District Human Development Report - 2017

Krishnagiri District

State Planning Commission
Tamil Nadu

KRISHNAGIRI

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Krishnagiri and
State Planning Commission, Tamil Nadu
in association with
MYRADA, HOSUR

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

I am delighted to see that Krishnagiri District District Human Development Report has been brought out now. The report has been prepared with efforts and involvements of all District Officials. This report is unique in the sense, it is the first District official report on Human Development in Krishnagiri District This report is prepared based on statistical data, information collected from various line departments especially from that of Education, Health, Rural Development, Economics and Statistical departments. It provides sub-district level disaggregated status on various socio-economic and demographic parameters. It also provides lead to development departments for their future action plan in specific core areas. It will be more more useful to set forth rightfully district priorities for policy makers in developmental agenda. This report will serve as benchmark for scaling up development process by all and common public.

In this endeavour, I thank all concerned who have put their best efforts to bring out a qualitative report. I thank profusely State Planning Commission, UNDP , Line departments, academic institutions and other organizations involved in the process of report preparation and also thank MYRADA Institution, who served as facilitating Resource Institution to bring this report.

I hope this human development report will trigger the development process in the Educationally and Socially backward regions of Krishnagiri District.

Best regards.

District Collector,
Krishnagiri.

ACKNOWLEDGEMENT

The assignment of preparation of Krishnagiri District Human Development Report was formulated by State Planning Commission, Government of Tamil Nadu. The intention of the report is to take a picture on the development of various dimensions and indicators which affect the overall development of the people. To prepare the human development report for Krishnagiri district, State Planning Commission and Krishnagiri District Planning Commission assigned the task to MYRADA. For this purpose, a district level committee was constituted under the Chairmanship of District Collector and different departments which are considered necessary for preparation of the report.

At the outset, I would like to express deep gratitude to T. Rajesh, I. A.S, District Collector, Krishnagiri District for selecting and providing the opportunity to MYRADA to complete the report successfully. It gives me pleasure to express sincere thanks to District Planning Officer, B. Sridhar who stood by me for completion of the report in time. It is also apt to point out gratitude to all staff of District Planning Commission for rendering their services and valuable time to accomplish the report.

I convey my sincere thanks to Tmt. Shantha Sheela Nair, I.A.S (Retd) Former Vice Chairman, State Planning Commission, Government of Tamil Nadu for continuous support and giving valuable suggestions to finish the task effectively and smoothly. I wish to express my thanks to Thiru. Anil Mesharam, I.A.S., Member Secretary, State Planning Commission for providing support for successful completion of the project. I also express sincere thanks to Mr. M.Balaji, I.A.S, the then Member Secretary, State Planning Commission for initiating this project and framing guidelines to undertake the task in a coordinated way and Mr. Sugato Dutt, IFS former Member Secretary, i/c, State Planning Commission for providing guidance throughout the project period.

I express my thanks to Thiru P. Selvarajan, Head of Division, Rural Development and District Planning, State Planning Commission and Selvi. S. Namagiri, Senior District Planning Officer, State Planning Commission, for their encouragement, and support from the inception to the culmination stage and enabling me complete this task. I thank Dr. G. N. Krupa Subramaniam, Planning Officer, State Planning Commission for providing the necessary data required for preparation of the report. I also owe my thanks to Mr. R.K. Haroon, Senior Planning Officer, State Planning Commission, for giving valuable suggestion to make this report in a good form.

It is indeed a great pleasure to place gratitude to Heads of all Departments, Block Development Officers and Superintendent Engineer, TNEB, Joint Director, Health & Family Welfare, Joint Director, Agriculture, Deputy Director, Health Services, Chief Educational Officer, Chief Educational Officer (SSA), Project Officer, Mahalir Thittam, Executive Engineer, (Urban), TWAD; Executive Engineer, (RWS), TWAD, Deputy Director, Statistics, Special Deputy Collector, SSS, Krishnagiri, District Elementary Educational Officer; District Social Welfare Officer, Project Officer, ICDS; all Executive Officers and other Officers for providing data required for preparation of District Humana Development Report.

I wish to express my gratitude and loyality to Mr. Arvind G Risbud, Executive Director, MYRADA, Bangalore for providing me an opportunity to work and prepare Krishnagiri district Human Development Report. It is my immense pleasure to mention my gratitude to Mr. Ethiraj Murugan, Programme Officer and Mr. Denis Dmello for providing support and guidance. It is also appropriate to express my hearty thanks to Mr. Shankar Prasad and Mr. Illayaraja, former Team Leaders, MYRADA, Hosur, who stood by me and provided incomparable support, advice and valuable suggestions during this project duration.

I convey my sincere thanks Mr. N. Deenadayalan, Secretary, Kadathur, CMRC, MYRADA for his valuable timely support and enthusiasm during this project duration. Interaction with Mr. N. Deenadayalan at all stages of this work unfolded many insights to me to take forward this study and led to stimulation of thinking of higher order.

Dr. G. ARUN KUMAR

Consultant

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CHAPTER 1
KRISHNAGIRI DISTRICT - A PROFILE

CHAPTER I

Profile of Krishnagiri District

Topography

After the bifurcation of Krishnagiri district from Dharmapuri district, the present Krishnagiri district is located approximately between 11'12N and 12'49N of the North Latitude and between 77'27E and 78'38E of east longitude. The total geographical area of the district is 5143 Sq. Km. Krishnagiri district is elevated from 300m to 1400m above the mean sea level. The district is surrounded by Vellore and Tiruvannamalai districts in the East, Karnataka in the West, Andhra Pradesh in the North, Dharmapuri district in the South. The climate condition of the district is hot and dry in summer i.e. from March to May. In winter it is very cold and misty i.e. from November to February.

The normal rainfall of the district is 850.7 mm. The actual rainfall of the district was 695.1 mm during the year 2012-13. Different types of the soil such as Black or mixed loamy red ferocious and gravel are found in the district. The Black of rigor loam is very fertile due to its moisture absorbing character. Red soils are seen in Hosur, Shoolagiri, Thally and Kelamangalam. In general, the soil in the district is quite loose and fresh with its colors from red to dark brown. The soil has low nitrogen and phosphate content with marked variation between different taluks.

