at birth.

Infant Mortality Rate (IMR)

The IMR is a sensitive indicator, not just of the state of health, nutrition and caring, accessible to infants below one year of age, but also of the general well-being of society. The infant mortality rate is 6.7 during 2013-14. Chennimalai and Thalavadi has the highest IMR of 14.9 and 16.4 per thousand respectively. A well-furnished infrastructure has provided maternity and children's wards at Government hospitals and PHCs in these blocks. Government of India RCH-II programme may be implemented in this district and that will help the reduction of IMR.

FIGURE 4.3 - INFANT MORTALITY RATE (IMR)



Source: Health Department, 2014

Maternal Mortality Ratio (MMR)

TABLE 4.4 MATERNAL MORTALITY RATIO

Sl. No	Block wise	2013-2014 (For 1 Lakh Births)
1	Ammapet	0
2	Anthiyur	150
3	Bhavani	50
4	Bhavanisagar	200
5	Chennimalai	0
6	Erode	20
7	Gobichettipalayam	190
8	Kodumudi	90
9	Modakurichi	0
10	Nambiyur	360
11	Perundurai	0
12	Sathyamangalam	70
13	Thalavadi	120
14	Thukkanaickenpalayam	90
15	Erode M Corp.	0
Erode District		89.33

Source: Health Department 2014

It is to be noticed that Maternal Mortality Rate of Erode district (89.33) is higher than the State average. In 2013-14, Nambiyur, Anthiyur, Bhavanisagar, Gobichettipalayam and Thalavadi, blocks had the highest MMR of 360, 150, 200, 190 & 120 per lakh respectively. Most of the maternal

deaths were due to bleeding, nutritional disorder and non-availability of transport facilities in the rural areas. The neo-natal ambulance had a role in reducing the Maternal Mortality Rate (MMR) in Erode district. The infant mortality rate is 6.7 per 1000 live births while the maternal mortality rate has fluctuated between 0 and 200 per 100000 live births during 2013-14.

Box-4.1 National Rural Health Mission

Providing universal access of quality health care to the poor is one of the major objectives of the Government. The major interventions by National Health Mission for provision of universal quality services include improving the manpower and infrastructure in public health institutions and implementation of innovative programmes to reach vulnerable unreached sections. In order to achieve this end, the health system in Tamil Nadu has provided primary and secondary health care with special focus on maternal and child health services and continued emphasis on promotion of the family welfare programme.

Studies regarding the urban population reflect that the health of the urban poor is as bad as or worse than that of their rural counterparts. Hence in the urban areas, especially in smaller urban towns, major lacunae exists in the urban health services which is further compounded by the ever growing urban population i.e. with rapid urbanization, accompanied by growth of urban slums, there is an urgent need to supplement the urban basic health system, especially in the smaller towns. Hence the poor health indicators of the urban poor, a large section of urban slums, need to be addressed on a priority basis.

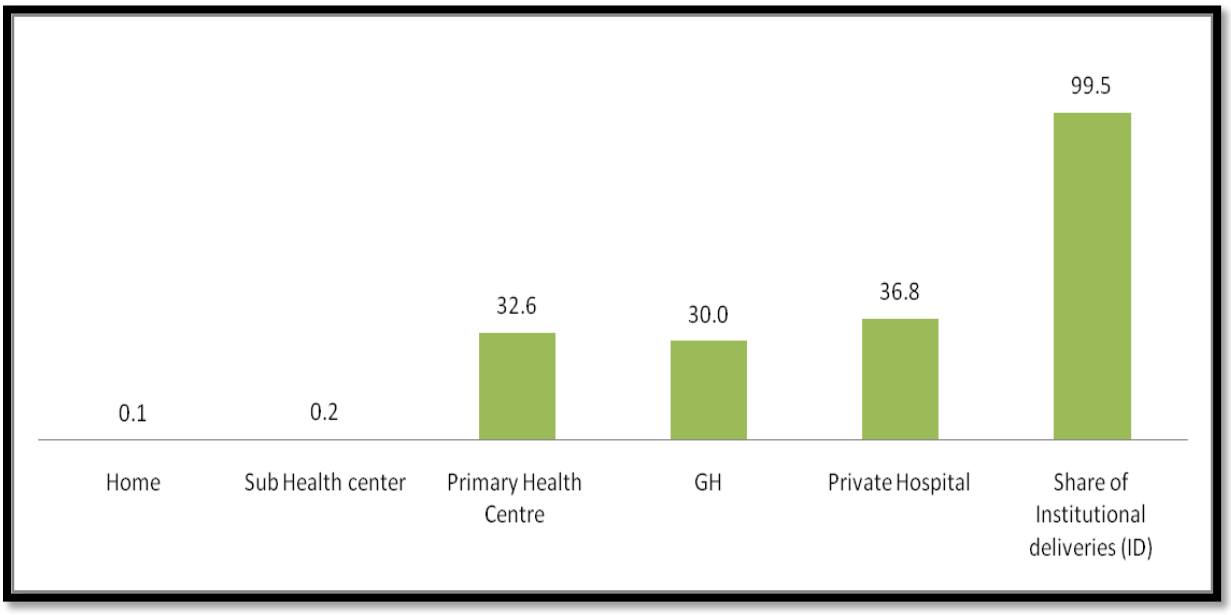
To effectively address the health concerns of the urban poor, the government of Tamil Nadu with support from NRHM through Urban RCH has established 135 Urban PHCs in 114 Municipalities and 21 town Panchayats. The Urban PHCs are sanctioned One Medical Officer, One Pharmacist, One Lab Technician and Four ANMs per UPHC. List of nine UPHCs in Erode District are

1	Gobichettipalayam	6	Karumandisellipalayam TP
2	Bhavani	7	Periyasemur Mpty Gr.III
3	Sathiyamangalam	8	Surampatti Mpty Gr. III
4	B P Agraharam TP	9	Veerappanchatram Mpty Gr. III
5	Suriyampalayam TP		

Percentage of Institutional Delivery

The State has made significant progress in increasing the proportion of institutional deliveries. About 45.83 % of the institutional deliveries are taking place in private hospitals and 29.32% are taking place in PHC (Primary Health Centre) followed by 24.73 % in Government hospitals. Improvement of facilities at the Primary Health Centres, Government hospitals and District Headquarters hospitals will in turn increase the institutional delivery. The government has to educate the public for safe deliveries by improving facilities in GHs, PHCs and HSCs.

FIGURE 4.4 PERCENTAGE OF INSTITUTIONAL DELIVERY



Source: D.D.Health Services

Still Birth Rate (SBR)

The SBR of the district was 8.5 in 2013-14 which is slightly low compared to 2011. There is a sharp decline in still birth rate in the district between 2007 and 2014 (i.e. from 16.4 % to 8.5%). Stillbirth rate is reduced considerably in all blocks except Sathyamangalam block. Erode block has 100% institutional delivery as it has the highest number of private hospitals and has shown good infrastructure. However, in some blocks SBR an increasing trend due to malnutrition of the expectant mothers and their poor health status. The following table gives us a picture of the SBR of Erode district.

TABLE 4.5 STILL BIRTH RATE (SBR)

Sl. No	Block	2007	2008	2009	2010	2011	2013-2014
1	Ammapet	10.8	12.4	14	7.6	4.6	8.9
2	Anthiyur	21	19.3	5	13.3	6.5	16.6
3	Bhavani	8.2	5.9	8	3.2	4.8	7.4
4	Bhavanisagar	10.1	13.2	18	16.5	6.7	2.2
5	Chennimalai	14.8	13.1	6.4	7.8	9	4.7
6	Erode	4.7	6.3	6.5	4	5.7	3.4
7	Gobichettipalayam	28.7	27	9	8.3	9.1	6.6
8	Kodumudi	13.6	12.8	12.9	12.2	7	7.8
9	Modakurichi	13.9	14.1	13.7	10.2	8.6	8.0
10	Nambiyur	32.5	25.4	17	10.1	8.6	10.5
11	Perundurai	17.1	13.7	11.2	9.2	8.9	14
12	Sathyamangalam	7.3	11.6	12	13.5	17.5	13.6
13	Thalavadi	21.4	20.2	11	14.6	12.9	17.4
14	Thukkanaickenpalayam	25.5	15.2	15	20.9	12.9	11.2
15	Erode M.Corporation	-	-	-	-	-	2.9
	Erode District	16.40	15.01	11.41	10.81	8.77	8.5

Source: D.D.Health Services, Erode

Under -5 Mortality Rate

Under-5 mortality rate is an important component of mortality in general and a crucial factor in indicating health status.

TABLE 4.6 UNDER-5 MORTALITY RATE

Sl. No	Block wise	Percentage (2013-14)
1	Ammapet	6.6
2	Anthiyur	6.2
3	Bhavani	8.0
4	Bhavanisagar	11.4
5	Chennimalai	14.9
6	Erode	4.0
7	Gobichettipalayam	7.3
8	Kodumudi	7.0
9	Modakurichi	8.1
10	Nambiyur	8.3
11	Perundurai	9.4
12	Sathyamangalam	11.8
13	Thalavadi	15.3
14	Thukkanaickenpalayam	6.6
15	Erode M Corp.	2.9
District Average		6.9

Source: Health department – 2014

Under-5 Mortality rate is higher in Thalavadi (15.3) followed by Chennimalai (14.9). The main causes for this are infections, pneumonia, neonatal or nutritional conditions. This can be prevented and controlled by giving proper vaccination during the period, providing adequate nutrition and sanitation and good hygiene practices.

Immunisation (Below 5years)

Table 4.7 IMMUNIZATION (BELOW 5YEARS) (2013-2014)

Sl. No.	Block	Total No. of Children's below 5 year	Total No. of children immunized	% of children immunized
1	Ammapet	12494	12549	100.44
2	Anthiyur	12924	13182	102.00
3	Bhavani	14381	14568	101.30
4	Bhavanisagar	9593	9518	99.22
5	Chennimalai	9650	9673	100.24
6	Erode	36732	36689	99.88
7	Gobichettipalayam	13466	13553	100.65
8	Kodumudi	10699	10736	100.35
9	Modakurichi	15390	15496	100.69
10	Nambiyur	8883	8922	100.44
11	Perundurai	14409	14512	100.71
12	Sathyamangalam	10932	11287	103.25
13	Thalavadi	5792	5760	99.45
14	Thukkanaickenpalayam	8313	8361	100.58
15	Erode M.Corporation	15738	15815	100.49
	Erode District	199586	207072	103.75

Source: D.D.Health Services, Erode

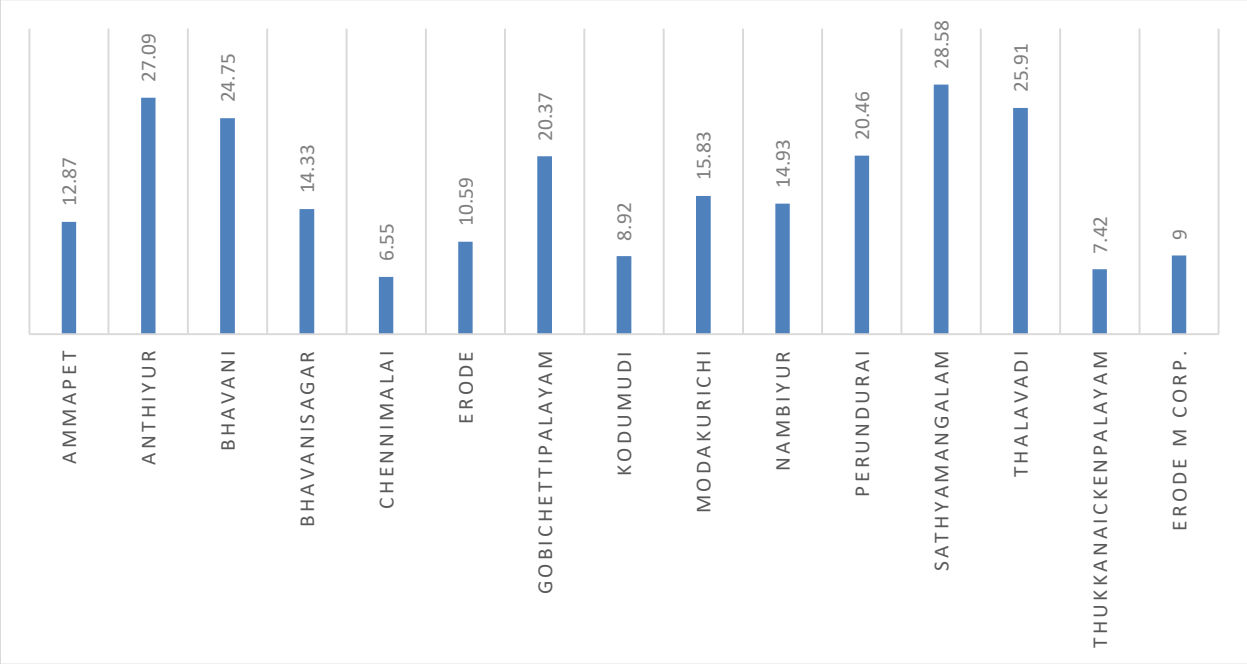
Immunization against various diseases during childhood is very important for long term success of health programmes. The state's programme also includes administration of five doses of Vitamin A for the prevention of night blindness and iron folic acid solution for iron supplementation. It can be seen that 103.75 per cent of the eligible children have been immunized during the year 2013-14. Immunization of children at an early age against diseases like diphtheria, polio and measles, etc. is done regularly by the parents, particularly in urban areas/centres. In rural areas, as well, awareness in this regard is quite high and the people are taking due care in this regard. Erode district is covered under a strong network of immunizing programmes.

Nutritional Status

Nutritional status of children

Nutrition is a significant causal factor of good health and the incidence of mal- and under-nutrition in the community affects certain indicators such as IMR and MMR adversely. In many developing economies, including India, nutrient absorption and utilization by the body is less, because of the presence of frequent infection episodes such as diarrhoea, intestinal parasites and upper and lower respiratory infections. Most infections are associated with a reduced food intake. Not surprisingly, the greatest levels of poor nutrition occur among women and children. An insufficient food intake and ignorance about nutrition coupled with low immunity ensure that the most vulnerable experience very fragile health. Malnutrition is a medical condition caused by an improper or insufficient diet. Malnutrition technically belongs to a category of diseases that includes under-nutrition, obesity and overweight, and micronutrient deficiency among others.

FIGURE 4.5 MALNOURISHMENT (2013-14)



Malnourished children under 5 years of age are more in Anthiyur, Sathyamangalam and Thalavadi blocks of the district . The government needs to concentrate more in terms of providing effective nutritional enhancement programmes for their physical and mental health. Though the government already has implemented some programmes for child nutritional development, it is somewhat not suitable for the hilly area people. The above mentioned three blocks are hilly areas and they follow the traditional method of grooming the child and this applies to their mothers also with respect to pre-

natal and post-natal care. So the governemnt may involve the Primary Health Centres and Special Health Officers for educating them and advising them to take proper nutrional guidence and consume healthy foods for tackling malnurishment.

Box-4.2 Noon Meal Programme

Good nutrition in childhood lays the foundation for good health throughout an individual's life time. If children do not receive the nourishment they need, under nutrition and malnutrition of one or other type will result. Government of India introduced Mid-Day Meal programme as a very important strategy to overcome malnutrition among children. [National Child Labour Project provides nutritious meal to Erode district's children's]. The children enrolled under the scheme are provided with hot cooked, wholesome food within the school campus itself on all weekdays. As the noon meal provided to the children in the form of hot cooked rice with sambar has become monotonous and in order to attract children, variety meals and masala eggs have been introduced by Hon'ble Chief Minister of Tamil Nadu to benefit the children. Around 1289 Noon Meal Centres in the 18 Blocks in this district. Government of Tamil Nadu has appointed a noon meal organizer, one cook and an assistant cook in all the schools for preparing and serving mid-day meals. In Erode, around 2916 Nutritious Meal Staff are appointed. The quantity of food served is satisfactory for the children in all the schools. The children responded that the quantity of food was sufficient. Source: Report of 5th Joint Review Mission on Mid-Day Meal Scheme, Tamil Nadu (29th July 2013 - 08th August 2013)

Provision of IFA Tablets

TABLE 4.8 PROVISION OF IFA TABLETS

Sl. No	Block	% of Women who took IFA Tablets	% of Children who took IFA Tablets	% of Adolescent Girls who took IFA Tablets
1	Ammapet	100.00	55.00	100.00
2	Anthiyur	100.00	53.00	95.00
3	Bhavani	100.00	54.00	100.00
4	Bhavanisagar	100.00	53.00	96.00
5	Chennimalai	100.00	55.00	96.00
6	Erode	100.00	54.00	95.00
7	Gobichettipalayam	100.00	52.00	97.00
8	Kodumudi	100.00	53.00	99.00
9	Modakurichi	100.00	54.00	100.00
10	Nambiyur	100.00	54.00	97.00
11	Perundurai	100.00	53.00	100.00
12	Sathyamangalam	100.00	56.00	99.00
13	Thalavadi	100.00	54.00	100.00
14	Thukkanaickenpalayam	100.00	52.00	100.00
15	Erode M.Corporation	100.00	55.00	96.00
	Erode District	100.00	54.00	96.00

Source: D.D.Health ervices, Erode

Iron and folic acid (IFA) are the solution for iron supplementation for women, children and adolescent girls. About 100 % of women and 54% of children and 96% of adolescent girls were given IFA tablets. This leaves a very large number of children outside the purview of antenatal care and the protection it affords to the mother and her infant. The provision of IFA tablets to pregnant women to prevent nutritional anaemia forms an integral part of the safe motherhood services offered as part of the Reproductive and Child Health Programme in India. The programme recommends that women should consume 100% tablets of iron and folic acid during pregnancy.

Utilization of Government Health Care

All the blocks in particular require greater attention and better health care services. Dependence on a public facility for treatment of a non-hospitalized illness (Out Patient - OP) is 34,30,048 which is generally higher than the InPatients (IP) (61975). The Government may facilitate the patient by providing some long-term care facilities and accommodation services for the people with complex health issues who are unable to remain at home or in a supportive living setting.

Table 4.9 UTILIZATION OF GOVERNMENT HEALTH CARE

Sl. No	Block wise	Total No. of OP	Total No. of IP
1	Ammapet	261653	4710
2	Anthiyur	329253	5840
3	Bhavani	187713	4449
4	Bhavanisagar	143045	2907
5	Chennimalai	206475	2961
6	Erode	197940	3789
7	Gobichettipalayam	220925	6763
8	Kodumudi	330317	5530
9	Modakurichi	295722	4950
10	Nambiyur	200261	4867
11	Perundurai	202545	3399
12	Sathyamangalam	190420	3784
13	Thalavadi	123251	3217
14	Thukkanaickenpalayam	191973	3510
15	Erode M.Corporation	62105	356
	Erode District	3430048	61975

Source: D.D.Health Services, Erode

Non-Nutritional Factors and their Impact on Nutrition

Various studies have shown the importance of factors like improved water supply, reduction in infections, near universal immunization, providing community immunity etc., in improving nutritional status. Many of the non-nutritional factors require very little effort on the part of individual households and child care parents to put a special effort to acquire a better knowledge and to adopt nutritionally conducive practices. Inter-sectoral coordination between the departments dealing with water, hygiene, sanitation and health is crucial for the prevention of diseases, especially waterborne diseases.

Drinking Water and Sanitation

Water and sanitation are two non-nutritional factors which have an impact on nutrition. The safe drinking water and sanitation is the necessity of life. Water and sanitation have a direct bearing on nutrition. With a growing population, there is mounting pressure to provide water supply and sanitation facilities on a sustained basis. Provision of these facilities is also crucial for achieving the goal of "Good Health for All". UN has recognized "The Right to Safe and Clean Drinking Water and Sanitation as a Human Right". Specific attention is being given to assessing the availability and accessibility of drinking water and sanitation facilities. The task of providing safe drinking water and sanitation facilities in the rural areas in the State is the responsibility of the Department of Rural Development & Panchayat Raj and Tamil Nadu Water Supply & Drainage Board (TWAD).