Krishnagiri is one of the districts of Tamil Nadu, which with natural resources has 2,040 Sq. Kms of forest cover and it is unique feature. The hill ranges of this district are called by the name 'Melagiri'. The major types of forest seen here are tropical, deciduous forests, thorny shrubs and bamboo forest. Dense forest cover is there in Denkanikottai region. The other region contains shrubs, hills and hillocks with bushes.

History

'Krishna' refers to 'black' and 'giri' refers to 'hill'. This district is gifted with black granite hillocks and named as "Krishnagiri". Krishnagiri district has prehistoric importance. Archeological sources confirm the presence of habitats of mankind during Paleolithic, Neolithic and Mesolithic Ages. Various rock paintings and rock carvings of Indus Valley civilization and Iron Age seen in this district support the historical significance of this district. The heart of 'Krishnagiri', 'Hosur' and

'Uthangarai' were known as 'Eyil Nadu', 'Murasu Nadu' and 'Kowoor Nadu' respectively. During Chola period, Krishnagiri region was called 'Nigarili Chola Mandalam' and 'Vidhugadhazhagi Nallur'. Under 'Nulamba' rule it was popular as 'Nulambadi' according to historical sources. Hero stones were erected for those who have lost their lives in pursuit of adventure. There was a tradition of erecting memorial stones for people who sacrifice their lives for the sake of their kings since 'Sangam Age'. These memorial stones were called 'Navagandam'. Plenty of memorial stones available in this district speak volumes about the valorizes and virtues of the people.

Krishnagiri and Mysore were together named as "Thagadur Nadu" in Sangam Age. Adhiayaman, the noble king offered 'Karunelli' (Goose Berry) to the great poetess Avvaiyar who adorned his court during her long life. Krishnagiri was once ruled by Adhiyaman and hence also known as 'Adhiayaman Nadu'. This region was ruled by Pallavas, Gangan, Nulambas, Cholas, Hoysalas, Vijaya Nagar Emperors, Bijapur Sultans, Wudayars of Mysore and Nayaks of Madurai. Krishnagiri region served as gateway of Tamil Nadu and the protective barrier for Southern region defending onslaughts from the barriers with motives of imperialism and exploitation. Twelve forts in this region were popularly known as 'Bara Mahal' fort. These forts have borne the funs on many attacks by Mysore and Andhra rulers. Krishnagiri fort became the first and formost defensive place. The majestic fortress built on Krishnagiri hill by the Vijaya Nagar emperors, stands as testimony still now. "Kundani" a place in Krishnagiri district was once the Headquarters on the Hoysala king 'Veera Ramanathan' in 13th Century AD. 'Jagadevarayan', Hoysala king made 'Jagadevi' (one of the 'Bara Mahal' forts) as his capital.

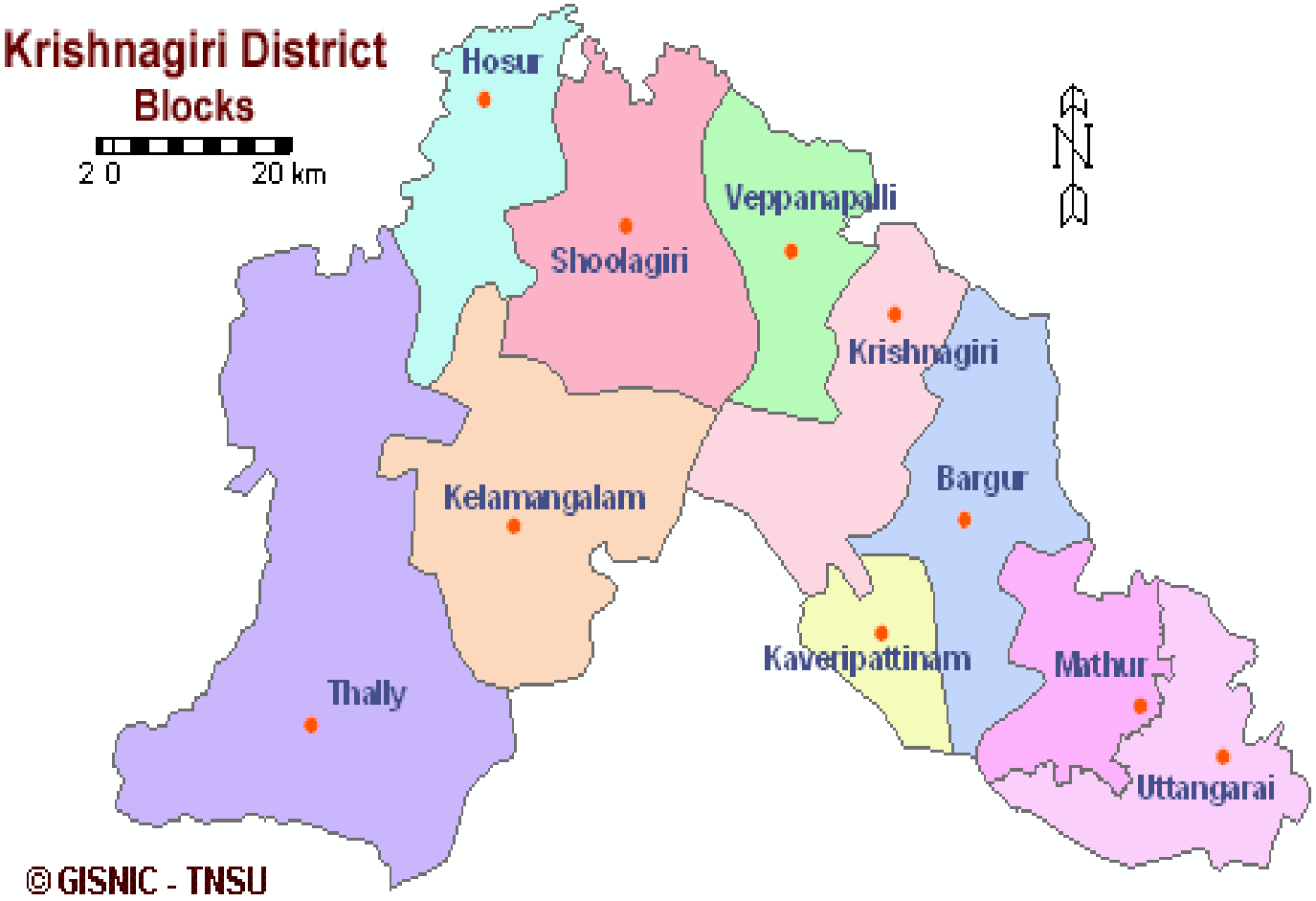
During the first Mysore war, the British troops passed through Krishnagiri to attack Hyder Ali's Forces at 'Kaveripattinam'. British army was defeated here. In second Mysore war, the entire region of Salem and Karnataka came under Hyder Ali's control. Hyder Ali fought bravely against the English at Krishnagiri. In seconf Mysore war, after the "Treaty of Srirangapattinam", the entire region of Salem and Barah Mahal were surrendered to the British. In 1792 AD, Captain Alexander Reed became the first District Collector of this region. Under the diplomacy of Robert Clive, the then Governor of Madras Presidency, Krishnagiri became the headquarters of Bara Mahal. A mint was established at Krishnagiri In 1794 AD. Gold, silver and copper coins were forged here. Rayakottai once the stronghold of British, lost its importance for defence by 1880 AD. Many soldiers from Krishnagiri region took part in the World War and lost their lives. Even today a large

number of youth from this Krishnagiri district are in the service of our Mother land. Many patriots and sons of this soil participated in the nation's freedom struggle. One among them was the "Wise Old Man, Dr. C. Raja Gopalachari", who from a small village in this district rose to the highest position in the nation as the first Governor General of independent India and also as Chief Minister of the state, Tamil Nadu. Krishnagiri district was bifurcated from the erstwhile Dharmapuri district and Krishnagiri district came into existence from 9th February 2004, consisting of Hosur and Krishnagiri divisions.

Language

In Krishnagiri district Tamil, Telugu and Kannada are the languages widely spoken by the people in the district. As the district is bordering Karnataka and Andhra Pradesh, presence of Kannada and Telugu speaking people is massive. Urdu is also one of the languages sparsely spoken by the Muslim community people in the district.

Krishnagiri District



Demography

Table 1.1- District Basic Demographic Indicators

S. No	Indicators	2001	2011
1	Population	1561118	1879809
2	Decennial Growth (%)	-	20.41
3	Density of population per sq,km,	307	370
4	Urban population (%)	19.74	22.80
5	Sex ratio	944	958
6	Percentage of 0-14 year old	13.77	11.6

Source-Census Documents 2001 and 2011

Table 1.1 presents the population of Krishnagiri district which has increased from 1561118 in 2001 to 1879809 in 2011 and it accounts for 2.60 per cent of the State population. The decadal growth of the population is 20.41 per cent. The density of population also increased to 370 in 2011 from 307 in 2001. In Krishnagiri district, the increase in density of population over a decade is attributed to the factors such as presence of industries in Hosur taluk has induced immigration of people from Southern Tamil Nadu for taking up employment and livelihood activities. The share of urban population in 2011 stands at 22.80 per cent against 19.74 in 2001. It is assumed from the above given data that in Krishnagiri district, one out of four persons live in urban areas of the district. Sex ratio in the district increased to 958 in 2011 from 944 in 2001. Adversely the share of child population decreased to 11.6 per cent in 2011 from 13.77 per cent in 2001. The factors for poor sex ratio and decrease in the child population have to be analyzed In-depth.

Economy

Agriculture

Agriculture is the main stay for people in Krishnagiri district. About 35.89 per cent of the total land available in the district is utilized for cultivation of various agricultural and horticultural crops. The district covers a total area of 514325 hectares and out of this; 184607 hectares are used for cultivation of different crops in the district. The district also has considerable proportion of forest land. The share of land under forest is 39.66 percent.

The important crops of Krishnagiri district are Paddy, Maize, Ragi, Banana, Sugarcane, Cotton, Tamarind, Coconut, Mango, Groundnut, Vegetables and Flowers. The district has an excellent scope for agri business. Regional Agricultural Research Centre of Tamil Nadu Agricultural University is functioning efficiently at Paiyur in Kaveripattinam union since 1973 AD. This centre is functioning in 18.5 hectares of land. It helps the peasants to develop and adopt the modern techniques of cultivation. It has developed hybrid seeds by research which yields more tonnage and good quality.

Sector wise Income of Krishnagiri

Table 1.2 Sector wise Gross District Domestic Product at Constant (2004-05) Prices for the year 2011-12

(Rs. in Lakhs)

Year	Sectoral Share in District Income			Share of District Income		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Krishnagiri	104911	385757	747671	8.47	31.15	60.38
Tamil Nadu	3872767	13039248	26411788	8.94	30.10	60.96

Source: Statistical Hand Book, Krishnagiri District, 2013

The Gross District Domestic Product of the district for the year 2011-12 at constant prices (2004-05) shows that the share of primary sector in Krishnagiri district (8.47) is marginally lower than that of the state average (8.94). However, secondary sector in the district (31.15) is showing better performance than the state average (30.10) The reasons attributed are presence of more number of industries in Hosur which ushered in more number of jobs; as a result the share of secondary sector is relatively high than the state average. It is observed that the tertiary sector is contributing largely toward the GDDP in the district as well as the state.

Industry

In Krishnagiri district, presence of industries is huge. Industrial development in Krishnagiri district gained momentum during 1970s as the Government initiated special measures for promoting industries for removing backwardness in the district. The State industrial Promotion Corporation of Tamil Nadu, (SIPCOT) has developed one of the largest industrial complexes in the country in Hosur in over an area of 1370 acres and to develop Large/Medium/Small industries with SIDCO offering comprehensive services for more than 500 industries.

The industries in Hosur are the source of raising the standard of living of people in Krishnagiri district. It is producing goods varying from pin to airplane. The credit goes to the good climate, incentives and inspiration provided by the State government and Central government. It is very near to Bangalore, the capital of Karnataka. Industries of various kinds such as electrical, electronic, automobile, chemical, iron & steel are flourishing because of the favorable conditions and infrastructure availability. Information technology has a great scope for investment because of the proximity of Bangalore.