Box 4.3 GROUND WATER POLLUTION IN PERUNDURAI

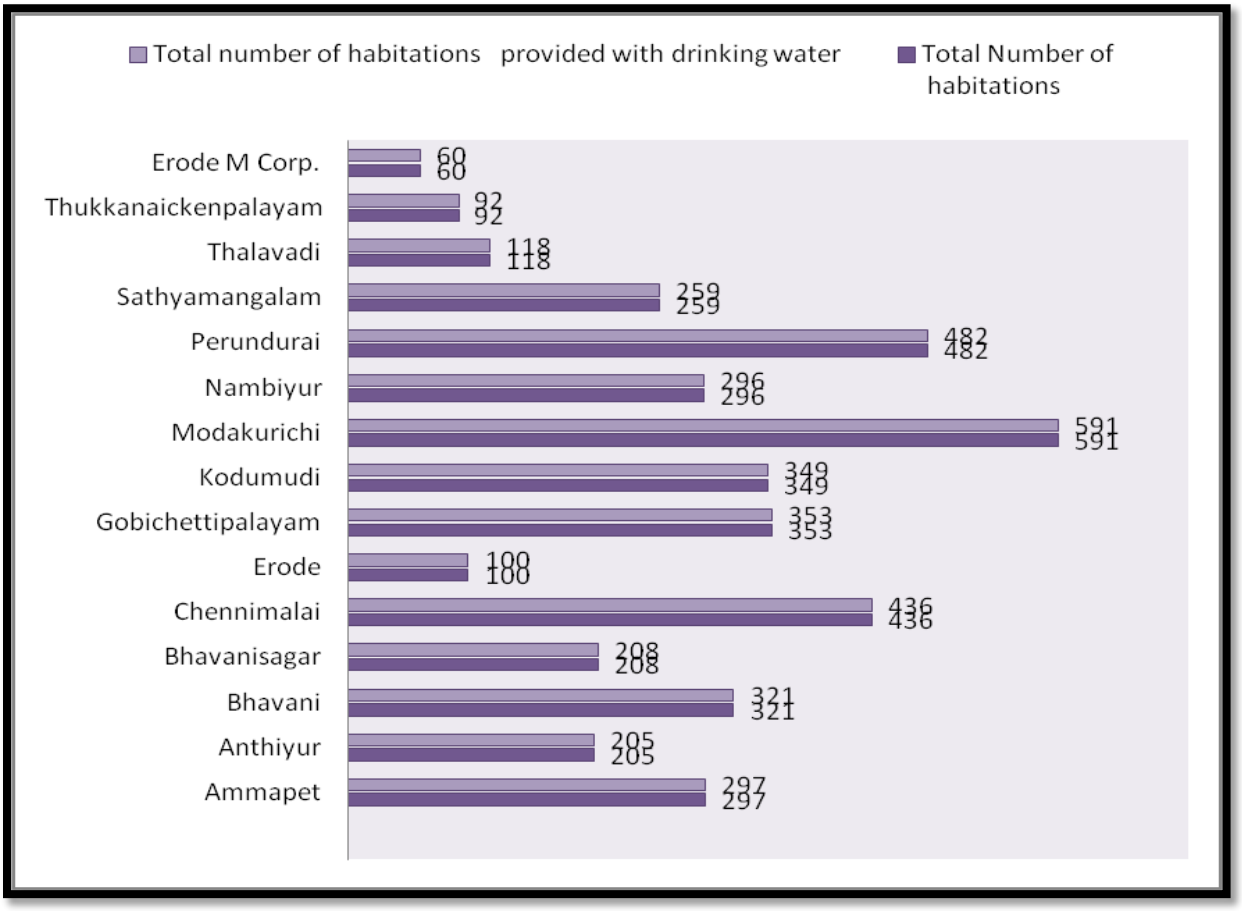
The SIPCOT (State Industries Promotion Corporation of Tamil Nadu) industrial zone is located among the rural areas of Perundurai, Erode district. It is considered as one of the important industrial hotspots in the state of Tamil Nadu. There are about 200 different industries like textile, tannery, chemicals, food, sanitaryware & other general type industries and many factories around this area. The industrial activities have brought the water sources in and around the industrial zone under great stress. Because of these problems, Perundurai is one of the most polluted areas in Tamil Nadu. The rural population being widely dispersed, the water supply through pipes is expensive in terms of the capital cost. So, the population largely depends upon the open well and tube well waters available in nearby areas for bathing, drinking, irrigation and other domestic requirements. But the entire groundwater around this area were totally contaminated by faecal pollution, irrespective of place and area. This illegally drain effluents and pollutants have seeped deep into the ground. While there have been efforts to set up common effluent treatment plants and individual treatment plants, the technology used by several units is not advanced enough to effectively deal with the effluents. The faecal pollution may lead to waterborne diseases like typhoid, cholera, shigellosis, viral associated diarrhoea and

infectious hepatitis. Therefore, prior treatment of well waters is recommended before using it for drinking and other human activities. Also, Government should alert and constantly monitor this issues to maintain water quality. Unless appropriate actions taken by Government and Non- Governmental Organizations (NGOs), no protection could be assured against high health hazards due to infectious diseases in these areas. So the Government should make a move on these issues and implement Safe Drinking Water Supply schemes for the benefits of the society.

Percentage of HH Provided with Safe Drinking Water

All HHs are provided with safe drinking water. Emphasis has to be on the augmentation of supply and maintenance of the water supply infrastructure to make full use of the facility. The quality of drinking water is a powerful environmental determinant of health. Assurance of drinking water safety is a foundation for the prevention and control of waterborne diseases.

FIGURE 4.6 - NUMBER OF HABITATIONS PROVIDED WITH SAFE DRINKING WATER



Sources: GOI/www.mdws.gov.in/NRDWP

Percentage of Population with access to Toilet Facilities

About 54.86% of the total households are covered with sanitation facilities comprising of septic tanks and soak pits. The slum area within Erode Municipality currently does not have access to any sanitation facilities including toilets. Therefore, in recent years, the emphasis is on the provision of quality community toilets with water facilities. Water scarcity in some villages is another factor for dysfunctional latrines. In order to prevent defecation in open areas and in drains, concerted effort is required to disseminate knowledge and create awareness among people on sanitation and its impact on their health and environment. This can be accomplished by educating a target group, in these cases women, which would in turn influence the families. Hence, there is a great need to educate the masses regarding hygienic conditions of living and improving the sanitation in the area for attaining the higher standard of living. Table 4.10 illustrates the access to toilet facilities.

TABLE 4.10 PERCENTAGE OF HOUSEHOLDS WITH ACCESS TO TOILET FACILITIES (2013-14)

Sl. No	Block wise	Total No. of HH's	No. of HH's with Toilet facilities	% of HH's provided toilets facilities
1	Ammapet	33820	11727	34.67
2	Anthiyur	28987	22170	76.48
3	Bhavani	42290	19161	45.31
4	Bhavanisagar	34455	13897	40.33
5	Chennimalai	30940	29638	95.79
6	Erode	18072	11036	61.07
7	Gobichettipalayam	55623	16192	29.11
8	Kodumudi	36948	23502	63.61
9	Modakurichi	54928	20323	37.00
10	Nambiyur	31130	17442	56.03
11	Perundurai	55817	24883	44.58
12	Sathyamangalam	80929	65735	81.23
13	Thalavadi	14521	2467	16.99
14	Thukkanaickenpalayam	26686	18499	69.32
15	Erode M Corp.	139155	99252	71.32

Source: GOI/ www.mdws.gov.in/NBA

Water and Sanitation: Impact on Health

The access to improved water and sanitation has been understood as a crucial mechanism to save infants and children from the adverse health outcomes associated with diarrheal disease. The link between water, sanitation and health status is a complicated one. Nonetheless, these non-nutritional factors do have a significant impact on the ability of individuals and households to attain a good nutritional status. It is estimated that 80 per cent of all diseases and sicknessed are waterborne and water-related. Water pollution in developing countries creates a major problem of diarrhoeal disease, not only among children but also among adults. The conditions that facilitate the transmission of these diseases are all related to poverty and unhealthy living conditions. In India, diarrhoeal diseases are a major cause of death among adults. It is observed that incidence of diarrhoea cases is less among those using own wells or piped water at home. Thus, the control of these diseases needs to be addressed chiefly through improving sanitation and the supply of safe drinking water. Lack of good drainage is another possible cause contributing to waterborne diseases. Most of the municipalities do not have underground sewerage system. So the Government should investigate and implement various Water Supply and Sanitation Schemes for the benefits of the society.

Age and Sex wise HIV Positive cases

Age and sex wise HIV positive cases have declined to 597 during 2013-14 (1702 during 2007). The number of people who tested HIV positive is high between age group 40-59 (i.e. 203) during 2013-14. The district shows the highest incidence of HIV cases and health education and prevention of HIV should be stepped up. In the context of increasing concern over the possible transmission of the HIV/AIDS virus through blood transfusion, the Government of India has brought into force strict regulations concerning licensing of blood banks and procedures for blood transfusion.

Table 4.11 AGE AND SEX WISE HIV POSITIVE CASES

Sl. No.	Age Group	Positive Cases in 2007		Positive Cases in 2011		Positive Cases in 2013-2014	
		Male	Female	Male	Female	Male	Female
1	0-14	23	26	5	9	4	4
2	15-19	0	5	1	4	1	1
3	20-24	16	49	11	19	5	14
4	25-29	99	118	71	53	22	23
5	30-39	393	222	190	140	98	88
6	40-49	278	150	156	111	129	74
7	50 & Above	151	172	96	51	87	47
Total		**960**	**742**	**530**	**387**	**346**	**251**

Sources:.DD.Health Services, Erode

Positive TB Cases/ Leprosy

The positive TB cases for the district was 1159 during 2013-14. The TB control programme in the State functions through district level units. It is based on the revised national TB control programme. It envisages detection of TB patients from those reporting with chest symptoms at the district TB centre as well as peripheral medical and health institutions in each district, including effective treatment for the prescribed period.

Table 4.12 POSITIVE TB CASES/LEPROSY

Sl. No	District	Positive TB Cases			Leprosy		
		2007	2011	2013-14	2010	2011	2013-14
1	Erode	1234	1069	1150	306	185	127

Source: D.D.Health Services, Erode

The district's leprosy epidemic has diminished from 306 to 127 between 2010 and 2014. Leprosy curative services are now available in all PHCs, corporations, municipal hospitals and government dispensaries. While the prevalence of leprosy has come down in the district as a whole, there are inter-block variations.

Conclusion

This chapter has focused on the performance of Erode district with respect to indicators related to demography, health and nutrition. The performance of this district has been relatively better in the few blocks in terms of a few demographic indicators. However, in terms of health and nutritional aspects it is still poor and it is lagging in many blocks like Thalavadi and Gobichettipalayam. It has been shown that it is not only maternal mortality that matters but also the sufferings of women in the reproductive age and problems related to maternity. As regards health infrastructure (physical and manpower), though there has been an improvement over the past, health care facilities are still inadequate, especially in rural areas. Owing to inadequate public health facilities, while awareness and demand for health services are increasing, private health care has developed on a wide scale. On the whole, though the district seems to be successful in terms of family planning and the immunization programme, many other facets of health care have to be improved.

CHAPTER 5

LITERACY AND EDUCATION

Introduction

Education is a core sector for achieving the objective of employment, human resource development and bringing about much needed change in social environment, leading to overall progress through efficient use of resources. An appropriate education system cultivates knowledge, skill, positive attitude, awareness and sense of responsibility towards rights and duties and imparts inner strength to face oppression, humiliation and inequality (Ninth Five Year Plan, 1997-2002).

Education, being a vast subject, the present chapter has been divided into different parts. There is a section on literacy followed by an overview of a school education and higher education in Erode district. Effort has, however, been made to retain the linkages between the different sections wherever possible.

Literacy

A person who is able to read and write with understanding in any language is recorded as literate. Literacy is the best possible barometer to judge the level of educational awakening in a district, leading to a minimum capacity for self-learning. Literacy rate in Tamil Nadu has seen upward trend and is 80.09 percent as per 2011 population census. Of that, male literacy stands at 86.77 percent while female literacy is at 73.14 percent. In 2001, literacy rate in Tamil Nadu stood at 73.45 percent of which male and female were 83.28 percent and 64.91 percent literate respectively. In the district, the literacy rate has been rising. It was 56 per cent in 2001 and increased to 64 percent in 2011, an increase of 8 per cent during the last 10 years.

TABLE 5.1 - OVERALL LITERACY RATE OF ERODE DISTRICT, TAMIL NADU AND INDIA AS PER 2001 AND 2011 CENSUS

Dist/State	2001			2011		
	Male	Female	Total	Male	Female	Total
Erode	65	46	56	71	56	64
Tamil Nadu	83	65	74	87	74	80
India	75	53	64	82	65	74

Source: Census 2001 & 2011

The female literacy (10 percent growth) outdoes the male literacy (6 percent growth) and it has made a significant contribution in the total literacy rate (8 percent growth). The gap between the male and female literacy index has narrowed down from 0.39 to 0.27. Despite these accomplishments in the literacy front, the district performance is lower than that of the state performance and are marginally equivalent to the national literacy rate. In other words, the district has 36 percent of illiterate population. This warrants a careful analysis as well as appropriate strategies like each one teach one

policy, quality improvements in present education system through public-private partnership and voluntary participation of corporates and NGOs by adopting a village.

Literacy by Block and Gender

Literacy rate has grown significantly in almost all the blocks (except Erode) between 2001 and 2011. Of the 15 blocks, vast growth was observed in the Thalavadi block (12.43 percent growth) due the special efforts taken by the state government in upbringing new schemes in education and setting up of primary schools in the remote areas of the block. Nearly 8 percent growth is seen in the blocks of Ammapettai, Modakkurichi, Nambiyur and Perundurai. A significant increase of 9 to 10 percent growth in female literacy rate in these blocks has made a drastic change in their respective total literacy rate. But a negative trend is seen in Erode block (1.67 percent decrease) and this is due to decrease in population of Erode block and the extension of Municipal Corporation. Invariably in all the blocks, the literacy rate of males outnumbers the literacy rate of females. In each of these blocks, the female literacy rate remains low when compared to male rate. The scenario is due to the male being considered as a source of income for their family in future and the lack of awareness of people in giving education for the girl children. Still the gender disparity occurs on a large scale.

Table 5.2: LITERACY RATE

Sl. No	Block	Literacy rate					
		2001			2011		
		Male	Female	Total	Male	Female	Total
1	Ammapettai	59.20	38.58	49.26	65.94	48.62	57.47
2	Anthiyur	58.29	39.18	49.01	64.08	48.64	56.47
3	Bhavani	66.64	49.00	57.97	73.05	57.81	65.53
4	Bhavanisagar	64.92	46.75	56.05	69.91	55.57	62.78
5	Chennimalai	71.06	48.98	60.25	75.88	57.34	66.83
6	Erode	77.43	64.38	71.03	75.99	62.81	69.42
7	Gobichettipalayam	68.12	51.21	59.70	74.55	60.47	67.44
8	Kodumudi	72.97	52.18	62.62	77.32	59.80	68.48
9	Modakkurichi	67.53	48.42	58.11	74.57	58.96	66.74
10	Nambiyur	61.33	40.68	51.08	68.67	50.62	59.61
11	Perundurai	67.30	49.82	58.64	74.89	60.35	67.61
12	Sathyamangalam	59.26	43.13	51.32	65.99	51.97	59.03
13	Thalavadi	51.14	33.73	42.45	62.29	47.54	54.88
14	Thukkanaickenpalayam	61.47	43.36	52.52	67.33	53.00	60.11
15	Erode M Corp.	-	-	-	81.15	71.66	76.42
	Total	64.76	46.39	55.72	71.44	56.34	63.92

Source: Census 2001 & 2011

While comparing with the overall literacy rate of our country, the district has not been in par with the state or country. Even in the midst of various schemes, all the blocks (except Erode Municipal Corporation) are not in par with the State or country's literacy rate. Hence a proactive measure such as identifying the reasons for being weak in the contribution towards literacy rate and the areas of concern is an utmost action to be taken up in addressing the larger issue of illiteracy.

A significant difference is noted among all the blocks of the district. Among all the blocks, the literacy rate is lower in Thalavadi block with 42 percent in 2001 followed by Ammapettai (42 percent) and Anthiyur (49 percent). Thalavadi remains to have low literacy as per 2011 census while compared to all other blocks. But the growth of literacy in this particular block has been 12 percent while remaining blocks have shown a normal growth of 7 to 8 percent. A literacy index of 0.39 is observed in the district during 2001 and this has been brought down to 0.26 in 2011. The improvement in the index value is due to the change in the growth rate of female literacy in the district and the initiatives taken up by the government in emphasising the importance of education for socio- economic development of our nation. Along with the rise in the female literacy rate, the gender gap has also come down to a great extent in all blocks. The average gender gap has come down from 18 percent to 15 percent during the period 2001 and 2011. It could be well observed that a difference in the gender gap could be noted in all the blocks with an average reduction of 2 to 4 percent. The government has taken up concrete and constant measures to increase overall female literacy rate and to bring down the gender disparities in the literacy rate of the district.

Elementary Education Gross Enrolment Ratio

India has made progress in terms of increasing the primary education attendance rate and expanding literacy to approximately three quarters of the population. India's improved education system is often cited as one of the main contributors to the economic rise of India. Much of the progress, especially in higher education and scientific research in recent years has been credited to various private institutions. The private education market in India was 5% and in terms of value was estimated to be worth US$40 billion in 2008 but had increased to US$68–70 billion by 2012[1]. Tamil Nadu gives priority to educational development than any other State. The earlier policy for universalisation of elementary education in Tamil Nadu, massive nationwide education programme

1. The Annual Status of Education Report (ASER), 2012.

"Sarva Shiksha Abhiyan" (SSA), Nutritious Meal Programme and The District Primary Education programme envisaged the enrolment of all children in the age group of 6-14 years.

Gross Enrolment Ratio at Primary level

Table 5.3: PRIMARY ENROLMENT RATIO (GER)

S.NO	BLOCK	Primary Enrollment Ratio (2012-13)			Primary Enrollment Ratio (2013-14)		
		Boys	Girls	Total	Boys	Girls	Total
1	Ammapettai	99.39	99.03	99.05	100.00	100.00	100.00
2	Anthiyur	98.80	98.72	98.88	99.00	99.00	99.00
3	Bhavani	99.58	99.25	99.31	100.00	100.00	100.00
4	Bhavanisagar	99.87	99.81	99.80	99.00	100.00	99.50
5	Chennimalai	98.37	98.53	98.49	99.00	100.00	99.50
6	Erode	99.21	99.35	99.29	100.00	100.00	100.00
7	Gobichettipalayam	99.08	99.27	99.18	100.00	100.00	100.00
8	Kodumudi	99.20	98.53	98.39	100.00	100.00	100.00
9	Modakkurichi	99.88	99.97	98.94	100.00	100.00	100.00
10	Nambiyur	99.32	99.12	99.22	99.00	99.00	99.00
11	Perundurai	99.43	99.46	99.44	100.00	100.00	100.00
12	Sathyamangalam	98.56	99.16	98.96	99.00	99.00	99.00
13	Thalavadi	99.10	99.14	99.12	99.00	100.00	99.50
14	Thukkanaickenpalayam	99.95	99.98	99.97	99.00	99.00	99.00
15	Erode M Corp.	99.59	99.67	99.62	100.00	100.00	100.00
District Average		**99.67**	**99.63**	**99.64**	**99.53**	**99.73**	**99.63**

Source: CEO,SSA

The Gross Enrolment Ratio (GER) have improved in the state over time. During 2001-02 to 2010, the GER at primary level increased from 97.81 percent to 119.56 percent in Tamil Nadu while it increased from 92.14 percent to 115.63 percent in India[2]. Gross enrolment ratios have remained relatively static during the decade. Gross Enrolment Ratio (GER) at primary level is high at 119%. High GER at primary level, however, indicates the presence of over-age and under-age children, possibly due to early and late enrolment or repetition. The share of girls in the total enrolment at primary was 19% in the year 2005-06, this increased to 48.5 in 2009-10[3]. The female-male ratio in education has been steadily improving over the years. In primary education, the GPI ratio has gone up from 0.76 in 1990 -91 to 1.00 in 2009 -10 showing 31.6% increase.

2. The District Information System of Education (DISE) Report, 2012.
3. Ministry of Statistics and Programme Implementation Report, 2012.

The primary school enrolment in the district remained static i.e., almost 99 percent (over 2 year period). The reason is due to lower population growth of children between the age group of 0-6 and lesser number of drop outs. In Erode the district child population during 2001 was 10.06% and during 2011 it was 8.76% (A decrease of 1.30% is noted from the District Census Handbook Erode, 2001 and 2011). This is substantiated from the fact that of absolute increase of 181 million in the country's population during the decade 2001- 2011, there is a reduction of 5.05 million in the population of children aged 0-6 years during this period[4]. Almost all the blocks in this district have shown more than 99 percent of GER. In the consecutive year 2013-14, almost the district's GER found to be almost close to the previous year rate. Most of the blocks (8 blocks out of 15) have almost reached 100% GER in the year 2013-14.

Upper Primary Enrolment Ratio

TABLE 5.4: UPPER PRIMARY ENROLMENT RATIO

S.NO	BLOCK	Upper Primary Enrollment Ratio (2012-2013)			Upper Primary Enrollment Ratio (2013-2014)		
		Boys	Girls	Total	Boys	Girls	Total
1	Ammapettai	99.49	99.49	99.05	100.00	99.00	99.50
2	Anthiyur	99.40	99.41	98.88	99.00	99.00	99.00
3	Bhavani	99.38	99.38	99.31	99.00	100.00	99.50
4	Bhavanisagar	99.13	99.21	99.80	99.00	100.00	99.50
5	Chennimalai	99.03	98.59	98.49	99.00	100.00	99.50
6	Erode	99.85	99.66	99.29	100.00	100.00	100.00
7	Gobichettipalayam	99.25	99.57	99.18	99.00	100.00	99.50
8	Kodumudi	97.70	96.78	98.39	99.00	100.00	99.50
9	Modakkurichi	99.34	99.51	98.94	100.00	100.00	100.00
10	Nambiyur	99.25	98.95	99.22	99.00	99.00	99.00
11	Perundurai	99.90	99.80	99.44	99.00	100.00	99.50
12	Sathyamangalam	99.26	98.91	98.96	99.00	99.00	99.00
13	Thalavadi	99.50	99.48	99.12	99.00	99.00	99.00
14	Thukkanaickenpalayam	98.45	97.95	99.97	99.00	99.00	99.00
15	Erode M Corp.	99.91	99.71	99.36	100.00	100.00	100.00
District Average		**99.26**	**99.09**	**99.16**	**99.27**	**99.60**	**99.43**

Source: CEO,SSA

In India, one in every 10 children aged 6-10 is out of school[5]. Approximately two-thirds only of the Grade I cohorts survive to the last grade of the primary cycle. Around 84% of primary school

4. Ministry of Statistics and Programme Implementation Report, 2012.
5. UNICEF, 2012.

children progress to upper primary level, but the participation rate in upper primary level is much lower (GER 85.5%).

In Tamil Nadu the enrolment in middle/upper primary classes (class VI-VIII) was 34.0 million in 1990-91 which increased to 42.8 million in 2000-01 and then to 62.1 million in 2010-11. During 2001-02 to 2010-11, the GER of Tamil Nadu at middle stage increased from 92.57 percent in 2000-01 to 119.56 percent in the year 2010-11[6]. In the district, it could be noted that the Gross Enrolment Ratio (GER) at the middle level have marked no change at all. And even it could be observed that there are no significant changes among the blocks. Even though the government have taken up various measures like creating social demand for education, greater awareness programme, implementation of nutritious noon meal scheme, supplying of free text books, free uniforms and free bus passes to students of the district has a stagnant position in the GER at upper primary level. No blocks have made a remarkable change in the GER ratio and hence the district's GER has remained almost the same as previous year. However, as said earlier the no growth trend in the absolute number of children in elementary education is attributed to the deceleration in the growth of population. In the year 2013-14, a slight increase (0.27 %) in GER could be noted. The probable reason behind this scenario is due to increase in GER of girls in upper primary classes.

Completion Rate

The Eleventh Plan had set a target of increasing completion rates at the primary and upper primary level to 100% and 95% respectively. The completion rate at primary level, has increased to 97.36% in 2010 from 86.55% in 2006 and at upper primary level to 93.35% from 88.57% during the same period. The completion rate of our country was 93.38 in 2009-10, which has significantly increased to 101.89 in 2010-11. The State-level Completion Rate (CR) at primary level is at 114.75% in 2009-10 and it was raised to 123.57 in 2010-11[7]. The percentage of the state was 22% higher than the completion rate of the country.

6. Ministry of Statistics and Programme Implementation Report, 2012.
7. The District Information System of Education (DISE) Report, 2012.

TABLE 5.5: COMPLETION RATE AT PRIMARY AND UPPER PRIMARY

S.NO	BLOCK	Primary				Upper Primary			
		Boys	Girls	Total	Total	Boys	Girls	Total	Total
		2012-13	2012-13	2012-13	2013-14	2012-13	2012-13	2012-13	2013-14
1	Ammapettai	99.87	100.00	99.94	99.94	87.40	92.23	89.82	90.72
2	Anthiyur	97.29	96.14	96.71	96.72	84.89	87.87	86.38	88.42
3	Bhavani	98.67	98.91	98.79	98.80	83.41	88.13	85.77	87.18
4	Bhavanisagar	99.61	99.20	99.41	99.41	96.53	91.18	93.85	94.76
5	Chennimalai	97.98	98.29	98.13	98.14	95.63	95.53	95.58	96.48
6	Erode	96.84	97.15	96.99	96.99	92.66	94.47	93.57	94.47
7	Gobichettipalayam	98.35	98.30	98.32	98.33	90.57	91.69	91.13	92.04
8	Kodumudi	98.69	100.00	99.34	99.35	90.23	93.04	91.64	92.54
9	Modakkurichi	99.88	100.00	99.94	99.94	95.01	96.86	95.93	95.56
10	Nambiyur	98.82	98.88	98.85	98.86	91.53	92.96	92.25	93.15
11	Perundurai	98.00	98.67	98.33	98.34	92.40	91.51	91.96	93.50
12	Sathyamangalam	94.00	92.71	93.36	94.52	90.20	88.56	89.38	91.20
13	Thalavadi	94.90	96.98	95.94	96.44	89.39	91.55	90.47	91.37
14	Thukkanaickenpalayam	100.00	100.00	100.00	100.00	100.00	98.00	99.00	98.66
District Average		98.06	98.23	98.15	98.27	91.42	92.40	91.91	92.86

Source: CEO,SSA

The completion rate in the district has remained static in the primary section between the years 2012 and 2013. The completion rate ranged from 100 percent in Thukkanaickenpalayam block to 93.36 percent in Sathyamangalam block in 2013. All the blocks have shown a static rate in terms of completion and have resulted with insignificant change in the district's completion rate. The completion rate in upper primary category ranged from 86 percent in Anthiyur block to 99 percent in Thukkanaickenpalayam block. This signifies a vast difference in the rate of completion exists between the blocks as the differences exist between the blocks, the district could study the factors that would promote higher growth rate. In addition, the government completions could take up an initiative that could be practised in the weaker blocks. In both primary and upper primary education, the girl's completion rate is marginally higher (as the enrolment rate of girl children at primary and upper primary is high) when compared with boy's completion rate. In the year 2013-14, not much variation could be seen in the completion rate at primary level. But a slighter variation is notable in the completion rate of upper primary level and this is due to increase (an increase of 1.25 percent) in completion rate of girl children in the district.

Dropout Rate

The biggest problem facing the schooling system is that a percentage of children who join up in Class I drop out by Class VIII. Total enrolment in primary classes (Class I to V) was 137.09 million in 2011-12, the latest year for which complete data is made available in the District Information System for Education (DISE, 2012) flash statistics, collected by the National University for Educational Planning and Administration (NUEPA). In Classes VI to VIII, the total enrolment had increased to 61.9 million. Earlier data shows that with each successive class, students quit in large numbers. By Class V, every third kid has dropped out and by Class VIII every second student is no longer attending school. The Right to Education Act covers children in the 6 to 14 years age group — precisely for these classes in school.

TABLE 5.6: DROPOUT RATE AT PRIMARY, UPPER PRIMARY AND SECONDARY

S.NO	BLOCK	PRIMARY			UPPER PRIMARY			SECONDARY		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
		2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14
1	Ammapettai	0.12	0.00	0.06	1.29	1.18	1.24	8.47	2.83	5.65
2	Anthiyur	2.35	3.86	2.93	5.35	6.46	5.90	4.4	8.32	6.36
3	Bhavani	0.69	0.81	0.75	1.04	4.82	2.93	5.2	5.08	5.14
4	Bhavanisagar	0.38	0.80	0.59	2.94	2.22	2.58	10.1	7.47	8.79
5	Chennimalai	1.74	1.48	1.61	1.01	0.20	0.60	3.35	5.57	4.46
6	Erode	3.09	2.68	2.88	2.48	0.49	1.48	5.42	3.34	4.38
7	Gobichettipalayam	0.86	1.47	1.16	2.45	1.54	1.99	5.2	4.43	4.82
8	Kodumudi	0.79	0.00	0.13	0.16	1.31	0.74	9.45	3.5	6.48
9	Modakkurichi	0.11	0.00	0.06	1.44	0.00	0.72	5.97	2.45	4.21
10	Nambiyur	0.46	1.04	0.75	2.41	0.85	1.63	9.52	3.23	6.38
11	Perundurai	1.72	1.33	1.39	0.63	3.04	1.84	2.72	2.8	2.76
12	Sathyamangalam	4.13	6.00	5.07	4.52	5.28	4.90	8.68	5.52	7.1
13	Thalavadi	2.82	2.84	2.83	7.19	4.52	5.85	8.82	4.52	6.67
14	Thukkanaickenpalayam	0.00	0.00	0.00	0.88	0.00	0.88	7.32	4.92	6.12
15	Erode M Corp.	0.00	0.00	0.00	0.00	0.00	0.00	6.25	4.23	5.48
Total		**1.28**	**1.49**	**1.35**	**2.25**	**2.13**	**2.22**	**6.72**	**4.55**	**5.65**

Source: CEO,SSA

Tamil Nadu has reported with 0.98 percent and 0.28 percent dropout rate in primary and upper primary grades respectively[8]. The state has reported low average dropout rate than the national

8. Education Status Report – Tamil Nadu, 2012.

average and have almost achieved the goal of universal retention at primary level. Tamil Nadu, as surveys indicate, the majority of the dropouts belonged to the poorest and least developed areas of the country, especially backward rural areas and urban slums.

The district has reported an average drop-out rate of 1.35 percent (1.28 percent of boys and 1.49 percent of girls) in primary grade, 2.22 percent in upper primary grade (with 2.25 percent of boys and 2.13 percent of girls) and 5.65 percent at Higher Secondary level. Higher percent of dropouts could be observed in the higher secondary level than at the primary and upper primary level. Of the blocks, Sathyamangalam recorded the highest dropout rate of 5.07 percent in primary grade. This is due to the area being a reserved area and existence of notable percent (11.12%) of scheduled tribes and scheduled caste population. Very little importance to education is given by this segment. To highlight, there were no girl's dropout in Thukkanaickenpalayam block in primary and upper primary but a significant change of 6.12 percent dropout could be observed in the higher secondary. Also higher percent of dropouts could be observed in Nambiyur, Kodumudi and Bhavanisagar blocks. This is mainly due to large number of boys dropouts (Boys being either employed or having opted to join ITI). Also, the outcome used in the data analysis was to identify primary reasons for high drop-out rates in girls. The top most reasons cited for dropping out of the school are: Lack of self-interest in studies, Parents not interested in educating girls, family's economic status, family migrated to other place, unable to adapt and cope with change, help in domestic work to the parents and non-existence of facilities to continue their studies.

Box 5.1 ASER by Pratham Foundations

ASER is the largest annual household survey of children in rural India that focuses on the status of schooling and basic learning. Facilitated by Pratham, in each rural district ASER is conducted by local organizations, and institutions. ASER 2013 reached 550 district s and close to 16,000 villages, 3.3 lac households and 6 lac children in the age group 3-16.

In Tamil Nadu, 25 district s were selected and divided into 5 divisions (Central, North, South, East and West) based on administrative divisions used in the state or by geographical regions. Erode district is accounted with west division.

It was found that in West division, 0.78% of the children were out of school and 24.87 % children enrolled in private schools. 70% of the children in Standard I & II were able to read letters (a 8% growth from previous year) and 47.6% of the children in Standard III – V were able to read Standard I text (a decline of 8 percent). Also it is observed that 75.7 percent of children in Standard I & II were able to recognise numbers from 1 to 9 or more. 36.3 percent of children in Standard III – V were able to do subtraction and more.

Source: ASER, 2013

Gross Access Ratio

Logistics in education system, in terms of distance from school, is one of the important factors affecting access to education and attendance. Expansion has not only been in terms of the number of institutions, but also in terms of the spatial distribution of the schooling provisions at primary, upper primary, secondary and higher secondary levels. In order to achieve universal access, the school should be located within easy reach of the children.

Significant efforts have been made in the last fifty years to universalize elementary education. Since 1950, impressive progress has been made in every sphere of elementary education. As of 2013 in Tamil Nadu there are 34871 primary schools, 9969 middle (upper primary) schools with student's strength of 53.31 lakh comprising of 31.79 Lakh in primary and 21.52 in middle schools[9] (School Education Policy, 2012-13). Tamil Nadu has an impressive coverage of habitations in rural areas with schooling facilities at primary stage within one kilometre. In 2005, 99% of rural habitations had already been covered. Since the state runs the Sarva Shiksha Abhiyan (SSA or Universal Education Campaign) quite successfully, the goal of providing physical access (availability) of a primary school within a radious of one kilometre is achieved by now. However, the quality the facility and the services, besides ensuring that children do not remain out of school.

Of the 5165 habitations in Erode district , there are 1000 primary and 706 secondary schools available in this district . On an average, the accessibility ratio of habitation to primary school is 1:5 and to secondary school is 1:7. Within the block, the access ratio is very strong in Thukkanaickenpalayam, Thalavadi, Nambiyur and Bhavanisagar blocks with an average ratio of 1:3. This is purely the result of SSA intervention. During the year 2012-13, the access ratio is found to be high (1:6) in the blocks of Ammapettai, Bhavani and Modakkurchi. But due to change in the size of habitations (increase in size of habitation) in the blocks like Erode, Chennimalai and Sathyamangalam, the access ratio has grown in terms of 1:8 during the year 2013-14. In case of secondary schools, the access ratio is found to be higher (1:9) in the blocks of Ammapettai, Kodumudi, Modakkurchi and Perundurai during the year 2012-13. But the scenario is changed with 1:11 access ratio in the blocks Erode, Kodumudi, Chennimalai and Modakkurchi during the year 2013-14. Most of the students in this blocks are not able to have easier access for secondary school, due non-availability of provisions and procedural delay in sanctioning. It may be noted that most of the blocks still have a large number of unserved habitations. It was observed that the notable change between the blocks was due to the

9. School Education Policy, 2012-13.

formation of new habitations over time, immigrant population, non-availability of land and other provision for constructing and setting up infrastructure, lack of awareness and poor community involvement, procedural delays (sanction not received for opening primary schools), lack of skill at the village level for undertaking construction of civil works and inadequate funds (cost norms).

TABLE 5.7 : BLOCK-WISE GROSS ACCESS RATIO IN THE DISTRICT

Sl. No	Block	No. of Habitations		Number of Schools Primary Only (I-V)		No. of Upper Primary/ Secondary/ Higher Secondary Schools Having 6-8		Number of Schools Access Ratio	
		(2012-13)	(2013-14)	(2012-13)	(2013-14)	(2012-13)	(2013-14)	(2012-13)	(2013-14)
1	Ammapettai	387	273	64	65	44	46	108	111
2	Anthiyur	323	373	63	62	58	66	121	128
3	Bhavani	455	402	80	83	55	55	135	138
4	Bhavanisagar	177	215	60	58	35	37	95	95
5	Chennimalai	294	390	59	59	35	37	94	96
6	Erode	563	1118	114	119	113	112	227	231
7	Gobichettipalayam	402	352	77	77	57	60	134	137
8	Kodumudi	290	307	82	82	28	28	110	110
9	Modakkurichi	550	442	91	93	54	52	145	145
10	Nambiyur	229	312	69	68	37	39	106	107
11	Perundurai	439	317	91	92	48	51	139	143
12	Sathyamangalam	313	397	62	60	56	63	118	123
13	Thalavadi	141	118	43	43	21	36	64	79
14	Thukkanaickenpalayam	101	149	42	39	31	24	73	63
Total		**4664**	**5165**	**997**	**1000**	**672**	**706**	**1669**	**1706**

Source: CEO,SSA

Transition Rate from Primary to Upper Primary

One of the important indicators on which the expansion of upper primary education depends is the transition rate from the primary level to the upper primary level of education. The transition rate of our country from primary to upper primary is 87.09 percent from 85.17 percent between the year 2009 and 2010[10]. In Tamil Nadu, more than 100 transition rate is observed because of inconsistent enrolment data or migration of children into the state at the Grade VI level. The recent record (2014) shows, the district has achieved 100 percent transition rate in the year 2012-13 and the same is followed

10. The District Information System of Education (DISE) Report, 2012.

in the year 2013-14. Improvement over the years made few blocks to reach 100 percent transition rate and the rest followed suit.

Pupil-Teacher Ratio (PTR) Pupil-School Ratio (PSR) – Primary & Upper Primary

TABLE 5.8: PUPIL -TEACHER RATIO (PTR) PUPIL -SCHOOL RATIO (PSR)-PRIMARY &UPPER PRIMARY

S.NO	BLOCK	PRIMARY (2012-13)		PRIMARY (2013-14)		UPPER PRIMARY (2012-13)		UPPER PRIMARY (2013-14)	
		PTR	PSR	PTR	PSR	PTR	PSR	PTR	PSR
1	Ammapettai	1:22	1:129	1:23	1:74	1:22	1:125	1:26	1:96
2	Anthiyur	1:32	1:155	1:27	1:105	1:25	1:122	1:33	1:70
3	Bhavani	1:24	1:157	1:23	1:76	1:24	1:151	1:31	1:115
4	Bhavanisagar	1:24	1:105	1:24	1:80	1:22	1:115	1:29	1:93
5	Chennimalai	1:20	1:102	1:19	1:51	1:22	1:120	1:25	1:58
6	Erode	1:25	1:363	1:27	1:90	1:26	1:226	1:28	1:70
7	Gobichettipalayam	1:24	1:158	1:22	1:64	1:23	1:171	1:19	1:60
8	Kodumudi	1:18	1:69	1:21	1:41	1:26	1:121	1:31	1:75
9	Modakkurichi	1:21	1:106	1:21	1:62	1:17	1:114	1:22	1:84
10	Nambiyur	1:24	1:85	1:22	1:66	1:20	1:109	1:25	1:91
11	Perundurai	1:22	1:108	1:20	1:55	1:21	1:143	1:24	1:82
12	Sathyamangalam	1:29	1:193	1:26	1:91	1:27	1:119	1:32	1:63
13	Thalavadi	1:27	1:103	1:24	1:77	1:26	1:84	1:32	1:69
14	Thukkanaickenpalayam	1:22	1:115	1:21	1:80	1:23	1:152	1:41	1:95
Total		**1:24**	**1:139**	**1:23**	**1:72**	**1:23**	**1:134**	**1:28**	**1:80**

Source: CEO,SSA

One of the important indicators that influence classroom transaction is the pupil teacher ratio which is presented by school category. Primary school pupil-teacher ratio is the number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their teaching assignment). Primary Pupil-teacher ratio in India was last measured at 35.15 in 2011, according to the World Bank. The highest pupil-teacher ratio in the country is observed in the case of the Primary schools (1: 46), followed by Elementary (1: 38) and Upper Primary attached to Secondary & Higher Secondary (1:37). The Pupil-teacher ratio in upper primary in India was last reported at 29 percent in 2012[11](Elementary Education in India, 2013). The fall in the absolute number of enrolment and the rise in teacher strength led the state to decrease the pupil-teacher ratios (quality

11. Elementary Education in India, 2013.

indicator) in both primary and middle levels. At primary level, the pupil-teacher ratio declined from 29 in 2009-10 to 27 percent in 2011-12 and at middle level it declined from 34 to 33[12].

The district overall pupil to teacher ratio conforms to the RTE Act; one teacher for every 30 children (1:30) in primary and 1:35 in upper primary section. In the year 2005, the ratio was 1:39, the highest ratio in the last decade. The ratio was subsequently reduced to 1:23 as the prescribed norms followed under SSA. It is observed that in the year 2012-13, Kodumudi block has appreciative pupil to teacher ratio in primary level and Modakkurchi in the upper primary level. In the year 2013-14, the PTR ratio was quite appreciable in the blocks Perundurai and Chennimalai at primary level and Gobichettipalayam and Perundurai at upper primary level. The reduction in ratio will result in improved teacher's individual attendance, reduction of burden for teachers in assessing students, reduction of disciplinary recurrences and improvement in time spent on each student. The pupil to school ratio is highly determined by number of school going children and the availability of schools in that particular block. A lower PSR at primary level is observed in Kodumudi block since there are 78 schools for 12854 school going population. The PSR in upper primary is observed to be low in Thalavadi block since the number of enrolment and the availability of school is less when compared to other block. A high ratio is observed in Erode block since the population of school age children is 57391 for 99 schools. In the year 2013-14, the district's overall PSR ratio has been to 72 pupils per school at primary level and 80 pupils per school at upper primary level. The intervention of both the government in promoting more number of schools and making education more accessible has lead to the improvement of PSR ratio.

Secondary Education

Secondary education has expanded slowly, but steadily, over the past twenty years, largely contingent on the growth of elementary education. The growth in the number of secondary schools over the last two decades has occurred primarily among private unaided schools, which now represent almost one out of three of India's secondary schools. Jointly, private aided and unaided schools make up 60 percent of all secondary schools. Most secondary students are boys, and disproportionately are from urban areas and wealthier segments of the population.

12. Ministry of Statistics and Programme Implementation Report, 2012.

India's gross enrollment rate (GER) at the secondary level of 40 percent is far inferior to the GERs of its global competitors in East Asia (average 70 percent) and Latin America (average 82 percent)[13]. There are 44.8 million children in secondary education in India, which translates into a gross enrolment ratio (GER) of 45.81 per cent in Classes IX–XII. Most of these 44.8 million children are in lower secondary education — 28.4 million — while the remainder are in higher secondary education. While the overall GER in Classes IX–XII is 45.81, the GER is much higher in lower secondary (at 58.15 per cent) than in higher secondary (33.48 per cent).

Table 5.9: SECONDARY ENROLMENT RATE

S.No	Block	No.of Schools		Boys		Girls		Total	
		(2012 -13)	(2013 -14)	(2012 -13)	(2013 -14)	(2012 -13)	(2013 -14)	(2012 - 13)	(2013 - 14)
1	Ammapettai	10	8	56.54	92.00	60.09	98.00	58.07	95.00
2	Anthiyur	13	13	46.81	96.00	46.43	92.00	46.64	94.00
3	Bhavani	16	14	66.37	95.00	67.65	95.00	66.93	95.00
4	Bhavanisagar	6	6	62.45	90.00	58.83	93.00	60.59	91.50
5	Chennimalai	9	8	59.09	97.00	47.71	95.00	54.07	96.00
6	Erode	29	35	53.75	85.00	49.49	92.00	51.65	88.50
7	Gobichettipalayam	14	16	49.85	95.00	48.79	96.00	49.39	95.50
8	Kodumudi	4	4	61.85	91.00	59.78	97.00	60.88	94.00
9	Modakkurichi	7	6	56.72	94.00	57.68	96.00	57.14	95.00
10	Nambiyur	8	8	68.90	91.00	60.77	96.00	64.95	93.50
11	Perundurai	16	13	59.87	98.00	54.70	97.00	57.49	97.50
12	Sathyamangalam	13	13	52.87	92.00	56.39	95.00	54.58	93.50
13	Thalavadi	10	11	64.81	92.00	58.00	96.00	61.40	94.00
14	Thukkanaickenpalayam	4	4	63.38	93.00	58.61	95.00	61.07	94.00
15	Erode M Corp.	4	4	73.82	82.00	60.39	85.00	67.73	83.50
District		**163**	**163**	**59.81**	**92.20**	**56.35**	**94.53**	**58.17**	**93.37**

Source: CEO,SSA

The states like Tamil Nadu and Himachal Pradesh have the highest rates for both primary completion and for Class IX gross intake (both these states have rates at 100 per cent or more). In Tamil Nadu while near universal enrolment in elementary education (up to 8 years of schooling) is achieved, the Net Enrolment Rate in high schools (9th and 10th Standards) is 65.6% and in higher secondary schools (11th and 12th Standards) it is 40.7% as of 2011-12. Tamil Nadu has a GER greater

13. The World Bank Group Report, 2012.

than 56% in secondary education and more than 67% of habitations have a secondary school within a radius of 5 kilometres[14].

In the year 2012-13, the GER of the Erode district in secondary education is 58.17, which is much higher than the state's GER (40.7). The enrolment ratio is higher in Erode block with 67.73 and lower in Anthiyur block with 46.64. The overall GER ratio in secondary education seems not up to the mark in the district during the year 2012-13. The reason was the result in a shortage of secondary schools in the district and also the least importance of giving secondary education. Most of the students after their high school education are likely to join ITIs or CNC centres, which give them better job opportunities. Currently, majority of the students is secondary education are pursuving their studies at fee-paying schools. The Government of India (GoI) has launched a national drive to expand and improve the quality of secondary education for all social groups through Rashtriya Madhyamik Shiksha Abhiyan. With the intervention of the scheme, a drastic change is noted in the year 2013-14. The total enrolment during the year 2013-14 has gone up to 93.37% (almost 33% increase). Expanding free education through RMSA schools has extended secondary education to currently unserved areas and help families who cannot afford school fees. India's gender indicators are low and the social and economic benefits of secondary education are likely to be strong. The district worked in par with the scheme and raised the GER ratio.