The units located at Hosur manufacture sophisticated products ranging from Trucks, Automobiles and Automobiles parts, Motor Cycles, Mopeds, Diesel Engines, Power shift Transmission, Castings, Forgings, Cigarettes, Watches & Jewellery, Abrasives, Hosiery knitting needles. Machineries, Aircrafts, Pharmaceuticals, Biotech textiles, Chemicals, Electronic, electrical and general engineering. Internationally renowned industries like Ashok Leyland, Titan, TVS, Gabriel India Limited, EXIDE, Hindustan Lever Limited are serving to manufacturing sectors in the district.

Other Sectors

In Krishnagiri district, presence of other sectors is also huge. Hotels, Communication, Tourism, Dairy, Quarries, Banking and Horticulture are rendering services to the people and fetching income to the district and contribution to NDP.

Income and Poverty

Table 1.3 per Capita Income and Annual Growth Rate

(At Constant prices 2004-05)

Year	Per Capita Income (Rs.)		Annual Growth Rate	
	Krishnagiri	Tamil Nadu	Krishnagiri	Tamil Nadu
2007-08	43065	46293	-	-
2008-09	46497	48473	7.97	4.81
2009-10	54143	53359	13.41	8.86
2010-11 (RE)	63450	59967	14.26	11.42
2011-12 (RE)	69318	63996	25.12	19.60

Source: Department of Economics and statistics. Chennai

It is observed from Table 1.3 that per capita income (at constant prices 2004-05) of the district has steadily increased over the years. The per capita income of the district between 2007-2008 to 2011-12 increased by 61 per cent. The average growth rate of the district (25.12 per cent) is considerably higher than that of the state (19.60) growth rate during the year 2011-12. The reasons that can be attributed for increase in annual growth rate of per capita income in the district over the years are Krishnagiri district is highly endowed with agricultural and allied activities like horticulture, floriculture and well-known automobile companies have their ancillary-making units in Hosur and mango pulp units located in and around Krishnagiri.

Social Sector

Health

Good health confers on a person or group, freedom from illness and the ability to realize one's potential. Health is therefore best understood as the indispensable basis for defining a person's sense of well-being. Healthcare is widely recognized as public good. Improvement in health has been important part in the overall strategy for socio-economic development over the planning period. Significant demographic changes and epidemiology shifts have occurred but the health system is still at crossroads with a wide gap between demand and supply of health services.

Crude Birth Rate

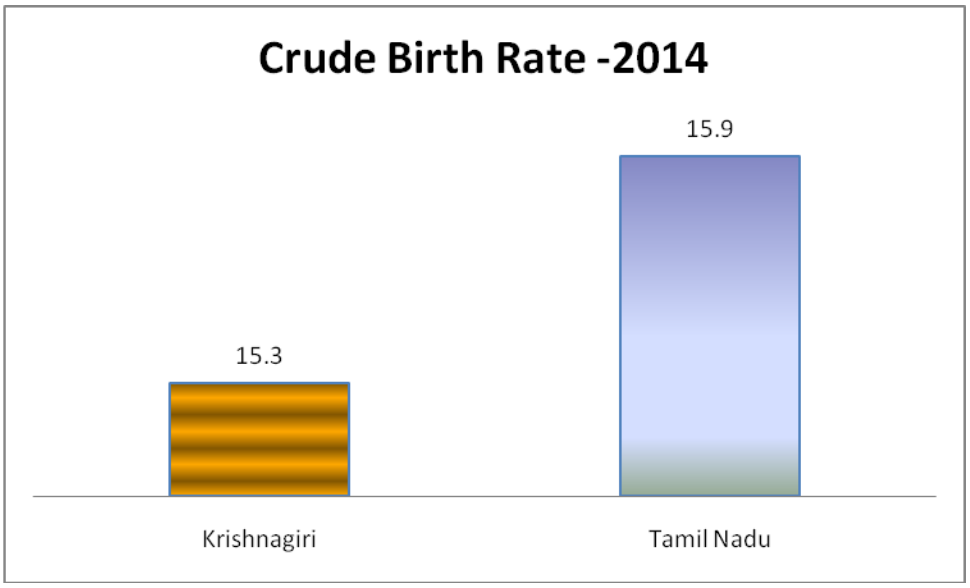


Figure 1.1 Crude Birth Rate

Crude birth rate can be observed from Figure 1.1. The crude birth rate (15.3) of the district in the year 2014 is slightly lower than the state CBR of 15.9. It shows that the district administration is making tremendous efforts to reduce the CBR.

Infant Mortality Rate

The convention on the rights of child assures the rights of child to the enjoyment of the highest standard of health and facilities for the treatment of illness and rehabilitation of health. The State strives to ensure that no child is deprived of his/her right to access to healthcare services. Over the last few years, the State Government, with support from UNICEF, has focused extensively on improving facility based healthcare for new-born and mothers with new-born care corners (NNBCs), special new born care units (SNCUs) and labour rooms in first referral units across the state.