Never Enrolled Children

As of 2012, 31 million primary school pupils worldwide dropped out of school. According to UNESCO, 61 million primary school-age children were not enrolled in school in 2010. Of these children, 47 percent were never expected to enter school, 26 percent attended school but left, and the remaining 27 percent are expected to attend school in the future. In India, the proportion of children not enrolled or out of school is declining, dropping to below 4 per cent in 2011 from 7.6 percent in 2006[15]. The district reports that during the year 2012-14, almost all the blocks have negligible percent of never enrolled children under the government specified age category. Almost every child in all the blocks have enrolled in the school at the specified age. It was the relentless effort of the government by providing universal access to elementary education under SSA. Also Non Residential Bridge special training centres established by the state government has substantially reduced the number of never

14. India Infrastructure Report, 2012.
15. The District Information System of Education (DISE) Report, 2012.

enrolled. Unserved areas are provided with primary and elementary schools under DPEP (District Primary Education Programme) and SSA.

Out-of-School Children

According to the Right to Free and Compulsory Education Act 2009, 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. During 2011-2012, 55758 out of school children are covered through various interventions in the age group of 6 to14 years[16]. The total number of out-of-school children in Krishnagiri district tops the list with 5645 children followed by Coimbatore (4077) and Dindigul (3569). 10146 children are covered through KGBV/NCLP Projects. As per EER 2011 statistics, 1577 out-of school children in Erode district are covered under the special Training Interventions like Direct enrolment, NRSTC, RSTC, Special RSTC, KGBV and NCLP.

TABLE 5.10: OUT-OF-SCHOOL CHILDREN (2013-14)

S.NO	BLOCK	School Age Children (6-14)			Out-of- School Children			% of Out of School Children
		Boys	Girls	Total	Boys	Girls	Total	
1	Ammapettai	9009	8072	17081	38	18	56	0.33
2	Anthiyur	9050	8303	17353	182	25	207	1.19
3	Bhavani	13713	12518	26231	90	0	90	0.34
4	Bhavanisagar	6909	5745	12654	59	0	59	0.47
5	Chennimalai	7115	6475	13590	60	0	60	0.44
6	Erode	27545	26512	54057	195	0	195	0.36
7	Gobichettipalayam	10985	10477	21462	113	0	113	0.53
8	Kodumudi	6419	6270	12689	42	0	42	0.33
9	Modakkurichi	9217	8439	17656	73	0	73	0.41
10	Nambiyur	5898	5571	11469	87	18	105	0.92
11	Perundurai	9531	9227	18758	78	0	78	0.42
12	Sathyamangalam	9667	9035	18702	169	30	199	1.06
13	Thalavadi	4656	4285	8941	48	12	60	0.67
14	Thukkanaickenpalayam	5836	5125	10961	92	22	114	1.04
Total		**135550**	**126054**	**261604**	**1326**	**125**	**1451**	**0.61**

Source: CEO,SSA

During the year 2013-14, the district has recorded 0.61 percent of out-of-school children. Highest percent (1.19 percent) of out-of-school children is found in Anthiyur block and the lowest

16. http://ssa.tn.nic.in

(0.33) is reported from Ammapettai and Kodumudi blocks. A gradual decrease in out-of-school percent is observed over last four decades. The state has taken up several initiatives to enroll and induct all out of school children in the neighbouring school. The state SSA has undertaken a special survey to identify out of school children involving project functionaries with the help of teachers and anganwadis. The out of school children in the state has been reduced to 1451 for the year 2013-2014.

School Infrastructure

To have a school without minimum basic amenities is unjust. Availability of good drinking water, toilet facility especially for girl children and teachers, playground, electricity, desks and benches and compound wall are essential features of a school. Nationally, school facilities also show improvement over time. Improvement is visible in basic facilities available in schools. In 2012, 73% of all schools had drinking water available. The proportion of schools with useable toilets has increased from 47.2% in 2010 to 56.5% in 2012. Approximately 80% of schools had separate provision for girls' toilets. The midday meal was being served in 87.1% schools[17].

The number of classrooms in each school is an indicator reflecting the facility available to accommodate different grade students in different classes. The district has a total number of 1212 primary and upper primary schools in 2014. About 43 percent of the schools have either three or more than three classrooms. 65 schools in Modakkurchi block have three or more classrooms, which is recorded to be the highest among all blocks. Of the blocks, Nambiyur and Anthiyur blocks were found to have 72 and 68 schools with less than three classrooms respectively. The insufficiency/improper availability of classroom facilities lead to handling of classes under the shades of trees and this is disturbing particularly when the weather conditions are bad. Thus, multi-grade teaching becomes inevitable and ultimately deteriorates the quality of education.

The most positive outcome is noted in terms of availability of toilet facilities. The schools in all the blocks are having sufficient toilet facilities and that too with enough provisions for girl's toilet. Only 4 percent of the schools in the district have reported with no provision for separate toilet facilities for girls. Modakurrchi block is observed to have the highest (13 percent) percent in terms of no provision for girl's toilet. A very negligible percent of schools in a few blocks are found to have no

17. The Annual Status of Education Report (ASER), 2012.

provision for electricity. Out of all schools, 219 schools (18 percent) do not have proper compound wall and that too higher percent is notable in Anthiyur block with 44 schools. 22 schools out of 94 in Erode block have no proper desks and benches. These stark realities bite. Deprivation of these minimum facilities not merely disturbs the children but their lack deeply drills into the bright minds especially when they see their fellow age students enjoy all sorts of comforts in private schools. This is too hard to digest especially for the young minds that form 100 percent future of this country. Waking up to the reality and improving up the basic amenities not only in terms of numbers but in view of quality should be the immediate task.

TABLE 5.11 : SCHOOL INFRASTRUCTURE (2013-14)

S. NO	BLOCK	No. of Schools	Number of Government schools having		Without Girls Toilet	Without Electricity	Without Com-pound Wall	Without Desk & Bench
			More than 3 class rooms	Less than 3 class rooms				
1	Ammapettai	90	27	63	0	0	23	0
2	Anthiyur	99	31	68	1	4	44	0
3	Bhavani	97	30	67	8	0	23	1
4	Bhavanisagar	83	38	45	7	0	9	0
5	Chennimalai	69	43	26	0	0	7	5
6	Erode	94	32	62	4	0	16	22
7	Gobichettipalaym	88	45	43	1	0	10	0
8	Kodumudi	77	54	23	3	0	15	1
9	Modakkurichi	118	65	53	16	0	21	2
10	Nambiyur	95	23	72	2	0	12	0
11	Perundurai	111	61	50	6	0	23	7
12	Sathyamangalam	82	38	44	1	2	12	0
13	Thalavadi	62	23	39	0	0	0	3
14	TN palayam	47	14	33	0	0	4	6
	Total	1212	524	688	49	6	219	47

Source: CEO,SSA

Scholarships

Education is considered as a yardstick to measure the development of the society. Government is implementing various schemes for the educational advancement of Backward Classes, Most Backward Classes, Denotified Communities and Minorities.Having regard to the fact that education is essential to improve the lives of Backward Classes, Most Backward Classes, Denotified Communities and Minorities, the Government is providing three kinds of Scholarships viz., Pre-matric, Post-matric and Free Education to the poor students in order to assist them financially to

continue their education. Tamil Nadu Government has incurred an expenditure of Rs.137.89 lakh for 77,094 students during the year 2010-11 as scholarships. A sum of Rs.126.33 lakh for Backward Classes Welfare Department and Rs.117.93 lakh for Most Backward Classes and Denotified Communities Welfare Department and totally Rs.244.26 lakh has been provided under this scheme for the year 2011-12[18].

TABLE 5.12: SCHOLARSHIP (2013-14)

S.No	Block	No. Of Schools	Total Numbers of Students	No. Of students Availed Scholarship
1	Ammapettai	95	9233	1294
2	Anthiyur	111	10270	2235
3	Bhavani	108	13587	2176
4	Bhavanisagar	86	7071	1439
5	Chennimalai	79	5776	635
6	Erode	114	23131	3256
7	Gobichettipalayam	108	11102	1379
8	Kodumudi	95	6170	1275
9	Modakkurichi	126	7973	1440
10	Nambiyur	95	6540	808
11	Perunudrai	122	8631	1586
12	Sathyamangalam	95	8333	1442
13	Thalavadi	74	4512	617
14	Thukkanaickenpalayam	51	6091	876
15	Erode M.Corp	17	3542	211
		1376	131962	20669

Source: CEO,SSA

The table indicates that 20669 students have benefitted under the scholarship scheme. The scheme has benefitted only 16 percent of the school going children (6-14 years). The district could take a deep insight to improve the percentage of enrolment at high school and higher secondary level by providing scholarships which in turn might encourage the students to continue their education.

Hostel Facilities

To ensure that the economically poor students belonging to the Backward Classes, Most Backward Classes and Denotified Communities who live away from the schools continue their studies without any impediment, they are provided with free hostel facility nearer to the educational institutions. They get free food and accommodation in these hostels. There are 1257 hostels for

18. Department of Backward Classes, Most Backward Classes and Minorities, Welfare Department, 2012.

Backward Classes, Most Backward Classes and Denotified Communities functioning in the State from 2011-12. Of these 701 hostels are administered by the Director of Backward Classes Welfare and 556 hostels are administered by the Director of Most Backward Classes and Denotified Communities with a sanctioned strength of 76614 boarders to stay in these 1257 hostels[19].

Table 5.13 : HOSTEL FACILITIES (2013-14)

S.No	Block	No. Of Schools	Total Numbers of Students	No. Of students in Hostel
1	Ammapettai	91	7819	274
2	Anthiyur	105	7728	668
3	Bhavani	100	13587	216
4	BhavaniSagar	84	6610	307
5	Chennimalai	70	3286	32
6	Erode	99	15660	91
7	Gobichettipalayam	92	5782	91
8	Kodumudi	77	4215	115
9	Modakkurichi	120	7793	223
10	Nambiyur	95	6540	312
11	Perundurai	114	8525	102
12	Sathyamangalam	85	7019	405
13	Thalavadi	68	3833	643
14	Thukkanaickenpalayam	48	4672	72
	District	**1248**	**103069**	**3551**

Source: CEO,SSA

In addition to scholarship facilities, the state also provides free Hostel facilities for SC/ST and most backward class students of the total enrolment, only 3 percent of the students were provided with hostel facilities. Most of the beneficiaries are male students. Of the total beneficiaries, only 0.73 percent of the girls stay in hostel. This clearly shows that parents are reluctant to allow their girls to stay in hostel and pursue their higher studies. Still there exists gender disparity in terms of allowing girls to stay away from home.

Higher Education

India has one of the largest higher education systems in the world, and has been witnessing healthy growth in its number of institutions and enrollment in the last few decades. The number of universities has grown more than six times in the last four decades. India has more than 33,000 colleges with one-third of the colleges having been set up in the last five years. Student enrollment in HEIs

19. Department of Backward Classes, Most Backward Classes and Minorities, Welfare Department, 2012.

has grown 12 times in the last four decades (2 percent in 1970 to 29.5 percent in 2012). GER in higher education has reached close to 18% in 2011–12. India (25.9 percent) ranks second in the world after China (29.3 percent) in terms of enrollment of students in higher education institutions.

In India, there is wide disparity in the GER of higher education across states (47.9% in Delhi and 9% in Assam) and the GER (30% in urban areas and 11.1% in rural areas) in urban and rural areas, and gender (15.2% for females and 19% for males) -and community-wise (14.8% for OBCs, 11.6% for SCs, 7.7% for STs and 9.6% for Muslims).

TABLE 5.14: HIGHER EDUCATION

S.NO	District	Arts and Science Colleges		Engineering Colleges		Polytechnics		Other Institutions		Total	
		No	Students	No	Students	No	Students	No	Students	No	Students
1	Erode (2001)	12	13763	7	8289	9	3934	14	1522	42	27508
	Erode (2011)	18	30954	12	29374	10	11063	38	5403	78	76794

Source: Erode district Statistical Handbook - 2011-12

Total enrolment of students in regular mode in higher education institutes in India is around 241.8 lakhs, with 55.7% male and 44.2% female enrolments. Tamil Nadu's GER ratio in Higher Education is 32.9 percent with 18 lakh students. Tamil Nadu performs well in this regard being ranked fourth in India even in terms of enrolments (7.4% of total). Of this scenario, the district's contribution in terms of GER is only up to 4.2 percent. Higher enrolment was found to be in the arts and science and engineering stream. The district could focus the untapped potential by establishing suitable number of institutions across regions and making it accessible to all, providing equal opportunity for all sections of society to participate in higher education and provision of suitable infrastructure, trained faculty and effective pedagogy in higher education institutions.

Box 5.2 Issues relating to Higher Education in Thalavadi Block

Thalavadi is a hilly area in Erode district. It is a separate block and it is identified as a backward block by the state government. This is a block, which mainly depends on agriculture for the livelihood and agriculture is the major occupation in this block. Almost 75 percent of this block is covered by thick forest and it is not a surprise to witness animals in their day-to-day life. This block is situated in the Tamil Nadu and Karnataka state borders. Some places of this block are in Tamil Nadu and some of the other parts are to be reached, crossing the Karnataka state (i.e. one may have to travel through Karnataka state to reach other places of the Thalavadi block). Every year, nearly 58 percent of students pass through their higher secondary classes and aspire to do their higher educations. After they finish their higher secondary, they have to go to plains of Erode district, in order to join in a college and continue their higher studies. Or they may have to go to Karnataka for their studies. If they go to colleges in Tamil Nadu, they find no problem in seeking their degree. But when they pursue their further education in Karnataka, after the completion of the course, the course is not recognized by the people in Tamil Nadu i.e., either by industries or even the government is not recognizing their degrees and are not qualified for applying to any job. This is a great hindrance for the aspiring students and they don't want to continue their higher studies. This needs a special attention of the government and the concerned officials may have to look into the matter and try to settle the issue.

Summary

The above analysis suggests that Erode district fares reasonably well, in the education front, in terms of indicators such as female literacy, girls enrolment at primary, upper primary and secondary education, transition, scholarship and infrastructural facilities. The literacy rate of the district has been increasing progressively and is performing much better. The 2011 census recorded literacy rate of 63 percent, up from 55 percent in 2001. Male literacy rate grew from 64 to 71 percent and female literacy from 46 to 56 percent in the same year. Yet, the district has to derive some strategic advantage in upbringing the 46 percent illiterates to acclaim any significant achievement in literacy.

The district is progressively increasing the Gross Enrolment Rate (GER) through effectively bringing the children into school. The GER is in increasing trend and the district has to pave out ways to be ahead of 100 percent. Strategies should be devised to help these blocks break through their historical backwardness and achieve universal enrolment. The government intervention programmes like SSA, Compulsory Education Act, and DPEP programme have caused a higher percent of GER and transition rate from primary to upper primary and thereby to secondary education.

Still a small percentage of dropouts occurs at every stage due to poverty and low level of literacy rate of parents; support systems should be designed for such children as well as the teachers to help them attend school regularly. The infrastructure facilities available should also pave way for conducive learning environment. The district needs to make available basic infrastructure and teaching and learning material such as maps, charts etc., besides utilizing fully the existing infrastructure; improve quality of existing infrastructure in schools, for example functional blackboards; devise systems to assess and improve quality of teaching at the school level.

Programme of teacher training to achieve 'Joyful Learning' should be sustained. Text books to be redesigned with the child as the focus for joyful learning. Teachers of small schools should be given special training in multi-grade teaching to achieve high quality in teaching at the primary level. At the primary school level, parent–teachers association are not very active. There is a need for parents and teachers to get together frequently, so that the former may be counselled periodically on their children's education. Innovative methods (such as village education committees) should be put in place to empower village communities to act within the ambit of public provisioning of primary education. The district has to pay attention on getting education for all and strive much harder to attain and sustain higher levels of quality in all levels of education.

CHAPTER 6

GENDER

Introduction

The word 'gender' refers to the socio-economic description of man and woman-the way societies discriminate men and women and assign them social roles. The distinction between sex and gender was introduced to deal with the general tendency to attribute women's subordination to their anatomy. For ages, it was believed that the different characteristics, roles and status accorded to women and men in society are determined by sex that are natural and therefore not changeable. Gender is seen closely related to the roles and behaviour assigned to women and men based on their sexual differences. As soon as a child is born, families and society begin the process of gendering. The birth of the son is being celebrated while the birth of a daughter filled with pain; sons are showered with love, respect, better food and proper healthcare .Boys are encouraged to be tough and outgoing but girls are encouraged to be homebound and shy. All these differences are gender differences and they are created by society. Gender inequality is, therefore, a form of inequality which is distinct from other forms of socio-economic inequalities.

Box no. 6.1 Gender Inequality

Human Development Report can be flawless only when it disentangles gender inequalities in human development, analyses the strength and weakness of efforts to address these and suggests possible strategies to bridge the gender gap in the future. The performance with respect to female literacy, female IMR, female life expectancy and fertility rate shows that the status of women in the district is better. However, while women have improvements in absolute levels of literacy, enrolment and life expectancy, their position vis-à-vis men has remained unchanged (for example, persistent gender gap in literacy) or even worsened in many ways (for example the declining sex-ratio). This part of the report focuses on the Gender Inequality in the district of Erode.

Gender equality is recognised as a key human development issue because of its intellectual proximity to the goals of universal human rights and social justice. In any development framework, where women constitute half the stock of human resources and also represent half of the human development potential, efforts to promote greater equality between women and men also become important means of contributing to overall human development within society. The gender based division of roles, responsibilities, resources and power are in turn determined by a variety of institutions: family, marriage, religion, schools, market and State. The rules of these institutions vary from country to country, state to state and community to community.

Based on the analysis it seems that the district fares reasonably well and in fact got improved in terms of indicators such as female literacy, girl's enrolment, female life expectancy, and women's access to basic amenities. The MMRs and total fertility rates are also lower. In terms of political participation, women are faring sensibly well. While the absolute condition of women in Erode is better than that in most district s in the state, still the position of women vis-à-vis men with respect to literacy, education, work force participation, wages, asset ownership and political participation has not improved. The condition of women seems particularly poor in four blocks: Thalavadi, Thukkanaickenpalayam, Nambiyur and Perundurai Chennimalai, Erode Municipal Corporation and Kodumodi blocks seem to be doing well in terms of Gender equality. Hence each of the blocks requires attention through different kinds of strategies.

TABLE NO.6.1.COMPARATIVE STATUS OF WOMEN IN ERODE DISTRICT

S.No	Particulars	District
1	Total Number of women	1121876
2	Percentage in Total population	49.82%
3	Sex-ratio	993
4	Female literacy rate	56%
5	School Enrollment	88550
6	MMR	64%
7	% of women worker in agriculture sector	50.71%
8	% of women in Non-Agri. Sector	22.96%

Source: Census Data, 2011

The percentage of women in total population accounts to 49.82% in the Erode district, and for 1000 men there are 993 women in the district which is regarded as the Sex-ratio. Literacy rate for female in the district is recorded to be 44.51%. The percentage of women in non- agri sector in Erode district was 22.96%.

Status of women in literacy, employment and society

It is the status of women in literacy and employment that indicates economic empowerment of women in the society. The status of women is thoroughly connected with their economic position, which in turn depends on opportunities for participation in economic activities. Education to women is the most powerful instrument of changing their position in the society .It also brings about reduction in inequalities and also acts as a means to improve their status within the family.

In order to encourage education of women at all levels and to dilute gender bias in the provision and acquaintance of education, schools, colleges were established exclusively for women in the district . To bring more girl children, especially from marginalized BPL families, into the main stream of education, Government has been providing a package of concessions in the form of free supply of books, uniform, boarding and lodging, clothing for hostellers, mid-day meals, scholarships, free bicycles and so on.

Education along with participation of women in workforce has been universally recognised as an important element in the adoption of small family norms, which is essential for family planning. There has been a substantial progress in the entry of women in all sectors of employment in the district.

TABLE NO.6.2. LITERACY RATE AND WORK PARTICIPATION RATE OF MALE AND FEMALE (2011)

Blocks	Female Literacy (in %)	Male Literacy (in %)	Female Worker Participation Rate (in %)	Male Worker Participation Rate (in %)
Ammapet	49	66	52	65
Anthiyur	49	64	49	64
Bhavani	58	73	43	63
Bhavanisagar	56	70	44	66
Chennimalai	57	76	46	65
Erode	63	76	39	65
Gobichettipalayam	60	75	41	66
Kodumudi	60	77	52	68
Modakurichi	59	75	47	67
Nambiyur	51	69	51	69
Perundurai	60	75	42	65
Sathyamangalam	52	66	45	65
Thalavadi	48	62	44	63
Thukkanaickenpalayam	53	67	50	68
Erode M.Corp.	72	81	25	62
District	56.34	71.44	41	65

Source: Census Data and District Census Handbook-2011

More of agricultural labourers are women and more of industrial labourers are men. This is based on availability, willingness, and skill requirements. It is found from the statistics, 50.71% of women workers are in agricultural sector and 22.96% are in non-agricultural sector. Looking at the inter-block variations, the female literacy rate is too low in the blocks like Thalavadi, Ammapet and Anthiyur because of the reason that these areas are downtrodden and backward. This reveals that the people in these blocks are not exposed to the educational development. Not just the female literacy but also the male literacy is found to be low in these blocks.

Pattern of Literacy and Enrolment

A common characteristic of the development process noted in rural studies in many parts of the state is that the males in rural society are better placed to leverage the new opportunities created by development. Because of the premium placed on the primacy of males in a patriarchal society, this applies equally to human development, as well as to purely economic opportunities, leading to the widening of gender differentials between men and women. Because of the eventual impact it has in improving the skills and potential earning abilities of its recipients, school education is among the most important constituents of the human development process.