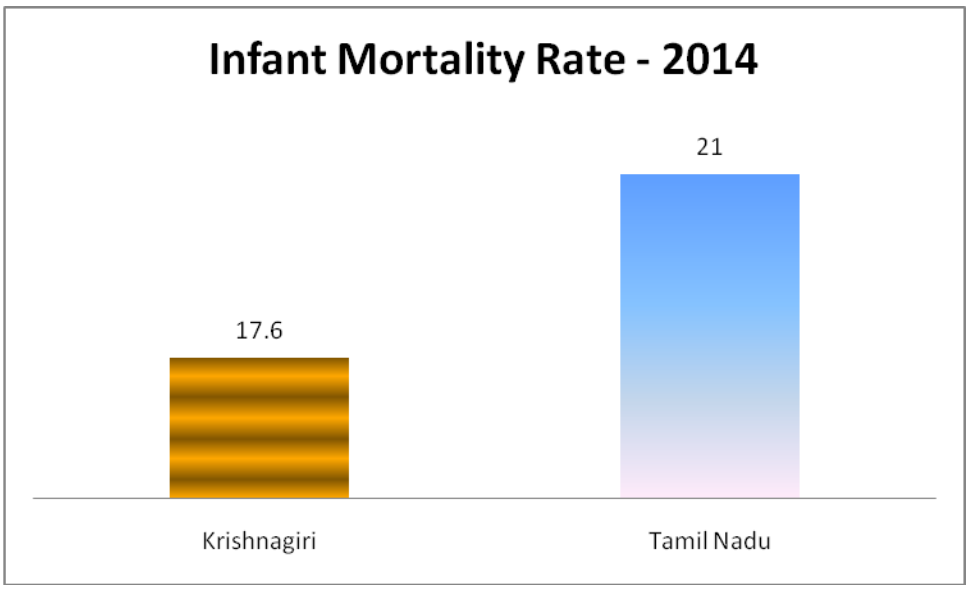


Figure 1.2 Infant Mortality Rate

The infant mortality rate is presented in Figure 1.4. It is observed that during the year 2014, the IMR in Krishnagiri district (17.6) is lower than that of Tamil Nadu (21). This achievement is due to the efforts of district health department adopting the primary healthcare approach to provide free, curative and preventive health services to large sections of the population. In the district 99.22 percent of the deliveries occurred in the institutions like PHC, Government hospitals and private hospitals.

Literacy

Table 1.4 Educational Status in the District

Particulars	2001			2011			Gender Literacy Gap
	Male	Female	Total	Male	Female	Total	
Krishnagiri	71.06	55.16	64.20	78.7	63.9	71.5	14.80
Tamil Nadu	82.42	64.43	73.43	86.80	73.40	80.1	13.40

Source: Census 2011, Department of Statistics, Krishnagiri

The total literacy rate of Krishnagiri district, according Census 2011 is 72. 41 per cent which is lower than the state average 80.1 As far as gender literacy gap is concerned, in Krishnagiri district the gap is 13.40.

In Krishnagiri district the enrolment ratio at primary education level slightly decreased from 99.08 per cent in 2011-12 to 98.95 per cent in 2012-13. Enrolment rate at upper primary education level in Krishnagiri district is slightly increased from 98.14 per cent in 2011-12 to 98.29 per cent in 2012-13. In Krishnagiri district, transition rate from primary to upper primary level slightly increased from 2011-12 to 2012-13.

Conclusion

This chapter has highlighted the achievement of various sectors in Krishnagiri district. A detailed analysis on each sector is presented in the following chapters. Krishnagiri district has potential for improvement of primary sectors, since agriculture and horticulture are predominant livelihood in the district. The decadal growth of the population is 20.41 per cent. The density of population is increased to 370 in 2011 from 307 in 2001. In Krishnagiri district, the increase in density over a decade is attributed to the factors such as presence of industries in Hosur taluk has induced immigration of people from Southern Tamil Nadu for taking up employment and livelihood activities. The Gross District Domestic Product of the district for the year 2011-12 at constant prices (2004-05) shows that the share of primary sector in Krishnagiri district (8.47) is marginally lower than that of the state average (8.94). However secondary sector in the district (31.15) is showing better performance than the state average (30.10).

The per capita income of the district between 2007-2008 to 2011-12 increased by 61 percent. The average growth rate of the district (25.12 per cent) is considerably higher than the state (19.60) growth rate during the year 2011-12. The crude birth rate (15.3) of the district in the year 2014 is slightly lower than the state CBR of 15.9. The IMR in Krishnagiri district (17.6) is lower than that of Tamil Nadu (21). The total literacy rate in Krishnagiri district according Census 2011 is 72. 41 per cent which is lower than the state average 80.33 per cent.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

CHAPTER II

Status of Human Development in Krishnagiri District

Introduction

The Human Development Report is an analytical report with emphasis on the issues, trends and policies related to the human development. The concept is elaborated through the Human Development Index (HDI), Inequality-adjusted HDI, Gender Inequality Index and Poverty Index. The HDI focuses on three basic dimensions of human development: (i) healthy life (ii) access to education and (iii) access to resources needed for decent living. Human development, according to current definition of the concept, creates an enabling environment for people to lead a life according to their choices.

The term 'human development' was the result of criticism of the approach that was taken in early 1989 on development. At that time, it was believed that there was a close link between a country's economic growth and expansion of individual choices of human beings. Development is focused on expanding the choices human beings have to lead the life they value. In this sense, it is essential to work on building capacities for human development that is sustainable over time. There are six basic pillars of human development: equity, sustainability, productivity, empowerment, cooperation and security.

- Equity is the idea of fairness for every person, between men and women; we each have the right to an education and healthcare.
- Sustainability is the view that we all have the right to earn a living that can sustain our lives and have access to a more even distribution of goods.
- Productivity states the full participation of people in the process of income generation. This also means that the government needs more efficient social programs for its people.
- Empowerment is the freedom of the people to influence development and decisions that affect their lives.
- Cooperation stipulates participation and belonging to communities and groups as a means of mutual enrichment and a source of social meaning.
- Security offers people development opportunities freely and safely with confidence that they will not disappear suddenly in the future.

Human Development Report: Origin and Concept

The Human Development approach arose in part as a result of growing criticism to the leading development approach of the 1980s, which presumed a close link between national economic growth and the expansion of individual human choices. Many, such as Dr. Mahbub ul Haq, the Pakistani economist who played a key role in formulating the human development paradigm, came to recognize the need for an alternative development model due to many factors, including:

- Growing evidence that did not support the then prevailing belief in the "trickle down" power of market forces to spread economic benefits and end poverty;
- The human costs of Structural Adjustment Programmes became more apparent;
- Social ills (crime, weakening of social fabric, HIV/AIDS, pollution, etc.) were still spreading even in cases of strong and consistent economic growth;
- A wave of democratization in the early 90s raised hopes for people-centered models.

As of 1990, the human development concept was applied to a systematic study of global themes, as published in the yearly global Human Development Reports under the auspice of the UNDP. The work of Amartya Sen and others provided the conceptual foundation for an alternative and broader human development approach defined as a process of enlarging people's choices and enhancing human capabilities (the range of things people can be and do) and freedoms, enabling them to: live a long and healthy life, have access to knowledge and a decent standard of living, and participate in the life of their community and decisions affecting their lives.

The Human Development Report is released by the United Nations and contains the Human Development Index. There is not only a global Human Development Report but there are regional and national reports as well that specifically show certain areas. Within global HDR, there are four main indexes: Human Development Index, Gender-related Development Index, Gender Empowerment Measure and the Human Poverty Index. The Human Development report normally contains the matters relating to life expectancy, literacy, education, standard of living, and GDP per capita for countries worldwide. It is an improved standard means of measuring well-being, especially child welfare and thus human development.

In the year 2000, the UN General Assembly highlighted eight goals for development known as Millennium Development Goals to be achieved by 2015. They are to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, combat Human Immune-Deficiency Virus (HIV), Acquired Immune deficiency Syndrome (AIDS), eradicate malaria and other diseases, ensure environment sustainability and develop global partnership for development. Most of these goals have quantifiable and monitorable targets to measure the progress against standards set by international communities.

Human Development Index in Krishnagiri District

The HDI was prepared to ascertain the levels of development of the people on various dimensions which affect the living of the people. The computation of HDI reveals the level of development of people. In this chapter, an effort has been put to measure the human development index of the district. Three dimensions such as standard of living, education and health were used. There are five indicators in standard of living, three in education and three in health. Data for these indicators are collected at block level and after thorough validation; these data are used for computation of human development index for the district. All these data reflect the pattern of human development in the district. The list of dimensions and indicators are given below

Dimensions	Indicators
Standard of Living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to electricity Access to pucca houses
Education	Literacy rate Gross enrolment in primary Gross enrolment in secondary
Health	Infant mortality rate Maternal mortality rate Under 5 mortality rate

Table 2.1 Human Development Index in Krishnagiri District

Particulars	Top Three Blocks	Values	Bottom Three Blocks	Values
Human Development Index	Krishnagiri	0.873	Veppanapalli	0.404
	Hosur	0.795	Thally	0.435
	Bargur	0.592	Shoolagiri	0.442

Source: Computed

HDI was calculated for ten blocks of Krishnagiri district using the methodology stipulated by Tamil Nadu State Planning Commission. It is observed that the HDI values range from 0.873 to 0.404 at the block level. Krishnagiri block (0.873) takes top position while Veppanapalli (0.404) is placed at the bottom.

In Krishnagiri block, the calculated index value is 0.873, which is the top index value in the district. In the block, it is found that the overall standard of living index value is 0.90 scoring maximum value among the other blocks in the district. Access to toilet facilities is 100 per cent. Similarly access to pucca houses is 100 per cent. The IMR rate is 10.2 which is lower than the district value (17.6) and U5MR is 13.7 against the district rate 20.8. The literacy rate in Krishnagiri block is 77.73. These are the factors that contributed for achieving top rank in the district.

In-depth analysis reveals that high industrial presence, good transport facilities and feature of bordering Karnataka and Andhra Pradesh are the predominant factors which serve as scope for migration for the people of the said states in search of employment opportunities in the industries of Hosur for having positioned top place among the blocks of the district. Adversely in Veppanapalli block is lack of availability of industries, poor accessibility of basic facilities and poor level of education.

Gender Inequality Index

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 the highest level of inequality in the society. The UNDP report of 2010 has brought out the GII index for all the countries. For measuring GII, three dimensions are considered by the report. They are:

1. Reproductive Health
2. Empowerment
3. Labour market

Indicators used for Gender Inequality Index

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

Gender Inequality Index in Krishnagiri District

Table 2.2 Gender Inequality Index in Krishnagiri District

Particulars	Top Three Blocks	Values	Bottom Three Blocks	Values
Gender Inequality Index	Hosur	0.043	Bargur	0.101
	Uthangarai	0.043	Mathur	0.084
	Kaveripattinam	0.046	Veppanapalli	0.083

Source: Computed

The GII constructed for all ten blocks in the district vary from 0.043 to 0.101. It is seen from Table 2.2 that Hosur (0.043), Uthangarai (0.043) and Kaveripattinam (0.046) are the top three performing blocks. While Bargur (0.101), Mathur (0.084) and Veppanapalli (0.083) are low performing blocks in the district. As, Bargur, Mathur and Veppanapalli blocks are endowed with rural features they are with high GII which shows there are massive gender disparity.

Hosur block has scored Ist rank in GII. It has performed well in the following indicators. MMR (39) Share of institutional deliveries (99.20%), Share of female child (48.73%), Female worker participation rate (67.74%). These indicators contributed to get top performance in GII by Hosur block. Since the index shows a relative performance of the blocks, the block performance is better than other blocks in terms of gender development. On the other hand, the same block has performed well in human development.

It is also observed that though Hosur is endowed with the presence of more number of industries, the female worker participation rate is observed to be poor at (21.12 %) which is lower than the other blocks of the district. Therefore, the district administration may take up measures to promote employment opportunities for women in Hosur block.

Child Development Index

Child Development Index (CDI) is an index combining performance measures specific to children - education, health and nutrition - to produce a score on a scale of 0 to 100. 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. There are different indicators dealing with Child Development Index. They are Under Five Mortality rate, Juvenile Sex Ratio, Percentage of Malnutrition Children, Enrolment in Primary Education, Enrolment in Secondary Education, Children Never Enrolled in School, Transition rate from primary to upper primary and Transition from upper primary to secondary.

Indicators used for Child Development Index

The following indicators are used for computing Child development index.