TABLE NO.6.3. PRIMARY SCHOOL ENROLLMENT RATIO

S.NO	BLOCK	Primary Enrollment Ratio (2012-13)			Primary Enrollment Ratio (2013-14)		
		Boys	Girls	Total	Boys	Girls	Total
1	Ammapettai	99.39	99.03	99.05	100.00	100.00	100.00
2	Anthiyur	98.80	98.72	98.88	99.00	99.00	99.00
3	Bhavani	99.58	99.25	99.31	100.00	100.00	100.00
4	Bhavanisagar	99.87	99.81	99.80	99.00	100.00	99.50
5	Chennimalai	98.37	98.53	98.49	99.00	100.00	99.50
6	Erode	99.21	99.35	99.29	100.00	100.00	100.00
7	Gobichettipalayam	99.08	99.27	99.18	100.00	100.00	100.00
8	Kodumudi	99.20	98.53	98.39	100.00	100.00	100.00
9	Modakkurichi	99.88	99.97	98.94	100.00	100.00	100.00
10	Nambiyur	99.32	99.12	99.22	99.00	99.00	99.00
11	Perundurai	99.43	99.46	99.44	100.00	100.00	100.00
12	Sathyamangalam	98.56	99.16	98.96	99.00	99.00	99.00
13	Thalavadi	99.10	99.14	99.12	99.00	100.00	99.50
14	Thukkanaickenpalayam	99.95	99.98	99.97	99.00	99.00	99.00
15	Erode M Corp.	99.59	99.67	99.62	100.00	100.00	100.00
District Average		**99.67**	**99.63**	**99.64**	**99.53**	**99.73**	**99.63**

Source: CEO, SSA

However, the spread of school education across genders is generally uneven because of the stereotypical attitudes that characterise patriarchal society, and little importance is attached in the early stages of the human development process to the education of girls. The resulting gender differentials in school education generally show up in two forms (i.e.,) lower enrolment of girls overall, and higher rates of educational dropout from the school system for girls at every stage. These days there is more awareness among both urban and rural people on the importance of education for their children. Hence the enrollment rate for girls is fairly good. Both in terms of initial enrollments and decelerated dropouts, overall attainment of school education is in rational terms. Primary enrollment ratio is comparatively better in the year 2013-14 than in the year 2012-13 especially the girls' primary enrollment ratio is found to be increased considerably in 2011 compared to that of 2001.

There is not much of inter-block variations in the primary enrolment ratio in the district. Looking at the upper primary enrollment ratio, we find that blocks like Kodumudi and Thukkanaickenpalayam have lower upper primary enrollment ratio of girls for the year 2012-13 where as it has increased to 100% and 99% respectively in the year 2013-14. The State Government has adopted several policy measures to address gender-specific barriers to girls' education. Perhaps every block has a women's resource centre, which acts as a venue for a 10–15 day residential training courses

for women (including SHGs) and girls who are interested in strengthening their functional literacy skills and also offer inputs for economic, social and political empowerment. It could, in other words, act as an education centre for women.

TABLE NO.6.4. UPPER PRIMARY SCHOOL ENROLLMENT RATIO

S.NO	BLOCK	Upper Primary Enrollment Rate (2012-13)			Upper Primary Enrollment Rate (2013-14)		
		Boys	Girls	Total	Boys	Girls	Total
1	Ammapettai	99.49	99.49	99.05	100.00	99.00	99.50
2	Anthiyur	99.40	99.41	98.88	99.00	99.00	99.00
3	Bhavani	99.38	99.38	99.31	99.00	100.00	99.50
4	Bhavanisagar	99.13	99.21	99.80	99.00	100.00	99.50
5	Chennimalai	99.03	98.59	98.49	99.00	100.00	99.50
6	Erode	99.85	99.66	99.29	100.00	100.00	100.00
7	Gobichettipalayam	99.25	99.57	99.18	99.00	100.00	99.50
8	Kodumudi	97.70	96.78	98.39	99.00	100.00	99.50
9	Modakkurichi	99.34	99.51	98.94	100.00	100.00	100.00
10	Nambiyur	99.25	98.95	99.22	99.00	99.00	99.00
11	Perundurai	99.90	99.80	99.44	99.00	100.00	99.50
12	Sathyamangalam	99.26	98.91	98.96	99.00	99.00	99.00
13	Thalavadi	99.50	99.48	99.12	99.00	99.00	99.00
14	Thukkanaickenpalayam	98.45	97.95	99.97	99.00	99.00	99.00
15	Erode M.Corp.	99.91	99.71	99.36	100.00	100.00	100.00
District Average		**99.26**	**99.09**	**99.16**	**99.27**	**99.60**	**99.43**

Source: CEO, SSA

With regard to access to schools, specific focus should be made on increasing the proportion of women teachers at middle, high school, and higher secondary school levels, with greater focus on blocks where the gender balance is low. Establishing women-only libraries and reading rooms, posting women as librarians (part-time or full-time), locating libraries in places accessible to women are possible strategies to enable girls and women to gain access to knowledge.

TABLE NO.6.5.GENDER -WISE LITERACY RATE

BLOCK	Literacy rate					
	2001			2011		
	Male	Female	Total	Male	Female	Total
Ammapettai	59.20	38.58	49.26	65.94	48.62	57.47
Anthiyur	58.29	39.18	49.01	64.08	48.64	56.47
Bhavani	66.64	49.00	57.97	73.05	57.81	65.53
Bhavanisagar	64.92	46.75	56.05	69.91	55.57	62.78
Chennimalai	71.06	48.98	60.25	75.88	57.34	66.83
Erode	77.43	64.38	71.03	75.99	62.81	69.42
Gobichettipalayam	68.12	51.21	59.70	74.55	60.47	67.44
Kodumudi	72.97	52.18	62.62	77.32	59.80	68.48
Modakkurichi	67.53	48.42	58.11	74.57	58.96	66.74
Nambiyur	61.33	40.68	51.08	68.67	50.62	59.61
Perundurai	67.30	49.82	58.64	74.89	60.35	67.61
Sathyamangalam	59.26	43.13	51.32	65.99	51.97	59.03
Thalavadi	51.14	33.73	42.45	62.29	47.54	54.88
Thukkanaickenpalayam	61.47	43.36	52.52	67.33	53.00	60.11
Erode Municipality Corporation	NA	NA	NA	81.15	71.66	76.42
District Average	**64.76**	**55.57**	**55.72**	**71.44**	**56.34**	**63.92**

Source: Census Data

Work participation trends and Marginalisation of women's work

The work participation rate indicates to a great extent the economic empowerment of women in the society. The status of men and women is intimately connected with their economic position, which in turn depends on opportunities for participation in economic activities. There has been a considerable improvement in the entry of workers in all sectors of employment in the district.

Work participation rates [WPRs] are commonly used as a measure of the economic roles of men and women is the society. Since much of the work they do is unpaid, WPRs of women in the state is generally low compared to male WPRs in both rural and urban areas. Over time, there has been some increase in rural WPRs for women, mainly because of their increasing participation in irregular or marginal work. In Ammapet, Kodumodi, Nambiyur and Thukkanaickenpalayam, the rate of female participation rate is over and above 50%.

One of the most striking phenomena of recent times has been the extent to which women have increased their share of the labour force; the increasing participation of women in paid work has been driving employment trends and the gender gaps in labour force participation rates have been

shrinking. While liberalisation may have increased the employment opportunities, it has slightly reduced the quality of employment, especially for women.

In the district of women contribute to economic activity in several ways. As home-makers and mothers who provide unremunerated services towards caring for their family, they contribute indirectly to the work productivity of family earners. Additionally, they contribute directly to production by participating personally in the work process as paid labour, or by supporting and supplementing the direct work contributions of family earners through additional unpaid labour.

In practice, only the second category of paid labour services enters the national accounts as 'income received' against work. Particularly in rural areas however, where agricultural or artisanal activity is carried out collectively by family labour, women contribute considerable amounts of unpaid labour towards tending livestock and crops and also to crop harvesting and post-harvest activities. While not classified as activities that generate personal income, the unpaid labour contributions of women enter the practical definition of work and any woman so engaged is notionally a worker. However, since her work contributions do not result in direct income for her, she is not classified as a worker under the Census. Thus a woman marginal worker under Census definition will have secured less than six months of paid work in the year immediately preceding the Census, while a woman main worker will have secured more than this quantum of paid work.

In general, because of their gender-typical roles as care takers and home-makers, many women do not enter the Census definition of 'workers' at all. Of those that do, many perform marginal rather than main work, because they continually have to balance family commitments against livelihood opportunities. Under such rigid definitions, many women are therefore perceived as being unproductive and idle, since their participation in paid work is much lower than that of their male counterparts. Among the more affluent sections of society that reside in urban areas, the economic pressure on women to go out and seek paid work is much less. Therefore their participation in paid labour activity is much less than that of poorer women who reside in rural areas.

Total women workers account to be around 43% out of total women population in the district. This proportion has to be improved for ensuring better and all round economic empowerment. Female work participation rate in non-agri sector is low in all blocks compared to that of total female work participation rate except in Erode Municipal Corporation block which is around 86%.

TABLE NO.6.6.WORKER PARTICIPATION TRENDS OF ERODE DISTRICT (2011)

S.No	Blocks	Male Worker Participation Rate	Female Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector (in %)	Wages Paid to Female for Agricultural Work (in Rs.)
1	Ammapet	65	52	16	135
2	Anthiyur	64	49	27	132
3	Bhavani	63	43	43	125
4	Bhavanisagar	66	44	38	121
5	Chennimalai	65	46	51	119
6	Erode	65	39	49	107
7	Gobichettipalayam	66	41	37	119
8	Kodumudi	68	52	22	110
9	Modakurichi	67	47	26	127
10	Nambiyur	69	51	27	131
11	Perundurai	65	42	42	113
12	Sathyamangalam	65	45	24	117
13	Thalavadi	63	44	11	75
14	Thukkanaickenpalayam	68	50	22	123
15	Erode Municipality Corporation	62	25	86	107

Source: District Census Handbook-2011

Access and control over resources

No district (or state) level statistics are available on the ownership of land. Women who own land will be predominantly those heading households or would have been the only child of their parents. Again no gender-disaggregated statistics are available in this regard. The patrilineal customary system of inheritance, patrilocal system of marriage, the lack of knowledge of women of their legal rights and their dependence on their male siblings for support in the event of marital conflict all come in the way of women claiming their rights.

As regards access to markets, it is most often the husband who is involved in the marketing of products/goods in the case of agriculture, family business or service, and as a result women lack knowledge of markets which includes information and dynamics of pricing, quality, marketing channels, etc.

SHGs have a revolutionary role in aiding women to mobilize financial resources, to increase the total family income and to utilize bank loan and government welfare schemes in more effective way and thereby increases the total family income as well. By 2011, over 5563 exclusively women's

SHGs were operating in the district with a membership of over 72000 women. And the credit availed is averaged to be around Rs150000 per group. Women's control over their income is higher when they are engaged in wage labour or where marketing is controlled by them (for example milk vending, flower vending, fish vending), and less so when marketing is controlled by the men. However, where the women have some control over the money they earn, they usually spend the bulk of it on the family's basic needs, especially food, healthcare and education, unlike their husbands. Moreover, the issue of control over household income is a crucial factor affecting nutritional levels of women (in particular pregnant women), infants and children, and the well-being of the family in general.

Box.no. 6.2 Self Help Groups in the district

Self Help Groups are small homogenous groups consisting of 12-20 women from BPL families voluntarily organised to promote savings. The specific objectives of SHGs are to:

- Improve saving habits among women;
- Increase the total family income;
- Fulfil the economic needs through self-employment of women;
- Utilize bank loan and government welfare schemes;
- Help the members to escape from the clutches of moneylenders; and
- Mobilize financial resources.

The SHG movement has emerged as a powerful and vibrant movement spread over the length and breadth of the State. In Erode district a good number of self-help groups and considerable number of members are in group which enables the group members who are poor women, to mobilize financial resources through their own savings and lend the same amongst themselves to meet the credit needs of their members. By 2011, over 5563 exclusively women's SHGs were operating in the district with a membership of over 72000 women. And the credit availed is calculated to be around Rs 150000 per group.

S. No.	Block	Number of Self Help (2011)	Number of Self Help (2013)	Number of members (2011)	Number of members (2013)	Credit availed (Rs. Lakhs) 2011	Credit availed (Rs. Lakhs) 2013
1	Ammapettai	227	54	2951	702	337.07	73.39
2	Anthiyur	754	158	9802	2054	1211.00	295.06
3	Bhavani	856	358	11128	4654	1395.01	521.01
4	Bhavanisagar	437	163	5681	2119	749.12	496.25
5	Chennimalai	298	177	3874	2301	417.09	365.35
6	Erode	647	706	8411	9178	965.33	1640.08
7	Gobichettipalayam	530	112	6890	1456	768.14	220.55
8	Kodumudi	296	134	3848	1742	426.77	414.79

9	Modakkurichi	387	193	5031	2509	556.65	362.23
10	Nambiyur	307	239	3991	3107	314.68	345.31
11	Perundurai	200	216	2600	2808	245.74	417.77
12	Sathyamangalam	204	113	2652	1469	441.78	381.76
13	Thalavadi	209	135	2717	1755	479.94	443.07
14	Thukkanaickenpalayam	211	200	2743	2600	358.46	554.72
District		5563	2958	72319	38454	8666.78	6531.34

Source: P.O.Mahalir Thittam,Erode.

SHGs in the district have enabled a tremendous physical mobility among women, increased their bargaining capacities, self-confidence, life skills in areas such as accounts keeping, money management, savings and credit, awareness about health, nutrition, immunization, education, and so on. They have also enabled households to reduce dependence on local moneylenders by providing an optional pool of resources through the group's common fund, generated out of regular savings and internal rotation. Further, SHGs in the district have empowered women to cope with important social problems like alcoholism, domestic violence, abandonment, dowries and female infanticide. The initial reluctance of male members has been transformed into support for the reason that the entire household benefits from it. It was the status of the year 2011 but the number of self-help group, number of members in each group have gone drastically down in the year 2013 because of irregular repayment of the credits. And it has resulted in drastic downfall of the availing of credit as well.

Trend in political participation

Political equality to all persons regardless of birth, sex, colour, etc. is one of the basic premises of democracy. Political equality includes not only equal right to franchise but also more importantly, the right to access to the institutionalised centres of power.

Thus, political participation of women means not only using the right to vote but also power sharing, co-decision making and co-policy making at all levels. The active participation of women in political sphere is integral to empowerment of women and helps to build a gender-equal society as well as to speed up the process of national development. Women's political empowerment is premised on three fundamental and non-negotiable principles: (a) the equality between women and men; (b) women's right to the full development of their potentials; and (c) women's right to self-representation and self-determination.

With respect to political participation in local bodies, the situation is more favourable in terms of women's participation. The 73rd and 74th Constitutional Amendments in 1992, which went a long way in re-activating decentralized democracy in India, also made it mandatory to reserve one-third of

seats in local bodies for women. This set the stage for serious participation by women in the political process in India, not as passive voters or party workers alone, but also as candidates. When the Erode district is concerned the percentage of female participation in membership of women in state assembly and local bodies, out of 15 blocks, it is substantial in the blocks of Chennimalai, Nambiyur and Sathyamangalam. There is no significant difference in the percentage of participation of women in various blocks of the district s.

TABLE NO.6.7 – MEMBERSHIP OF MALE AND FEMALE IN STATE ASSEMBLY AND LOCALBODIES

Sl. No	Name of the Block	Number of Male	Number of Female	% of female participation
1	Ammapettai	178	104	36.88
2	Anthiyur	145	78	34.98
3	Bhavani	177	99	35.87
4	Bhavanisagar	130	75	36.59
5	Chennimalai	145	95	39.58
6	Erode	109	62	36.26
7	Gobichettipalayam	203	110	35.14
8	Kodumudi	153	86	35.98
9	Modakkurichi	204	122	37.42
10	Nambiyur	119	77	39.29
11	Perundurai	233	135	36.68
12	Sathy	145	93	39.08
13	Thalavadi	74	46	38.33
14	Thukkanaickenpalayam	106	65	38.01
15	Erode M Corp.	38	23	37.70

Source: Local Bodies, Revenue Department Records

Community attitudes and social prejudices if any affecting women and girl children

Communal compositions that subordinate the roles of women within traditional communities are often enforced through the open exercise of power by males, both in natal and marital relations. The unfortunate consequences that are faced personally by women include physical and mental cruelty, domestic and dowry-related violence, bigamy and desertion, sexual harassment and abuse at home and in the workplace, as well as specific crimes against women, including the crime of rape. Since many such events especially those that occur in the privacy of the marital home, find tacit approval rather than condemnation within society, they are not treated as offences under law. Reducing violence against women matters for development. There are still number of vulnerable cases that are happening in and around the district which show the lack of proper and complete social

security that exist in the place especially for women and girls even in this so called 21st century. It may be noted that even such records filed, probably represent the tip of the proverbial iceberg, since a large number of crimes where women are victims go unreported, particularly when the victim is silenced by family concerns, such as in rape. The arrest records against rape offences also reveal that in many cases, more than one offender is involved, demonstrating tangibly that rape is the exercise of male power rather than merely a sex offence. A more investment is needed in the district on evaluating programmes to create stronger evidence of what works to prevent and reduce violence against women. Importantly, there is a need to improve the quality and coverage of data, on all forms of violence and attitudes to enable better monitoring of change over time.

Summary

The analysis indicates that the district is on track in meeting the targets relating to gender equality. The female literacy, female IMR, female life expectancy and fertility rate reveal that the status of women in the district is satisfactory. Even though the women have made progress in levels of literacy, enrolment and life expectancy, their stance comparing to men has remain impassive (eg. enduring gender gap in literacy).

CHAPTER 7

SOCIAL SECURITY

Introduction

In our country, the joint family system took care of the social security needs of all the family members. Traditionally the family has been the informal social system and the joint families live together, with members taking responsibilities for those who are in need. Over the years, government has introduced numerous social security measures. Now protection against the vulnerabilities associated with child labour, disability, caste and gender-based discrimination and old age people are available and considered as one of the keys to human development. Social security is essential for reducing social and economic inequalities among the people. Social security is an instrument of social and economic justice as it works for horizontal and vertical redistribution of incomes in the society. Social security is not new in India. It was practised during the ancient times India. In those days, Kings doled out social assistance to the old, sick, widows and orphans and the blind and disabled. The state bore the primary responsibility for developing appropriate system for providing assistance to its people. This chapter covers the demographic profile of the aged, financial assistance to differently abled, marriage and maternity assistance provided to women and crime against women.

Many households in rural areas at the bottom of the income distribution in India are very poor and could not save for their old age. Available resources are used to meet daily consumption needs. Even at slightly higher income levels, there is likely to be little demand for savings and pension instruments that require a commitment of several decades. The absolute poor cannot be expected to participate in long term savings schemes for old age and they do not. The poverty in rural areas for older persons is increasing and needs attention. Hence rural poor would need social security in large measure. The problems of women are exacerbated by a lifetime of gender based discrimination. It is compounded by other forms of discrimination based on class, caste, disability, illiteracy, unemployment, and marital status. Women experience proportionately higher rates of chronic illness and disability in later life than men.

Demographic profile of the Aged in the District

TABLE 7.1 DEMOGRAPHIC PROFILE OF AGED IN DISTRICT

Sl. No	District	Total Population 2011	Population aged above 60		Total Population 2001	Population aged above 60	
			Male	Female		Male	Female
1	District	2251744	145301	146950	2016582	147014	140075

Source: Census Data 2001 & 2011

Erode district has a total population of 22, 51,744 as per 2011 census. Out of this, 145301 male are aged above 60 years which constitute 6.45 percent. Out of the total female population of the district, 146950 women are above 60 years and they constitute 6.52 percent of total population.

Financial Security

TABLE 7.2 FINANCIAL ASSISTANCE TO OLD AGE PEOPLE

Sl. No.	Category	Sanctioned			
		Total	Female	Male	Below 80 years
1.	Indira Gandhi National Widow Pension Scheme	12828 (480023)*	12822 (479872)*	6 (151)*	12828 (479990)*
2.	Indira Gandhi National Old Age Pension Scheme	38841 (1224181)*	24621 (778008)*	14220 (446173)*	34468 (1166056)*
3.	Indira Gandhi National Disability Pension Scheme	2311 (50802)*	1024 (18324)*	1287 (32478)*	2311 (50660)*

Source: www.nsap.nic.in*State level

Since the joint family system is undergoing radical change in favour of nuclear families even in villages, the social and economic vulnerability of the aged person is on the increase. The government of India has adopted various mechanisms to address this issue. At present, this problem is addressed through the old age pension scheme jointly implemented by the state and central governments. The old age persons enrolled in the scheme receive Rs1000 per month. In addition, to the destitute widows, enrolled in the scheme receive Rs.200 per month. In Erode district , 12828 persons receive financial assistance under Indira Gandhi National Widow Pension Scheme which constitute 2.67 percent compared with state level (480023), whereas 38841 persons receive financial assistant under Indira Gandhi National Old Age Pension Scheme, which constitute 3.17 percent compared with State level (1224181). 2311 people receive financial assistance under Indira Gandhi National Disability Pension scheme, which constitute 4.54 percent compared with state level (50802).

Box No 7.1 National Social Assistance Programme

The National Social Assistance Programme (NSAP) was introduced by Union Government from 15th August 1995, a significant step towards the implementation of the Directive Principles enshrined in article 41 of the Constitution. The objective of National Social Assistance Programme is to provide social protection to the Widows, Aged and Disabled Persons.

The features of the schemes are:

- Indira Gandhi National Old Age Pension Scheme (IGNOAPS) (Rs. 200/- per month per beneficiary aged 60 years or older and belonging to the BPL family).
- Indira Gandhi national Widows Pension Scheme (IGNWPS) (Rs. 200/- per month per beneficiary aged between 40 to 59 years of age belonging to the BPL Family).
- Indira Gandhi National Disability Pension Scheme (IGNDPS) (Rs. 200/- per month per beneficiary aged between 18 to 59 years and belonging to the BPL Family).
- National Family Benefit Scheme (NFBS) (Rs. 10,000 to the bereaved household where the bread winner aged 18 and 64 years)
- Annapurna: under this scheme 10 kg of food grains per month are provided free of cost to senior citizens, though eligible for old age pension remained uncovered.

Source: www.nsap.nic.in

TABLE 7.3 FINANCIAL SECURITY OF THE AGED (2013-2014)

Sl. No	Category	Coverage 2013-14
1	OAP	539209
2	Destitute widows	74431
3	Disabled persons	82190

Table 7.3 exhibits the financial assistance given for the aged during the year 2013-2014. During the year 2013-2014, 539209 persons received old age pensions. Further 74431 destitute widows and 82190 disabled persons have also benefited from the state government.

Financial Security

The Government of Tamil Nadu is implementing the following Pension schemes, through Revenue Department, to provide social security to the old aged / destitute persons in the State who neither have any means of subsistence nor any relative to support them.

i) Old Age Pension (Normal) Scheme

Under this scheme, pension was granted to all old aged persons who neither have any means of subsistence nor any relative to support them and is 65 years and above (60 years in case of destitute,

who are incapacitated to earn their livelihood due to blindness, leprosy, insanity, paralysis or loss of limb).

ii) Destitute Physically Handicapped Pension Scheme

Physically handicapped destitute persons aged 45 years and above whose permanent disability is 50 per cent or more are eligible for this pension. Patients suffering from leprosy are also covered by this scheme. Entire expenditure under this scheme is borne by the State Government.

iii) Destitute Widows Pension Scheme

Destitute widows of any age who have not remarried are benefitted under this scheme even if they have legal heirs aged 18 years and above. Other conditions applicable to Old Age Pension (Normal) scheme are applicable to this scheme also. An amount of Rs.400/- is paid as pension under this scheme. Entire expenditure under this scheme is borne by the State Government.

iv) Destitute Agricultural Labourers Pension Scheme

This scheme covers Destitute Agricultural Labourers aged 60 years and above. Conditions applicable to Old Age Pension (Normal) scheme are applicable to this scheme also. An amount of Rs.400/- per month is paid as pension under this scheme. Entire expenditure under this scheme is borne by the State Government.

v) Destitute/Deserted wives Pension Scheme

The scheme of Old Age Pension has been extended to benefit deserted wives / destitute women who are not less than 30 years of age and who are deserted by their husbands for a period of not less than five years / obtained legal separation certificate from competent court of law. Deserted wives having legal heirs who have completed 18 years of age are also eligible for pension under this scheme. Entire expenditure under this scheme is borne by the State Government.

Differently Abled

Human rights are universal and civil, political, economic, social and cultural rights belong to all human beings, including differently-abled persons. The differently-abled persons are entitled to realization of all human rights and fundamental freedom on equal terms with other members in society, without discrimination of any kind. As per the 2001 census report, the population of the differently-abled persons in the Erode district is 66,695 which constitutes 4.06 percent of the total

population. (Directorate of Census Operations, Tamil Nadu).The Tamil Nadu Government has implemented various social security schemes to its differently abled persons. These are: personal accident relief for differently abled persons, financial assistance to meet the funeral expenses of differently abled persons, financial assistance on the natural death of differently abled persons.

Assistance for Marriage, Assistance for Delivery, Miscarriage of Pregnancy, termination of pregnancy to female differently abled person and assistance for purchase of spectacles by a differently abled person. Furthermore, Pudhu Vaazhvu project is an empowerment and poverty alleviation project implemented by government of Tamil Nadu with World Bank assistance. The target population of this project is poor households, the most vulnerable section including the physically challenged and marginalized communities. In Erode district, 2311 differently abled persons received assistance under Differently Abled Schemes. The following table gives us a broad idea of the assistance provided to the differently abled people in the district.

TABLE 7.4 ASSISTANCE TO DIFFERENTLY ABLED

Categories	Male	Female	Total
Sex	1287	1024	2311

Source: District disabled rehabilitation officer

Box 7.2 Marriage and Maternity Assistance provided to women

Sl. No	Category	No. of women assisted during 2012-13	Number of women assisted during 2013-2014
1	MoovalurRamamirthamAmmaiyar Marriage Assistance	2479	2328
2	E.V.R. ManiyammaiNinaivu Widow Daughter Marriage Assistance	183	136
3	AnnaiTherasaNinaivu Orphan Girls Marriage Assistance	16	18
4	Dr. Muthulakshmi Reddy Ninaivu Inter Caste Marriage Assistance	10	40
5	Dr. Dharmambal Ammaiyar Ninaivu Widow Remarriage Scheme	5	5
6	Dr. Muthulakshmi Reddy Maternity Benefits	23539	14748
Total		26232	17275

The table 7.4 exhibits the details of schemes implemented by district welfare officers in 2013-2014. The Tamil Nadu Government is currently implementing five different types of marriage assistance schemes namely, Moovalur Ramamirtham Ammaiyar marriage Assistance, E.V.R ManiyammaiNinaivu Widow Daughter marriage Assistance, AnnaiTherasaNinaivyu Orphan Girl Marriage Assistance, Dr.Muthulakshmi Reddy Ninaivu InterCaste marriage Assistance, Dr. Dharmambal Ammaiyar Ninaivu Widow Remarriage Scheme.The limited percentage coverage of these schemes reveals that all persons in need of financial assistance from these schemes could not be provided. An analysis of Marriage and maternity assistance provided to women in Erode district reveals that the highest assistance is obtained under the Dr.Muthulakshmi Reddy Ninaivu Inter Caste marriage Assistance (23539), while it was the lowest in Dr.

Dharmambal Ammaiyar Ninaivu Widow Remarriage Scheme (5). During the year 2013-2014, 14748 women obtained maternity benefits under Dr. Muthulakshmi Reddy Maternity Benefits.

Crime against Women

Crime against women has been an area of high priority. Several measures have been undertaken to tackle this social menace affecting women at large. The incidence of reported crimes against women during 2013 are given below.

TABLE 7.5 CRIMES AGAINST WOMEN

Sl. No	Category	Number of cases (2012-13)	Number of cases (2013-2014)
1	Rape	14	14
2	Molestation	32	25
3	Kidnapping	31	26
4	Women Harassment	23	27
5	Dowry Death	1	-
6	Dowry Harassment	16	6
7	Cruelty by Husband & relatives	17	21
Total		134	119

Source: Police Department

In Erode district 134 cognizable crimes under IPC were committed in 2012-2013. The crime against women is without an exception. The incidence of crimes committed against women (134) registered in 2013 has shown an increase of 13.59 percent over 2012 (118) and it was lower than state average of incidence (184). The crime against women occurs in the forms of rape, molestation, kidnapping, women harassment, dowry death, dowry harassment, cruelty by husband and relatives, Kidnapping and abduction of women girls, female infanticide, female foeticide, wife battering, eve teasing, pornography and trafficking in women, and child marriage. These forms of violence occur in various institutional contexts: temples, workplace, schools and colleges, roads, hospitals, cinema theatres and even in prisons. Violence against women is largely under reported due to the tendency of society to the victim as well as the feeling that violence within the family is a personal issue. Therefore, the statistics on violence may be underestimated. The real magnitude of gender-specific violence may never be known in actual terms. During the year 2013-2014, none of the dowry deaths has been reported. Furthermore, compared with previous year crime against women has come down.

Summary

In the changing social and economic scenario, the joint family system is drastically undergoing a radical change. As a result, the vulnerability of the aged person has increased. In order to address this problem, the Government has introduced several schemes like Indira Gandhi Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS), Indira Gandhi National Disability Pension Scheme (IGNDPS), and National Family Benefit Scheme (NFBS) and Annapurna Scheme. Furthermore, in order to empower the women, the government has implemented several marriage and maternity assistance schemes. With the help of this social security schemes, Government will achieve the desired objectives.

CHAPTER 8

INFRASTRUCTURE

Introduction

Infrastructure provides a basic input for all-round socio-economic development of the rural areas. The provision and construction of roads and road links brings multiple socio-economic benefits to the rural areas and results in forming a strong backbone for the agro-based economy. The importance of the rural roads has been emphasized in various plan documents. In the 12th Five Year Plan also, it has been planned to provide all weather road connections to all the villages with a population of 1500 or above and 50 percent of the villages having a population between 1000-1500 persons. To accomplish this task, construction of nearly 1.30 lakhs kilometres of road length with an estimated cost of Rs. 3100 crores (in order to provide all weather road connection to additional 25,000 villages under the above criteria) has been proposed during the earlier plan period. Moreover the importance of providing rural roads can hardly be underestimated in the context of our economic and social goals. The impact of providing rural roads accrues in various ways resulting in numerous economic and social benefits and changes are briefly described in the following sections.

Road Transport

Road transport is quicker, more convenient and more flexible. It is particularly good for short distance travel as well as for movement of goods. In this connection, it is important to recognize the road system, which brings the villagers into contact with the towns and new ideas and the new system, which emanate from the towns. In fact, road construction and maintenance generate sizable employment opportunities, a factor that has assumed considerable importance with demographic expansion and the growth of the labour force. Road transport is of particular advantage to the farmers. Good roads help the farmers to send their product, particularly the perishable products like vegetables, quickly to the mandis and towns. Since the district s' economy is still largely an agrarian in character and the settlement pattern is rural oriented, roads constitute a critical element of the transportation infrastructure.

TABLE 8.1 – LENGTH OF ROADS (2013-14)

(In Kilometres)

ROADS	SURFACED ROADS				Unsurfaced Roads	Grand Total
	Cement Concrete	Bituminous	Water bound Macadam	Total		
Town Panchayat	232.323	856.324	64.336	1166.664	263.852	1430.516
National Highways	0	60.200	0	60.200	0	60.200
State Highways	0	321.253	0	321.253	0	321.253
Major District Roads	0	255	0	255	0	255
Other District Roads	0	891.846	0	891.846	0	891.846
Municipality	41.301	148.607	26.18	216.088	10.034	266.122
Village Panchayat Road	0.500	1592.608	436.517	2029.625	1038.295	3037.920
Panchayat Union Roads.	0.400	1091.510	105.400	1197.310	86.700	1284.010
Nabard and Village Roads	0	259.21	0	259.21	0	259.21
Erode Corporation	87.547	499.78	9.414	596.741	99.969	696.71

Source: 1.Assistant Director, Town Panchayats, Erode. 2. Project Director, DRDA, Erode. 3. All Municipalities in the District. 4. Divivsional Engineer, State Highways, Erode.5.Divisional Engineer, National Highways, Coimbatore.

TABLE 8.2 – LENGTH OF ROADS (2013-14)

(In Kilometres)

Name of the Block	Earthern	Gravel	SL WBM	DL WBM	BT	Total
Village Panchyats	764.670	293.625	383.017	83.500	1513.108	3037.920
Panchyats Union	64.200	22.500	79.600	25.800	1091.510	1283.610
Total	828.87	316.125	462.617	109.300	2604.180	4321.530

Source: Project Director, DRDA, Erode

TABLE 8.3 DISTRIBUTION OF TOTAL ROAD LENGTH

(In Kilometres)

Sl. No.	Block	2011				2013-14				
		Category				Category				
		Total road length	Mud	WBM	BT	Total road length	Mud	WBM	BT	CC
1	Ammapettai	248.570	0.000	89.650	158.920	346.901	75.143	32.600	225.483	13.675
2	Anthiyur	401.440	85.940	99.100	216.400	488.439	182.977	12.930	278.920	13.609
3	Bhavani	349.780	60.090	36.700	252.990	576.383	114.913	13.207	407.718	35.165
4	Bhavanisagar	291.750	69.070	44.270	178.410	383.485	83.460	21.180	169.152	9.693
5	Chennimalai	397.275	0.600	220.005	176.670	655.601	238.059	51.280	360.609	5.653
6	Erode	110.625	16.975	8.000	85.650	129.962	10.239	1.340	102.796	5.902
7	Gobichettipalayam	393.140	13.300	99.755	280.085	550.176	39.096	27.771	442.271	41.038
8	Kodumudi	188.580	17.510	18.350	152.720	447.707	67.873	18.317	282.726	44.641
9	Modakkurichi	441.320	96.490	32.850	311.980	612.445	127.463	17.769	336.048	56.195
10	Nambiyur	364.785	112.685	39.522	212.378	444.634	115.913	10.285	306.716	11.720
11	Perundurai	342.775	58.750	74.770	209.255	489.296	52.131	13.347	415.131	28.837
12	Sathyamangalam	297.460	54.200	75.200	167.760	497.185	147.863	24.279	299.762	25.286
13	Thalavadi	339.320	177.550	34.950	126.420	336.520	179.860	24.900	131.360	--
14	Thukkanaicken palayam	179.450	14.800	19.400	145.250	229.870	35.593	8.859	164.158	21.260
15	Erode M Corp.					696.720	22.140	5.414	578.529	90.637
Total		**4346.27**	**777.96**	**892.522**	**2674.888**	**6885.324**	**1492.723**	**283.478**	**4501.379**	**403.311**

Source: 1.Assistant Director, Town Panchayats, Erode. 2. Project Director, DRDA, Erode. 3. All Municipalities in the District. 4. Divisional Engineer, State Highways, Erode.5.Divisional Engineer, National Highways, Coimbatore.

The length of roads, the basic requirement of road transportation, is an assessment tool on road infrastructure. The total road length of the district is 4346.7 Km Modakkurichi has the longest

road length with 441.320 Km followed by Anthiyur (401.440 Km.) Chennimalai (397.275) Gobichettipalayam(393.40 Km), Bhavani(349.780Km.) and Perundurai(342.775Km.). On the other front, Erode (110.625Km) has the shortest length followed by Thukkanaickenpalayam (179.450 Km.) and Kodumudi (188.580Km.).

Better roads also achieve fuel economy and improve the overall productivity of the road transport sector. In Erode district 62% of roads are B.T roads and 21% being WBM, 18% are Mud roads and 0.02% roads are in the form of CC roads. When it comes to road transport, BT roads are considered to be viable and affordable in the sense of infrastructural development. In Erode district, longest BT roads ranging from 216Km to 311Km are in the major three areas lead by Modakkurichi and followed by Gobichettipalayam and Bhavani. Perundurai is covered under Golden Quadrilateral project, one of the largest highway projects in India. The other two major areas to be mentioned here with longest length of BT roads are Modakkurichi and Gobichettipalayam with 311.980 and 280.085 kilo meters respectively.

There is a lot of improvement in the road transport in the year 2013-14 when compared to previous year. Especially in two blocks, namely Sathyamangalam and Bhavani more than 65% increase in road lengths reported see table 8.3. On the other hand, Thalavadi is the only one block which has no improvement in the road length. This may have happened owing to this block containing more of forest region.

Though the road system in Erode district is comparatively better because of the three major places Modakkuruchi, Gobichettipalayam and Anthiyur, it needs a lot of improvement. The reason behind this is that Erode is one of the major turmeric hubs in India, and the success of the business development mainly depends on road infrastructure but roads connecting Erode with other cities are not upto the mark. The roads in Erode town really affect both the passenger and goods transport.

Electricity

Electricity has become another basic element next to the housing for every human being. Especially in technology driven world for every activity handled by the human being is mechanized and it needs electricity. The allocation and availability of electricity in Erode district is reported is table 8.4.

TABLE 8.4 – STATUS OF ELECTRIFICATION

Sl. No.	District	Revenue Villages	Hamlets	Towns	Population covered	No. of street lights		Access to electricity
						2011	2013-14	
1	Ammapettai	23	193	3	129140	2658	6157	89.51%
2	Anthiyur	14	257	2	138394	2358	3683	89.98%
3	Bhavani	20	253	4	191983	6249	9070	91.91%
4	Bhavanisagar	26	185	2	103990	3114	4820	83.54%
5	Chennimalai	24	434	1	105470	3578	1101	92.85%
6	Erode	41	130	7	558074	12587	3448	94.33%
7	Gobichettipalayam	32	244	4	197895	4110	11154	90.32%
8	Kodumudi	24	274	9	110341	7516	7004	90.49%
9	Modakkurichi	29	440	4	153914	4988	10226	90.27%
10	Nambiyur	23	336	2	93917	2389	5170	87.72%
11	Perundurai	48	444	6	160636	4265	8710	90.78%
12	Sathyamangalam	30	220	3	160092	3743	6663	84.69%
13	Thalavadi	20	101		63359	1544	1758	81.68%
14	Thukkanaicken palayam	21	84	3	84539	2661	4522	89.13%
15	Erode M.corp.			1	498469		18002	
Total		375	3595	50	2251744	61760	101488	

Source: E.B.,Erode&Gobi

Electricity has reached all the revenue villages and towns in Erode district. Out of 14 blocks in this district, more than 50% blocks are equipped with higher than 90% power availability. Not only that, almost all the blocks have more than 85% households equipped with electricity. But a concealing factor is that not even a single block has been provided with 100% electricity facilities, even in the modern world. There is some deviation in achieving the highest percentage and it needs to be looked at seriously. Identification of those households and the reasons for not having electricity connections have to be sorted out at the earliest possible.

There is lot of effort made for providing the electricity access to everyone especially in the form providing street lights when comparing the two different year data. There are blocks which have achieved more than 100% increment in the number of street lights led by Gopichettipalayam, followed by Ammapettai, Nambiyur etc.. It is very important that all the households have access to electricity that will enhance the productivity at household level. This is an important indicator from human development perspective for ensuring education of the children.

TABLE 8.5 OPERATIONS OF POWER STATIONS

Sl. No.	Name of the Power Stations	Date of Operation	Installed Capacity (M.W.)	Generation (M.U.)	Net Unit sent out (M.U.)
1	Lower Mettur Barrage Power House – II	26.08.1988 21-08-1988	2 *15 =30	103.26042	102.293752
2	Lower Mettur Barrage Power House – III	04-01-1988 30-09-1988	2*15 =30	106.55946	105.571715
3	Lower Mettur Barrage Power House – IV	18-09-1988 28-12-1988	2*15 =30	84.94668	83.965757
4	Micro Hydel Power House Bhavanisagar	25-05-1990 17-04-1990 11-04-1990 03-04-1990	4*2 = 8	41.5633	41.44191
5	Right Bank Canal Power House/ Bhavanisagar	10-02-1998 28-02-1998	2*4 = 8	23.813955	23.74389

Source: Sup. Engineer, Power Generation, Urachi Kottai, K.N.Palayam, Bhavani

Communication System

Earlier, home telephone was considered as a household amenity of the affluent section. Now, the scenario has changed a lot and it has attained a status of essential tool even among low income groups. Easy access to basic telephone services particularly mobile phones and affordable prices is the reason for such penetration even in rural areas. Thanks to the unforeseen growth in communication technology that has brought people closer than ever before. Telephone in that way, does not stop with serving merely as communication device, rather it goes beyond by serving many other purposes like a tool for promoting livelihood activity. As data was not available for mobile telephone penetration, data pertaining to the fixed phone service is used for analysis.

TABLE 8.6 TELECOMMUNICATION SYSTEM

Sl. No.	District	No. of Telephone Exchanges	No. of PCOs	No. of Land Lines	No. of HH with connection	Number of Mobile phone towers	Population Covered
1	Erode (2011)	90	8431	95311	117194	349	476359
2	Erode (2013-14)	121	80	79245	64108	"2G-237 3G-70"	2251744

Source:BSNL,Erode

Because of huge growth in the mobile phone usage, the landline phones are moving towards declining stage. The above table depicts the telecommunication system in the form of landline phones and telephone exchanges in the district. There is increase in the number of telephone exchanges on the other hand, there is a drastic decline in the number of PCOs when we compare two different years' data. This may be due to people moving towards new technology and switching over to mobile phones.

Financial Institutions

The banking sector plays a crucial role in terms of financial assistance for promoting economic and financial activities in the district. The major players are commercial banks and cooperative societies. There were totally 294 branches spread over the district covered by commercial banks. Utilization of the available banking facilities is of utmost importance because it safeguards the people from usurious money lender. Apart from regular banking, the district has 262 co-operative societies. But how far they are running successfully by benefitting the members is more important. There is only a small improvement while comparing the two year data.

TABLE 8.7 COMMERCIAL AND COOPERATIVE BANKS

Sl. No	Erode district	Number of co-operative societies	Number of Members	Commercial Banks	Number of account holders
1	2011	262	5,86,846	294	16,00,000
2	2013-14	272	6,04,213	314	16,92,800

Source: Lead Bank &J.R.Co-operative, Erode.

Insurance

Insurance, an important social security measure is a protection against financial loss arising out of the incidents of an unexpected event. It provides continuity to livelihood of people in a secured manner. It is an instrument that any individual or business house can use strategically to protect them in a proactive manner. In Erode, the penetration had been poor as depicted by the data given in table 8.8.

TABLE 8.8 INSURANCE COMPANIES

Sl. No	Name of the companies	No. of branches	Polices Issued	
			2011	2013-14
1	LIC	7	95001	72585
2	United India	4	56569	108014
3	National Insurance	4	43339	56627
District		15	194909	237226

Table 8.8 shows only 19, 94,909 policies were issued. The coverage is far from the expected level when compared to the total population available in the district. As the demand was low the number of branches was minimal. Thus, insurance education is very much essential to boost the penetration of various insurance products. Some improvement was achieved during 2011-12 to 2013-14.

Box No 8.1 Infrastructure Development Schemes in the State

A Scenario of villages lagging behind in providing the basic infrastructure facilities and Panchayat Raj Institutions constraining to provide statutory services due to inadequate resources are becoming a story of the past. Consequently the role of the village panchayats in the planning and development process is getting enlarged. This trend has resulted in reducing the gap between rural and urban in respect of the standard of living, availability of infrastructure facilities, provision of basic amenities, underemployment and unemployment, illiteracy, health and lack of expertise. This has been achieved by rural development programmes implemented by the Central and State Governments aiming to provide a safety net targeting especially the rural poor. All these programmes are committed to eradicate poverty and hunger and to usher in allround development of rural masses. As a result, various State and Central Schemes, viz., Anaithu Grama Anna Marumalarchi Thittam (AGAMT), Member of Legislative Assembly Constituency Development Scheme (MLACDS) and Member of Parliament Local Area Development Scheme (MPLADS) are being implemented in the State to create infrastructure facilities that are required and to fill up the gaps in the existing ones.