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

Table 2.3 Child Development Index in Krishnagiri District

Parameters	Top Three Blocks	Values	Bottom Three Blocks	Values
Child Development Index	Krishnagiri	0.802	Kelamangalam	0.227
	Hosur	0.666	Veppanapalli	0.245
	Bargur	0.635	Thalli	0.288

Source: Computed

With regard to performance of blocks in CDI, the top three blocks are Krishnagiri, Hosur and Bargur and bottom three blocks are Kelamangalam, Veppanapalli and Thalli. The CDI values range from 0.802 (Krishnagiri) to 0.227 (Kelamangalam). In general, the district administration has taken up number of measure for well-being of children such as enrolment in secondary education i.e., more than 100 per cent of students enrolment in secondary education in all blocks. Krishnagiri has obtained top position in CDI due to indicators which relatively perform better than other blocks such as under five mortality rate (13.7), Juvenile Sex Ratio (916.26), Percentage of Malnourished

Children (20%), Enrolment in Primary School (102.77%), Transition Rate from Upper Primary to Secondary (98.90%). It was due to efforts taken by the block level officials in bringing Krishnagiri to top position in CDI. Other blocks of Krishnagiri district also may replicate the mode of operation adopted by Krishnagiri. With regard to blocks that performed poorly in CDI, it is observed that only blocks with rural features show poor performance in CDI due to factors such as, in Kelamangalam block, percentage of malnourished children (24%) and Under Five Mortality Rate (25), Juvenile Sex Ratio is also causing more discrepancies for getting poor CDI in Kelamangalam and Veppanapalli. In Krishnagiri district only Kelamangalam block (909.35) and Veppanapalli (901.76) are having poor juvenile sex ratio. This is one of important factors which results in getting poor performance in terms of CDI in Kelamangalam and Veppanapalli. It is observed from the data that there is a wide gap between CDI scores of the blocks scoring high in CDI and the blocks scoring low in CDI.

Multidimensional Poverty Index

The MPI is an index of acute multidimensional poverty. It shows the number of people who are multi-dimensionally poor and the number of deprivations with which poor households typically contend. It reflects deprivations in very rudimentary services and core human functioning for people. Although deeply constrained by data limitations, MPI reveals a different pattern of poverty than income poverty, as it illuminates a different set of deprivations.

Multipoverty index was computed to find out the poverty level among the ten blocks in Krishnagiri district. To compute index values three dimensions, namely health, education and living standard were taken.

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

Multidimensional Poverty Index

Table 2.4 Multidimensional Poverty Index in Krishnagiri

Parameters	Top Three Blocks	Values	Bottom Three Blocks	Values
Multidimensional Poverty Index	Hosur	0.249	Mathur	0.697
	Krishnagiri	0.309	Uthangarai	0.674
	Bargur	0.530	Veppanapalli	0.649

Source: Computed

It is found that Hosur, Krishnagiri and Bargur are top three performing blocks and Uthangarai, Mathur and Veppanapalli blocks are bottom three performing blocks in terms of multidimensional poverty index (MPI). In Hosur block the calculated index value is 0.249, which is the top index value in the district. Access to toilet facilities is 72.88 per cent. Similarly access to pucca houses is 100 per cent. The IMR rate is 15 which is lower than the district value (17.6) and U5MR is 18 against the district rate 20.8. These are the factors contributed that for achieving top rank in MPI by Hosur block.

In Krishnagiri block, the calculated index value of MPI is 0.309, which is the top index value in the district. Access to toilet facilities is 100 per cent. Similarly access to pucca houses is 100 per cent. The IMR rate is 10.2 which is lower than the district value (17.6) and U5MR is 13.7 against the district rate 20.8. These are the factors contributed for achieving top rank in the district.

In-depth analysis reveals that high industrial presence, good transport facilities and feature of bordering Karnataka and Andhra Pradesh are the predominant factors which provide scope for migration for the people of the above states in search of employment opportunities in the industries of Hosur. All these have enabled Hosur to find a place among the top three blocks in HDI. Of course, Krishnagiri tops the list in HDI.

Conclusion

This chapter has presented the methodological framework for computing indices such as HDI, GII, CDI, and MDPI. Each index reflects the development of specific dimension and reveals the pros and cons of each block. This analysis would help the policy makers for evolving policies and achieving overall development of the block both at the household and regional levels.

Table 2.5 Consolidation of HDI, GII, CDI and MPI Indices, 2014

Block	HDI		GII		CDI		MPI	
	Index Value	Rank	Index Value	Rank	Index Value	Rank	Index Value	Rank
Thally	0.435	9	0.081	7	0.288	8	0.554	5
Hosur	0.795	2	0.043	1	0.666	2	0.249	1
Kelamangalam	0.541	5	0.060	4	0.227	10	0.499	7
Shoolagiri	0.442	8	0.066	5	0.439	5	0.513	4
Veppanapalli	0.404	10	0.083	8	0.245	9	0.649	8
Krishnagiri	0.873	1	0.077	6	0.802	1	0.309	2
Bargur	0.592	3	0.101	10	0.635	3	0.530	3
Kaveripattinam	0.473	7	0.046	3	0.521	4	0.491	6
Mathur	0.538	6	0.084	9	0.399	6	0.697	10
Uthangarai	0.577	4	0.043	2	0.362	7	0.674	9

Source: Computed

The index values across the ten blocks are varying significantly. The maximum index value is double than the value of minimum index value. With regard to HDI, attention may be given to the low performing blocks such as Veppanapalli (0.404), Thally (0.435), Shoolagiri (0.442) and Kaveripattinam (0.473). The district administration should allocate proper funds to undertake developmental activities to ensure the human development index is on par with well performing blocks of other districts in the state. Similarly, the district administration should also take proper measures to improve GII, CDI and MPI in all blocks of the district.

In terms of GII, Hosur (0.043), Uthangarai (0.043) and Kaveripattinam (0.046) are the top three performing blocks whereas Bargur (0.101), Mathur (0.084) and Veppanapalli (0.083) are low performing blocks in the district. As, Bargur, Mathur and Veppanapalli blocks are endowed with rural features, they are with high GII which shows there massive gender disparity.

For CDI, the top three blocks are Krishnagiri, Hosur and Bargur and the bottom three blocks are Kelamangalam, Veppanapalli and Thalli. The CDI values ranges from 0.802 (Krishnagiri) to 0.227 (Kelamangalam). In general, the district administration has implemented a number of measures for well-being of children such as enrolment in secondary education i.e., more than 100 per cent of students enrolment in secondary education in all blocks.