Source: www.tngov.in

Transport Facilities

The transportation system in the district is already well developed. Erode, being one of the prominent trading centres in the state, is well connected with all modern means of transport except air transport. The district is accessible by both road and rail from the state capital Chennai and other major cities. The district is divided into two RTO sub-divisions namely Erode and Gobichettipalayam. The district is well connected by road. The following is the list of major arterial roads:

National Highways

- NH-47 connecting Salem – Coimbatore – Cochin – Kanyakumari passes via Bhavani, Chithode and Perundurai
- NH-209 connecting Bangalore – Coimbatore – Dindigul passes via Sathyamangalam

Proposed Highways

- NH 67-A, connecting Karur – Erode
- NH 209-A, connecting Sathyamangalam – Gobichettipalayam – Erode

State Highways

- SH-15 connecting Erode – Gobichettipalayam – Sathyamangalam – Mettupalayam - Ooty
- SH-20 connecting Erode – Bhavani – Mettur Dam – Mecheri – Thoppur
- SH-37 connecting Mettur – Erode – Arachalur – Kangeyam – Dharapuram – Palani
- SH-79 connecting Erode – Tiruchengode – Rasipuram – Attur
- SH-81 connecting Gobichettipalayam – Uthukuli – Kangeyam – Dharapuram
- SH-82 connecting Sathyamangalam – Athani – Bhavani
- SH-84 connecting Erode – Kodumudi – Karur
- SH-84A connecting Erode – Modakurichi - Vellakoil – Moolanur
- SH-96 connecting Erode – Perundurai – Chennimalai – Kangeyam

The Tamil Nadu State Transport Corporation Coimbatore division-II headquartered at Erode (originally called as Jeeva Transport Corporation) services inter and intra-city routes. The State Express Bus Corporation (SETC) operates express services to major cities across the state. Erode Central Bus Terminus, which serves as a major hub, is one of the largest in the state.

Railways

The district has one major railway station namely, Erode Junction. It was built by the British to connect the west coast of India to the east coast of India. There are state of art ISO certified diesel and electric locomotive sheds at Erode Junction. Erode Junction, which has the distinction of being the third cleanest railway junction in India serves as the hub for water filling facilities and food provisions.

Irrigation

The district comprises a long undulating plain, sloping gently towards the Kaveri River in the south-east. Three major tributaries of river Kaveri, the Bhavani, Noyyal and Amaravati, run across the long stretch of mountains in the north. Palar river constitutes the boundary between Erode district and Karnataka in the north. The Bhavanisagar dam and Kodiveri dam provide storage facilities and numerous canals along with these rivers provide proper drainage and facilities for irrigation in the district.

Box No.8.2 Micro irrigation system gaining popularity in Erode district

The total area covered under the micro irrigation systems in the district has more than doubled during the last two years as many farmers are adopting effective water management practices in the wake of the drought.

In a period of three years starting from 2007-08, the farming community in the district installed drip and sprinkler systems to cover only about 3,500 hectares. But in the last two years, farmers installed micro irrigation systems covering more than 6,000 hectares.

"We are getting hundreds of applications from the farmers seeking subsidy for the installation of drip irrigation because many of them are facing serious water shortage following the monsoon failure," a senior official in the Agriculture Department said.

Importance

"The poor rainfall has made many farmers to realise the importance of water management techniques such as micro irrigation and they are coming forward in large numbers to adopt such techniques," the official said. A majority of the farmers had installed drip irrigation for sugarcane, banana and turmeric.

More than 60 per cent of the drip systems in the district were installed for the cultivation of sugarcane, a water intensive crop. Drip irrigation has the potential to save up to 60 per cent of the water, officials here pointed out. Farmers now install drip and sprinkler systems to cultivate papaya, tapioca, vegetables and a number of other crops as well.

"Water has become a scarce resource and the traditional methods of watering the crops results in huge amount of wastage. The power crisis has worsened the situation. So, we cannot waste the water any more. With the micro irrigation systems, we are able to conserve water and irrigate more areas with little water," says S. Kaliappan, a farmer in Kavunthapadi.

The department had distributed more than Rs. 25 crore as subsidy to the farmers who installed micro irrigation systems. The small and marginal farmers would be given 100 per cent subsidy, while the farmers with large land holdings could get 75 per cent.

Source: The Hindu dated 26 Apr 2013

TABLE 8.9 IRRIGATION CHANNELS IN THIS DISTRICT

Sl. No.	Name of the Taluk	Numbers of canals	Length	Wells used for irrigation purpose only	Industrial purpose	Wells used for domestic purpose only
1	Erode	3	171	22328	175	7004
2	Perundurai	1	43	13474	-	2634
3	Gobichettipalayam	3	381	18145	27	3656
4	Sathyamangalam	1	29	13056	156	2918
5	Bhavani	2	66	16582	25	4304
6	District Total	10	690	83585	383	20516

Source: Asst. Director of Statistics, Erode. (G-Return_Fasli-1421).

Table 8.9 gives detail of the major irrigation channels satisfying the needs of domestic, agricultural and industrial water needs. In Erode district, the above listed five blocks have source of major canals which support the water needs of the other blocks as well. Here, one of the major canals that contribute to the agricultural needs of the the district, apart from the river Kauveri, is Kalingarayan canal. Kalingarayan canal is a 90-mile long irrigation canal in the Erode district, it was constructed by Kongu chieftain Kalingarayan and was completed in 1283. It starts with Kalingarayan dam on River Bhavani, near Bhavani and flows through Erode before terminating near Kodumudi. Recently the canal has suffered from pollution. In 2007 a 12-crore (120 million) rupee programme to develop the canal was announced, funded by the National Bank for Agriculture and Rural Development. Local farmers have asked for a wall to be built on the right bank, to prevent nearby textile workshops and tanneries from discharging effluents.

TABLE 8.10 DETAILS OF DAMS

Sl.no	Name of the Dam/ Block	DAMS			
		Catchment area (Sq/Km)	Water spread area	Height (Ft)	Capacity (M.C.Ft)
1.	Noyal Orathupalayam	2245.53	423	46	616
2.	Bhavanisagar Dam	1621.5	30	105	32800
3.	Anthiyur Varattupallam	66.80	--	33.4	139.60

Source: G Return Fasli 1421

The Bhavanisagar dam and Kodiveri dam provide storage facilities and numerous canals along with these rivers provide proper drainage and facilities for irrigation in the district. Bhavanisagar Dam and Reservoir also called Lower Bhavani dam is located on the Bhavani river.The dam is situated some 16 km (9.9 mi) west of Satyamangalam, is 35 km (22 mi) from Gobichettipalayam and is 36 km (22 mi) north-east to Mettupalayam. The dam feeds the Lower Bhavani Project Canal and is the second largest dam in Tamil Nadu. The LBP was the first major irrigation project initiated in India after independence in 1947 and was in full operation by 1956. Kodiveri dam is located 10 km from the town Gobichettipalayam and 55 km from the city of Erode. Kunderipallam or Gunderipallam dam is built across wild streams at the confluence of Kadambur hill and an adjacent hill, which themselves are the last bit of cascading mountains that offer an exotic view for anyone. It is a small dam, supporting agriculture in roughly about 3000 acres of agriculture, mostly by increasing the ground water level, rather than direct canal irrigation. It is fed by rainwater from the Kadambur hills and the Bhavani river. It was built in the 1980s. It measures roughly 2 km long and 40 metres in height and occupies 65.29 hectares of land. The reservoir which the dam inundates is subject to dramatic changes in water levels, from drought to heavy flooding such as in November 2006. Perumpallam dam, across a rivulet Perumpallam that takes rain water from Kadambur hills to Bhavani river, is an earth-fill dam built in 1992. This 2 km long dam is 40 metre high and occupies 65.29 hectares of land. Water shed area is around 44.53 km and receives up to 15459 cusecs of water. The dam has a withholding capacity of 115.80 million cusecs and can discharge 14.660 cusecs/ second. The dam has a gateway on either side of the dam to discharge water through canals to irrigate the adjacent lands. The right side canal irrigates over 545.17 hectares of lands while the left side canal irrigates over 485.42 hectares of land. The deepest point in the dam measures 16.69 metres. Varattu Pallam dam is an artificial dam constructed in hills 12 km (7.5 mi) from Anthiyur in the Erode district. This dam irrigates nearby areas. A mountain road from Anthiyur leads to Kollegal.

Summary

Recent announcement of Erode as Municipal Corporation is really a boost to the people of this district in terms of the infrastructural development. Though Erode was being one of the major market places for several products and customers, it could not gain full advantages because of the insufficient infrastructure facilities when compared to other cities like Coimbatore and Chennai. Even though Erode has become a Corporation in 2008, it is still in the transition period, as it has more than a municipality but not in the standards of Corporation in terms of Infrastructure. Major infrastructure facilities in this district such as electricity, water transport etc., were developed very long ago and it may not be sufficient enough to meet out the demands of future. Except Road Transportation it still has to go a long way to achieve the momentum in the infrastructure facilities of this district.

CHAPTER 9

SUMMARY AND WAY FORWARD

Introduction

In the preceding chapters of the DHDR, we have attempted to summarize the human development as comprehensively as possible, while at the same time highlighting the challenges that has to be overcome in the coming years. The previous chapters of the report have explained the status of human development in terms of the general profile of the Erode district, status of human development in the district, demography, health and nutrition, literacy and education, employment, income and poverty, gender, social security and infrastructure in the district. They have also portrayed the existing status of these primary factors, which determine the human development in general, in the district. The index values calculated and denoted in the chapters describe about the issues and challenges addressed by the district administration, in its endeavours in achieving the human development in the district. In prosecuting the district level study on human development, an attempt has been made by us to gather and integrate the block level information, so as to enable one to understand the level of human development achieved, in total and block in particular. The intention of this report is to identify the hurdles faced by the district administration in implementing the governmental programs from a policy perspective. The whole exercise is basically oriented towards improving the efficiency of the present human development programs in operation. In addition, an attempt has been made to make some suggestions for the district administration, some new perspectives to be pondered upon for the successful implementation of the ongoing programs, and administrative measures to strategize human development programs to yield the intended results, on a sustainable basis.

- Erode had an average literacy rate of 63.92% with a male literacy of 71.44% and a female literacy of 56.34%. Out of the total Erode population for 2011 census, 51.43 percent lives in urban regions of district and 48.57 % population of Erode district lives in rural areas and villages.
- The per capita income for the district is well above the national and state level per capita income. The per capita income of the district is Rs75,670, during the year 2011-12.
- Erode is also well known for handloom, power loom textile products and ready-made garments and hence called the power loom city of India. Products such as cotton sarees, bed spreads, carpets, lungies, printed fabrics, towels, dhotis are marketed there.

Employment, Income, and Poverty

Agriculture

- Though noted for trade and industry, the district is by no means backward in the field of agriculture. Availability of irrigation facilities coupled with the awareness of improved methods of farming helped the agriculturists to forge ahead. Agriculture is the most important income source of this district. Paddy, plantain, groundnut, cotton, turmeric, coconut and sugarcane are some of the agricultural products. Erode district is the top turmeric producer in Tamil Nadu.
- Though the soil is not the best, utilization of improved methods of cultivation and improved strains of seeds together have helped the agriculturists in the district to maximize their output. Paddy is cultivated the most in the district. Corn stands second. Pulses are not much in cultivation in the district. Among condiments and spices, turmeric and chillies are significant.
- The main irrigation project of consequence in the district is the Lower Bhavani project. But today, the agriculture practices in the district are at stake. The interactions made with the agriculturists of different parts of the district have expressed the same opinion that it is very difficult to practise agriculture today because of the non-availability of labour. The labourers who were involved in the agriculture have gone out to work in the industries in and around.
- The failures of monsoon for three years consecutively, have created a hopeless mentality among the agriculturists. The agriculturists have incurred heavy losses for the past three years, since there was a scanty rain and people have spent much of their savings on finding water from the ground. The monsoon failures have not brought water in the canal too and no scope for the people to get their crops irrigated and gone withered. Some of the farmers have tried micro and drip irrigation system in their lands, which brought fruits for their efforts. But there is a large scope for the farming community to adopt this practice of micro and drip irrigation system in their lands, which will save water, their efforts, less labour dependency, power saving and so on.

- The government is encouraging the farmers by providing more soft loans and provides subsidies to them for adopting drip irrigation system in the farms. In this era of IT and growing opportunities for the educated man to earn more, the attitude of the youth and youngsters have changed towards earning money in an easy way. They are not ready to practise agriculture even though they have their own ancestral lands. Instead they go to the industry in search of a job, which will bring in more fortune for them. It is in the hands of the government to provide more soft loans for the agriculturists like providing lesser interest loans, providing subsidized fertilizers, providing hybrid seeds, which can withstand drought conditions etc., which will encourage the farmers to produce more and feed the masses.
- Industries that flourished in early days in the area were handloom weaving, carpet manufacturing, cart manufacturing, oil-pressing, brass vessel manufacturing etc.,. Bhavani which was noted the world over for its very beautiful carpets, has shrunk into insignificance and the industry is facing a major challenge as against the modern textile units. Chennimalai, which is a prominent place in the district, which is noted worldwide for its contribution in manufacturing world class bed sheets and "jamakalams" are no more existing. Poor market combined with less innovation in the products and heavy competition for the industry from the other sectors of the textile industry has led the industry nowhere. This needs a serious intervention of the government and its support for the weavers so that these industries are revived again.
- The district's per capita income is higher than that of the state's value, which shows the standard of living of the people in the district. It depicts that the standard of living of people in the district is comparatively better than that of the state as a whole. There is no doubt that a significant number, both in percentage and absolute terms, the number of people living below the poverty line has declined significantly over the last few decades. If the poverty level is to be brought down, the state government in tandem with the district administration should work quite intensively in making the measures reach the masses better, so that the overall poverty level is brought down.

Human Development

- The concept of Human Development indices has been a policy measure to identify the status of the human wellbeing. From there it will help the policy makers to evolve a specific scheme to promote the development based on social equity. The HDI, GII, CDI and MPI calculated and discussed in the chapter, dealt in detail about the human development in different dimensions of HDI. Access to toilet facilities, access to drinking water, access to electricity are all in a good shape in the district. Some of the blocks, which do not have such access, may be concentrated.

- Barring the Erode municipal corporation, which tops the rank in the HDI, Thalavadi, Bhavanisagar and Nambiyur are the blocks which are lacking in the HDI. Thalavadi is a hilly area and is an under- developed block, when compared to the other blocks. All of these blocks require a special care and attention of the district administration.
- Since Thalavadi and Anthiyur are hilly regions, the road access to these places are quite less. And more –over, the people living here collect dry wood and twigs from the forest, because it is a hilly area.
- Access to toilet facilities in the district is in a poor level. The district average is around 54.86 %. This is an area to be concentrated more by the district authorities. Though the state government is providing more loan facilities for constructing toilet facilities at home, the people still are not using this properly. The government is also spreading awareness about the health and cleanliness amongst the people, but the cultural stigma is not yet broken. This needs a serious effort of the district administration. Access to safe drinking water is one of the major areas that any government must ensure for its people. All the blocks of the district are having access to safe drinking water facilities. Though all the places are provided with safe drinking water facilities, during the visit to different parts of the district, the people have expressed their dissatisfaction about the availability of water in the connections provided by the board. The board may have to ensure that the people are provided with water, on a regular basis.

Health and Nutrition

- The IMR, MMR and other such related rates have come down in the district, when compared to the past years. This is an appreciable effort of the health department. The health department is striving hard to educate the people about the government's measures in reducing these.
- It is a positive trend to note that the institutional deliveries in the state have improved a lot. Thanks to the efforts of the state government, in providing facilities for the pregnant women, to have a safe delivery, this takes care of both the mother and the child. The Erode district is having a record of 100 % institutional delivery status. This shows a positive trend. Thanks to the 108 scheme where one can call 108 for free ambulance service in case of an emergency.
- Age and sex- wise HIV Positives*:* Age and sex wise HIV positive cases have declined. In the context of increasing concern over possible transmission of the HIV/AIDS virus through blood transfusion, the Government of India has brought into force strict regulations concerning licensing of blood banks and procedures for blood transfusion
- Positive TB Cases/ Leprosy*:* The positive TB cases for the district were 1250 during the year 2011. But the same have come down to just 127 during the year 2013-14. The TB control programme in the State functions through district -level units. It is based on the revised national TB control programme. It envisages detection of TB patients from those reporting with chest symptoms at the district TB centre as well as peripheral medical and health institutions in each district, including effective treatment for the prescribed period. The district's leprosy has diminished from 306 to 185 between 2001 and 2011. Leprosy curative services are now available in all PHCs, corporations, municipal hospitals and government dispensaries
- Iron and folic acid (IFA) are the solution for iron supplementation for women, children and adolescent girls. About 100 % of women and 44% of children and 87% of adolescent girls were given IFA tablets. The recommendation of the program is that all the women consume tablets of iron and folic acid during pregnancy.
- Immunization of children at an early age against diseases like diphtheria, polio and measles, etc. is done regularly by the parents, particularly in urban areas/centres. In rural areas, as well, awareness in this regard is quite high and the people are taking due care in this regard. Erode district is covered under strong network of immunizing programmes. These immunization programmes are regularly included in all the blocks of the district and are run through a network of primary health centres, sub-centres and hospitals spread in different blocks of the

district. The immunization is being successfully and regularly done in all the blocks of the Erode district.

- The district administration needs to concentrate especially on Thalavadi, Anthiyur and Sathyamangalam blocks. Since these blocks, find a place in one way or the other when one talk about shortfalls in any of the parameters related to DHDR. This will enable the people of those blocks to attain self-sustenance and develop themselves.

Literacy and Education

- In the district, the literacy rate has been rising. It was 56 per cent in 2001 and increased to 64 percent in 2011, an increase of 8 per cent points during the last 10 years. .Literacy rate has grown significantly in almost all the blocks (expect Erode) between 2001 and 2011. Of the 15 blocks, vast growth was observed in the Thalavadi district (12.43 percent growth) due the special efforts taken by the state government in upbringing new schemes in education and setting up of primary schools in these remote areas. While comparing with the overall literacy rate of our country, the district has not been in par with the state or centre. Even in the midst of various schemes, all the blocks (expect Erode Municipal Corporation) are not in par with the State or country's literacy rate.
- Government has taken several steps for framing appropriate policies needed to design and implement various welfare programmes for achieving the objective of creating favourable environment to ensure speedy socio economic development of SCs/ STs. For the wellbeing of these communities, special target-oriented programmes are being implemented by earmarking funds, providing subsidies and scholarships, hostel facilities and offering reservations in employment and educational institutions.

Social Security

- The aged are enrolled in the scheme to receive financial assistance from the state government per month, along with free supply of rice and provision of meals through the noon meals programme. In addition, the destitute widows, enrolled in the scheme, receive financial assistance on a monthly basis.
- The following marriage and maternity assistance is provided in the district to women : The Tamil Nadu Government implements five different types of marriage assistance schemes namely, Moovalur Ramamirtham Ammaiyar marriage Assistance, E.V.R Maniyammai Ninaivu

Widowed Daughter Marriage Assistance, Annai Therasa Ninaivyu Orphan Girl Marriage Assistance, Dr.Muthulakshmi Reddy Ninaivu Inter-Caste marriage Assistance and Dr. Dharmambal Ninaivu Widow Remarriage Assistance.

Infrastructure:

- Though the road system in Erode district is comparatively better because of the three major places Modakkuruchi, Gobichettipalayam and Anthiyur, it needs a lot of improvement. The reason behind this is that Erode is one of the major turmeric hubs in India, so the success of the business development mainly depends on road infrastructure but roads connecting Erode with other cities are not up to the mark.
- Electricity has reached all the revenue villages and towns in Erode district s. Out of 14 blocks in this district, more than 50% blocks are equipped with higher than 90% electricity. Not only that, almost all the blocks have more than 85% households equipped with electricity. The provision of electricity is a basic requirement and the district is striving hard to provide electricity for all the places. There is some deviation in achieving the highest percentage and it needs to be looked at seriously. Enumeration of those households which are not provided with electricity may have to be identified and the reasons for not having electricity connections have to be sorted out at the earliest possible, so that the district can proudly claim that all the households are provided with electricity connections.

Summary

A target based effort is needed on the direction in which the human development is heading towards. Based on the findings in the report, concerning to particular indicator of the human development the people concerned will get a broad view of the efforts needed, relating to that indicator. In future, allocation of resources and funds for the district must be monitored in order to ensure an effective utilization of the resources provided for the needy. More allocation of funds and focus need to be done for the two blocks namely Thalavadi and Anthiyur, which seemed to be under developed by and large. Once the district administration starts focusing on these under -developed blocks, the district will have a balanced growth and will progress on the road towards prosperity and peace.

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ANNEXURES

Annexures

Index for the year 2013-14

Human Development Index

Sl. 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
		2013-2014	2013-2014	2013-2014	2013-2014	2013-2014				Census	Edcn Dept	Edcn Dept
		%	%	(habitation)			2013-14	2013-14	2013-14	2013-14	2013-14	2013-14
1	Ammapet	36.52	34.67	100.00	89.51	58.14	6.60	10.00	6.60	57.47	100.00	95.00
2	Anthiyur	41.99	76.48	100.00	89.98	85.41	6.20	150.00	6.20	56.47	99.00	94.00
3	Bhavani	47.80	45.31	100.00	91.91	86.55	8.00	50.00	8.00	65.53	100.00	95.00
4	Bhavanisagar	43.65	40.33	100.00	83.54	41.54	9.30	200.00	11.40	62.78	99.50	91.50
5	Chennimalai	62.90	95.79	100.00	92.85	89.53	14.90	10.00	14.90	66.83	99.50	96.00
6	Erode	93.83	61.07	100.00	94.33	71.53	3.80	20.00	4.00	69.42	100.00	88.50
7	Gobichettipalayam	55.23	29.11	100.00	90.32	69.45	6.60	190.00	7.30	67.44	100.00	95.50
8	Kodumudi	57.63	63.61	100.00	90.49	71.12	7.00	90.00	7.00	68.48	100.00	94.00
9	Modakurichi	53.48	37.00	100.00	90.27	79.14	6.90	10.00	8.10	66.74	100.00	95.00
10	Nambiyur	43.60	56.03	100.00	87.72	67.90	8.30	360.00	8.30	59.61	99.00	93.50
11	Perundurai	59.55	44.58	100.00	90.78	66.62	8.20	0.00	9.40	67.61	100.00	97.50
12	Sathyamangalam	52.77	81.23	100.00	84.69	83.62	11.80	70.00	11.80	59.03	99.00	93.50
13	Thalavadi	36.66	16.99	100.00	81.68	62.12	14.20	120.00	15.30	54.88	99.50	94.00
14	Thukkanaickenpalayam	64.85	69.32	100.00	89.13	76.14	5.70	90.00	6.60	60.11	99.00	94.00
15	Erode M Corp.	74.71	71.32	100.00	99.22	100.00	2.90	10.00	2.90	76.42	100.00	100.00

Sl. No.	Block	Standard of Living Index	Health Index	Education Index	Overall Index	Rank
1	Ammapet	0.31	0.80	0.61	0.53	12
2	Anthiyur	0.56	0.71	0.55	0.60	9
3	Bhavani	0.55	0.70	0.77	0.67	7
4	Bhavanisagar	0.27	0.47	0.65	0.43	14
5	Chennimalai	0.79	0.25	0.79	0.54	11
6	Erode	0.76	0.93	0.69	0.79	2
7	Gobichettipalayam	0.46	0.64	0.80	0.62	8
8	Kodumudi	0.61	0.72	0.79	0.71	3
9	Modakurichi	0.52	0.75	0.79	0.68	6
10	Nambiyur	0.47	0.32	0.62	0.45	13
11	Perundurai	0.55	0.69	0.84	0.68	5
12	Sathyamangalam	0.61	0.47	0.60	0.56	10
13	Thalavadi	0.18	0.23	0.52	0.28	15
14	Thukkanaickenpalayam	0.67	0.77	0.63	0.69	4
15	Erode M Corp.	0.86	0.99	1.00	0.95	1

Gender Inequality Index

	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**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**	**2013-14**
Source	**Health Department**			**Census**				**RD&PR Department**		**Census**				**DOES**	
Unit	**rate**	**%**	**nos**	**%**	**%**			**%**		**%**	**%**	**%**	**%**	**Rate per day**	
Ammapet	10.00	100	1846	48.6	65.9	48.2	51.8	36.88	63.12	51.95	65.16	15.86	32.57	150	257
Anthiyur	150.00	100	2035	48.6	64.1	48.4	51.6	34.98	65.02	48.54	64.20	27.15	40.79	150	257
Bhavani	50	100	2152	57.8	73.1	48.6	51.4	35.87	64.13	43.47	63.41	42.69	59.65	150	300
Bhavanisagar	200.00	100	1466	55.6	69.9	48.7	51.3	36.59	63.41	43.63	66.06	38.03	54.67	150	300
Chennimalai	10.00	99	1498	57.3	75.9	48.4	51.6	39.58	60.42	46.43	64.53	51.15	68.43	107	257
Erode	20.00	99	5763	62.8	76.0	49.2	50.8	35.45	64.55	39.14	64.80	48.92	66.96	107	257
Gobichettipalayam	190	99	1720	60.5	74.6	48.8	51.2	35.14	64.86	41.28	65.54	36.76	56.66	125	225
Kodumudi	90.00	100	1338	59.8	77.3	48.7	51.3	35.98	64.02	51.96	67.81	22.09	39.29	125	257
Modakurichi	10.00	100	1857	59.0	74.6	48.7	51.3	37.42	62.58	47.45	67.07	25.75	46.30	107	257
Nambiyur	360.00	99	1247	50.6	68.7	49.7	50.3	39.29	60.71	51.13	69.23	27.18	41.71	125	225
Perundurai	10	100	1894	60.4	74.9	49.1	50.9	36.68	63.32	41.70	64.62	42.22	60.90	150	300
Sathyamangalam	70	99	1579	52.0	66.0	48.4	51.6	39.08	60.92	44.78	65.00	24.35	41.79	150	300
Thalavadi	120	99	931	47.5	62.3	50.0	50.0	38.33	61.67	44.27	63.11	11.06	14.88	88	225
Thukkanaickenpalayam	90	99	1114	53.0	67.3	49.3	50.7	38.01	61.99	50.41	67.72	21.59	38.40	125	225
Erode M Corp.	10	99	2220	71.7	81.1	48.9	51.1	36.67	63.33	25.29	62.43	86.42	94.01	107	257

GII Indices Calculation Continued….

Block	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
Ammapet	0.82	0.65	0.72	1.82	0.52	0.46	0.76	0.05	12
Anthiyur	0.65	0.66	0.65	1.05	0.52	0.52	0.66	0.01	5
Bhavani	0.79	0.73	0.76	1.31	0.54	0.64	0.77	0.01	9
Bhavanisagar	0.64	0.72	0.68	0.95	0.54	0.63	0.68	0.01	2
Chennimalai	0.84	0.70	0.77	1.73	0.55	0.53	0.80	0.04	10
Erode	0.90	0.69	0.78	2.03	0.55	0.51	0.83	0.06	15
Gobichettipalayam	0.62	0.62	0.62	0.98	0.55	0.46	0.63	0.01	7
Kodumudi	0.63	0.67	0.65	1.07	0.55	0.47	0.65	0.01	1
Modakurichi	0.80	0.68	0.73	1.82	0.55	0.45	0.77	0.05	11
Nambiyur	0.54	0.60	0.57	0.85	0.53	0.43	0.58	0.01	8
Perundurai	0.94	0.73	0.82	1.83	0.55	0.64	0.86	0.05	13
Sathyamangalam	0.69	0.70	0.69	1.15	0.53	0.56	0.70	0.01	4
Thalavadi	0.44	0.52	0.48	0.96	0.51	0.23	0.48	0.01	6
Thukkanaickenpalayam	0.61	0.60	0.60	1.04	0.53	0.41	0.61	0.01	3
Erode M Corp.	0.94	0.69	0.80	1.90	0.57	0.55	0.84	0.06	14

Child Development Index

Sl. No	Block	Health			Education				
		U5MR	Juvenile sex ratio (0-6)	Malnourishment (0-5)	Enrollment in Primary	Enrollment in Secondary	Children never enrolled in schools	Transition rate from primary to Upper Primary	Transition rate from Upper Primary to Secondary
		2013-14	2013-14	2013	2013-14	2013-14	2013-14	2013-14	2013-14
		(Vital events survey)	Census	ICDS	SSA	RMSA		SSA	RMSA
1	Ammapet	6.6	930.88	12.87	57.47	100.00	0	100	100
2	Anthiyur	6.2	936.97	27.09	56.47	99.00	0	100	100
3	Bhavani	8	944.68	24.75	65.53	100.00	0	100	100
4	Bhavanisagar	11.4	950.22	14.33	62.78	99.50	0	100	100
5	Chennimalai	14.9	939.22	6.55	66.83	99.50	0	100	100
6	Erode	4	969.02	10.59	69.42	100.00	0	100	100
7	Gobichettipalayam	7.3	952.81	20.37	67.44	100.00	0	100	100
8	Kodumudi	7	950.45	8.92	68.48	100.00	0	100	100
9	Modakurichi	8.1	948.54	15.83	66.74	100.00	0	100	100
10	Nambiyur	8.3	987.76	14.93	59.61	99.00	0	100	100
11	Perundurai	9.4	963.13	20.46	67.61	100.00	0	100	100
12	Sathyamangalam	11.8	939.30	28.58	59.03	99.00	0	100	100
13	Thalavadi	15.3	998.02	25.91	54.88	99.50	0	100	100
14	Thukkanaickenpalayam	6.6	974.27	7.42	60.11	99.00	0	100	100
15	Erode M Corp.	2.9	956.58	9	76.42	100.00	0	100	100

CDI Calculation Continued…

Sl. No	Block	Health			Education					CDI	Rank
		U5MR	Juvenile sex ratio (0-6)	Malnourishment (0-5)	Enrollment in Primary	Enrollment in Secondary	Children never enrolled in schools	Transition rate from primary to Upper Primary	Transition rate from Upper Primary to Secondary		
		2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14		
		(Vital events survey)	Census	ICDS	SSA	RMSA		SSA	RMSA		
1	Ammapet	0.73	0.00	0.71	0.12	1	0	1	1	0.57	8
2	Anthiyur	0.76	0.09	0.07	0.07	0	0	1	1	0.37	14
3	Bhavani	0.63	0.21	0.17	0.49	1	0	1	1	0.56	9
4	Bhavanisagar	0.39	0.29	0.65	0.37	0.5	0	1	1	0.52	12
5	Chennimalai	0.14	0.12	1.00	0.56	0.5	0	1	1	0.54	10
6	Erode	0.92	0.57	0.82	0.68	1	0	1	1	0.75	2
7	Gobichettipalayam	0.68	0.33	0.37	0.58	1	0	1	1	0.62	6
8	Kodumudi	0.71	0.29	0.89	0.63	1	0	1	1	0.69	3
9	Modakurichi	0.63	0.26	0.58	0.55	1	0	1	1	0.63	4
10	Nambiyur	0.61	0.85	0.62	0.22	0	0	1	1	0.54	11
11	Perundurai	0.53	0.48	0.37	0.59	1	0	1	1	0.62	5
12	Sathyamangalam	0.36	0.13	0.00	0.19	0	0	1	1	0.33	15
13	Thalavadi	0.11	1.00	0.12	0.00	0.5	0	1	1	0.47	13
14	Thukkanaickenpalayam	0.73	0.65	0.96	0.24	0	0	1	1	0.57	7
15	Erode M Corp.	1.00	0.38	0.89	1.00	1	0	1	1	0.78	1

Multi Poverty Index

Sl. No	Block	Health			Education		Standard of living				
		IMR	High Order Birth rate	Malnourished children(0-5)	Dropout in primary	Dropout in secondary	Access to Cooking [illegible]	Access to Toilet Facilities	Access to drinking water	Access to Pucca houses	Access to Electricity
		2013-14	2013-14	2013	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14
		Vital events survey	Health	ICDS	SSA	RMSA		GOI www.mdws.gov.in NBA	GOI www.mdws.gov.in NRDWP	BDO, MC, EO (TP)	
1	Ammapet	6.60	4.8	12.87	0.06	5.65	36.52	34.67	97.00	58.14	89.51
2	Anthiyur	6.20	7.3	27.09	2.93	6.36	41.99	76.48	98.00	85.41	89.98
3	Bhavani	8.00	3.5	24.75	0.75	5.14	47.80	45.31	100.00	86.55	91.91
4	Bhavanisagar	9.30	2.1	14.33	0.59	8.79	43.65	40.33	98.00	41.54	83.54
5	Chennimalai	14.90	3.4	6.55	1.61	4.46	62.90	95.79	99.00	89.53	92.85
6	Erode	3.80	2.7	10.59	2.88	4.38	93.83	61.07	100.00	71.53	94.33
7	Gobichettipalayam	6.60	3.2	20.37	1.16	4.82	55.23	29.11	100.00	69.45	90.32
8	Kodumudi	7.00	3.5	8.92	0.13	6.48	57.63	63.61	100.00	71.12	90.49
9	Modakurichi	6.90	4.2	15.83	0.06	4.21	53.48	37.00	100.00	79.14	90.27
10	Nambiyur	8.30	5.0	14.93	0.75	6.38	43.60	56.03	98.00	67.90	87.72
11	Perundurai	8.20	4.7	20.46	1.39	2.76	59.55	44.58	99.00	66.62	90.78
12	Sathyamangalam	11.80	5.8	28.58	5.07	7.10	52.77	81.23	99.00	83.62	84.69
13	Thalavadi	14.20	9.8	25.91	2.83	6.67	36.66	16.99	96.00	62.12	81.68
14	Thukkanaickenpalayam	5.70	1.9	7.42	0.00	6.12	64.85	69.32	98.00	76.14	89.13
15	Erode M Corp.	2.90	1.7	9			74.71	71.32	100.00	100.00	99.22

MPI Calculation Continued…..

Sl. No	Block	Health			Education		Standard of living					MPI	Rank
		IMR	High Order Birth rate	Malnourished children(0-5)	Dropout in primary	Dropout in secondary	Access to Cooking fuel(LPG)	Access to Toilet Facilities	Access to drinking water	Access to pucca houses	Access to Electricity		
		2009	2011	2013			2012-13	2012-13	2012-13	2012-13	2012-13		
		Vital events survey	Health	ICDS	SSA	RMSA		GOI www.mdws.gov.in NBA	GOI www.mdws.gov.in NRDWP	BDO, MC, EO(TP)			
1	Ammapet	0.69	0.62	0.71	0.99	0.52	0.00	0.22	0.25	0.28	0.45	0.53	11
2	Anthiyur	0.73	0.31	0.07	0.42	0.40	0.10	0.75	0.50	0.75	0.47	0.55	12
3	Bhavani	0.58	0.78	0.17	0.85	0.61	0.20	0.36	1.00	0.77	0.58	0.41	7
4	Bhavanisagar	0.47	0.95	0.65	0.88	0.00	0.12	0.30	0.50	0.00	0.11	0.60	13
5	Chennimalai	0.00	0.79	1.00	0.68	0.72	0.46	1.00	0.75	0.82	0.64	0.31	3
6	Erode	0.93	0.88	0.82	0.43	0.73	1.00	0.56	1.00	0.51	0.72	0.24	2
7	Gobichettipalayam	0.69	0.81	0.37	0.77	0.66	0.33	0.15	1.00	0.48	0.49	0.42	8
8	Kodumudi	0.66	0.78	0.89	0.97	0.38	0.37	0.59	1.00	0.51	0.50	0.33	5
9	Modakurichi	0.67	0.69	0.58	0.99	0.76	0.30	0.25	1.00	0.64	0.49	0.36	6
10	Nambiyur	0.55	0.59	0.62	0.85	0.40	0.12	0.50	0.50	0.45	0.34	0.51	10
11	Perundurai	0.56	0.63	0.37	0.73	1.00	0.40	0.35	0.75	0.43	0.52	0.43	9
12	Sathyamangalam	0.26	0.49	0.00	0.00	0.28	0.28	0.82	0.75	0.72	0.17	0.62	14
13	Thalavadi	0.06	0.00	0.12	0.44	0.35	0.00	0.00	0.00	0.35	0.00	0.87	15
14	Thukkanaickenpalayam	0.77	0.98	0.96	1.00	0.44	0.49	0.66	0.50	0.59	0.42	0.32	4
15	Erode M Corp.	1.00	1.00	0.89	1.00	1.46	0.67	0.69	1.00	1.00	1.00	0.03	1

Child Birth Rate and Child Death Rate

Sl. No	Block	CBR	CDR
		2013-2014	2013-2014
1	Ammapet	13.4	6.4
2	Anthiyur	14.2	8
3	Bhavani	12.7	7.8
4	Bhavanisagar	13.6	7.5
5	Chennimalai	14.4	6.9
6	Erode	12.4	5.6
7	Gobichettipalayam	11.4	6.7
8	Kodumudi	12.9	7.8
9	Modakurichi	10.4	6
10	Nambiyur	14.6	7.5
11	Perundurai	11.6	6.3
12	Sathyamangalam	12.8	8.2
13	Thalavadi	13.1	4
14	Thukkanaickenpalayam	12.2	8.2
15	Erode M.Corporation	12.9	0.8
	Erode District	14.3	6.5

Infant Mortality Rate

Sl. No	Block	2013-14
1	Ammapet	6.6
2	Anthiyur	6.2
3	Bhavani	8.0
4	Bhavanisagar	9.3
5	Chennimalai	14.9
6	Erode	3.8
7	Gobichettipalayam	6.6
8	Kodumudi	7.0
9	Modakurichi	6.9
10	Nambiyur	8.3
11	Perundurai	8.2
12	Sathyamangalam	11.8
13	Thalavadi	14.2
14	Thukkanaickenpalayam	5.7
15	Erode M Corp.	2.9
	Erode District	6.7

Malnourishment

Sl. No.	Block	Total No. of Centres	Total Children Covered	Malnourished Children (0-5)years			
				SUW	MUW	SUW +MUW	Percentage %
1	Ammapet	131	7682	2	942	944	12.20
2	Anthiyur	168	8511	_	982	982	11.50
3	Bhavani	151	8439	_	342	342	4.00
4	Bhavanisagar	114	6119	1	712	713	11.60
5	Chennimalai	96	4873	6	243	249	5.10
6	Erode	220	20421	_	1737	1737	8.50
7	Gobichettipalayam	157	7354	2	1172	1174	15.90
8	Kodumudi	124	5146	8	323	331	6.40
9	Modakurichi	173	8107	8	585	593	7.30
10	Nambiyur	107	4777	1	658	659	13.70
11	Perundurai	180	7510	1	499	500	6.60
12	Sathyamangalam	175	8479	_	656	656	7.70
13	Thalavadi	114	4857	4	665	669	13.70
14	Thukkanaickenpalayam	85	4416	1	215	216	4.80
15	Erode M.Corp.	85	7590	2	462	464	6.10
	Total	2080	114281	36	10193	10229	

Institutional Delivery

Sl. No	Block	Home	Sub Health Centre	Primary Health Centre	GH	Private Hospital	Share of Institutional deliveries (ID)
1	Ammapet		0.06	47	25	28	100
2	Anthiyur			41	24	35	100
3	Bhavani			32	33	35	100
4	Bhavanisagar			44	27	29	100
5	Chennimalai	0.08	0.1	29	29	41	99
6	Erode	0.02	0.02	19	39	41	99
7	Gobichettipalayam	0.07	0.1	44	24	31	99
8	Kodumudi			36	19	45	100
9	Modakurichi			27	24	49	100
10	Nambiyur	0.18		45	22	32	99
11	Perundurai			19	39	42	100
12	Sathyamangalam	0.14		33	35	31	99
13	Thalavadi	0.12	0.7	38	47	13	99
14	Thukkanaickenpalayam	0.09	0.28	31	40	28	99
15	Erode M Corp.	0.1		4	23	72	99

Households provided with safe drinking water

Sl. No.	Block	Total Number of habitations	Total number of habitations provided with drinking water	Percentage of habitations provided with drinking water
1	Ammapet	297	297	100.00
2	Anthiyur	205	205	100.00
3	Bhavani	321	321	100.00
4	Bhavanisagar	208	208	100.00
5	Chennimalai	436	436	100.00
6	Erode	100	100	100.00
7	Gobichettipalayam	353	353	100.00
8	Kodumudi	349	349	100.00
9	Modakurichi	591	591	100.00
10	Nambiyur	296	296	100.00
11	Perundurai	482	482	100.00
12	Sathyamangalam	259	259	100.00
13	Thalavadi	118	118	100.00
14	Thukkanaickenpalayam	92	92	100.00
15	Erode M Corp.	60	60	100.00

Access to toilet facilities

Sl. No.	Block	Total No. of HH's	No. of HH's with Toilet facilities	% of HH's provided toilet facilities
1	Ammapet	33820	11727	34.67
2	Anthiyur	28987	22170	76.48
3	Bhavani	42290	19161	45.31
4	Bhavanisagar	34455	13897	40.33
5	Chennimalai	30940	29638	95.79
6	Erode	18072	11036	61.07
7	Gobichettipalayam	55623	16192	29.11
8	Kodumudi	36948	23502	63.61
9	Modakurichi	54928	20323	37.00
10	Nambiyur	31130	17442	56.03
11	Perundurai	55817	24883	44.58
12	Sathyamangalam	80929	65735	81.23
13	Thalavadi	14521	2467	16.99
14	Thukkanaickenpalayam	26686	18499	69.32
15	Erode M Corp.	139155	99252	71.32

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)

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

Construction of Child Development Index (CDI)

Introduction

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

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

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

Indicators for Child Development

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

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

Computation of Child Development Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.
- All the above indicators are negative and positive in nature.

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

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

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

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

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

- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block
- The Child Development Index would be the average of the index values of the three indicators – with highest value indicating better child development.
- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

Multidimensional Poverty Index

Indicators

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

Computation of Multidimensional Poverty Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.
- All the above indicators are negative and positive in nature.
    - The index value (in the case of a positive indicator) can be calculated using the formula –

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

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

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

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

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

Abbreviations

AIDS – Acquired Immune Deficiency Syndrome

ANC – Ante Natal Care

BPL – Below Poverty Line

CBR – Crude Birth Rate

CDI – Child Development Index

CDR – Crude Death Rate

CR – Completion Rate

DDHs – District Director Health Services

DOES – Department of Economics and Statistics

DHDR – District Human Development Report

GAR – Gross Access Ratio

GDP – Gross Domestic Product

GII – Gender Inequality Index

HDR – Human Development Report

HDI – Human Development index

HIV - Human Immune Deficiency Virus

ICDS – Integrated Child Development Scheme

IFA – Iron Folic Acid

IMR – Infant Mortality Rate

LBW – Low Birth Weight

LIC – Life Insurance Corporation of India

MMR – Maternal Mortality Rate

MDPI – Multi Dimensional Poverty Index

NDP – National Domestic Product

NMP – Noon Meal Programme

NIC – National Information Centre

PDS – Public Distribution System

PHC – Primary Health Centre

PTR – Pupil Teacher Ratio

RMSA – Rashtriya Madhyamik Siksha Abhiyan

SBR – Still Birth Rate

SBGF – State Balanced Growth Fund

SHG – Self Help Group

SSA – Sarva Shiksha Abhiyan

SC –Scheduled Caste

ST – Scheduled Tribe

TN – Tami Nadu

UN – United Nations

UNDP – United Nations Development Project

U5MR – Under Five Mortality Rate

WPR – Work Participation Rate