Hosur, Krishnagiri and Bargur are top three performing blocks and Uthangarai, Mathur and Veppanapalli blocks are bottom three performing blocks with regard to multidimensional poverty index. Indepth analysis reveals that high industrial presence, good transport facilities and feature of bordering Karnataka and Andhra Pradesh are the predominant factors which provide scope for migration for the people of the above states in search of employment opportunities in the industries of Hosur. All these have enabled Hosur to find a place among the top three blocks in HDI. Of course, Krishnagiri tops the list in HDI.

CHAPTER 3

EMPLOYMENT, INCOME AND POVERTY

Chapter III

Employment, Income and Poverty

Introduction

The proportion of the population engaged in productive work, the quality of employment and the remuneration received by the working population are important determinants of human development. A lack of adequate opportunity for gainful employment results in lowering of income levels which in turn pushes people into poverty. Thus, there is a close relationship between employment, income and poverty. Moreover, economic development is invariably associated with structural changes in GDP (income) and employment.

A characteristic feature of a developing economy is a declining trend in the share of the primary sector in GDP. In the process of diversification of the economy, one would expect a shift in the share of workers from the primary sector to the secondary and tertiary sectors. The present chapter presents the labour force, distribution of workers, status of poverty level, land holding pattern, public distribution system and agricultural land details in the district.

Employment

Size of Work Force and Work Participation Rate

The labour force is the actual number of people available for work. The labour force of a country includes both the employed and the unemployed. Labour force participation rate is the proportion of the population ages 15 and older that is economically active: all people who supply labour for the production of goods and services during a specified period. The workforce participation rates vary according to the stages of economic development, across cultures, age groups, and between sexes. Indian economy had been predominantly agricultural which contribute about one third to the total economy and employs more than half of the workforce. The agriculture is understandably not able to absorb a significant number of additional workers. However, with modernization, urbanization and industrial development picking up, there is likely to be a shift in the occupational structure of the Indian workforce.

The Census of India defines work as 'participation in any of the economically productive activity with or without compensation'. The workers are classified as main workers and marginal workers. The main workers are those who have worked for the major part of the reference period i.e. 6 months or more. Marginal workers are those who have not worked for the major part of the reference period i.e. less than 6 months. The share of workers, main and marginal workers in the population clearly indicates the economic conditions of a given area. In Krishnagiri district, agriculture is the main sustenance of the people. Presence of industries in Hosur region is providing employment opportunities to the notable number of people in the district.

Table 3.1 Total Workers and Non-Workers

Blocks	Total workers		Main Workers		Marginal Workers		Non-Workers		Total Population	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Thally	83995	94931	68223	80290	15772	14641	80537	85345	164532	180276
Hosur	98552	146502	89888	131639	8664	14863	149118	215579	247670	362060
Kelamangalam	69292	82877	55515	71141	13777	11736	75986	82346	145278	165392
Shoolagiri	73190	84996	64395	74856	8795	10140	77172	92612	150362	177608
Veppanapalli	44837	53647	36349	44120	8488	9527	37858	56316	82695	109963
Krishnagiri	79784	91816	66982	80075	12802	11741	107649	141547	187433	233324
Bargur	94127	92205	75850	75604	18277	16601	86420	106207	180547	198412
Kaveripattinam	90198	89149	69988	71997	20210	17152	80914	98748	171112	187907
Mathur	46360	49518	40092	38147	6268	11371	44641	45325	91001	94843
Uthangarai	72459	87932	62615	72555	9844	15377	68029	86016	140488	173946
District	**752794**	**877779**	**629897**	**742001**	**122897**	**135778**	**808324**	**1010041**	**1561118**	**1879809**

Source: Census 2001 and 2011.

It is observed from Table 3.1 that the share of the total workers in the district has decreased from 48.22 per cent in 2001 to 46.70 per cent in 2011. It is noted from Table 3.1 that total numbers of workers in the district increased from 752794 workers to 877779 with an increase of 124985 workers during 2001 to 2011 with an increase of 16.60 per cent. The proportion of main workers has increased marginally in all blocks. In the category of main workers, Krishnagiri district has recorded an increase of 17.79 per cent from 2001 to 2011. As Krishnagiri district is endowed with the presence of a large number of industries in Hosur, it provides accrue more opportunities for

taking up employment in formal organisations. As a result of spread effect, establishment of more industries is also seen in the district particularly in Hosur. Similarly, the rate of marginal workers in the district increased by 10.48 per cent in the year 2011. It can be concluded that the worker participation rate may be increased to a notable level in the district due to remarkable increase in main worker population. It is felt that there is need for enhancing the skill base of the human resources to match industrial needs as the presence of a number of industries in Hosur can provide employment opportunities in the district.

Box 3.1 Child Labour in Krishnagiri District

Child labour is the practice of having children engaged in economic activity, on part or full-time basis. The practice deprives children of their childhood, and is harmful to their physical and mental development. Poverty, lack of good schools and growth of informal economy are considered as the important causes of child labour in India. The 2001 national census of India estimated the total number of child labour, aged 5–14, to be at 12.6 million, out of a total child population of 253 million in 5-14 age group. A 2009-2010 nationwide survey found child labour prevalence had reduced to 4.98 million children (or less than 2% of children in 5-14 age group). The child labour problem is not unique to India; worldwide, about 217 million children work, many full-time. The Child Labour (Prohibition and Regulation) Act of 1986: The Act prohibits the employment of children below the age of 14 years in hazardous occupations identified in a list by the law. The list was expanded in 2006, and again in 2008. The Juvenile Justice (Care and Protection) of Children Act of 2000: This law made it a crime, punishable with a prison term, for anyone to procure or employ a child in any hazardous employment or in bondage.

In Krishnagiri district, the presence of child labour is found in all ten blocks. In Krishnagiri the total number of child labour engaged in different work settings were 702 with 399 boy and 302 girl child labourers. All these child labourers are placed in 24 schools across the district. All these children are provided with education in three different stages. At present, out of 702 child labourers, 337 children were mainstreamed to take up regular mode of education.

Sectoral Composition of Workers

Table -3.2 Compositions of Workers in Major Sectors - 2011

Blocks	Total workers		Cultivators		Agricultural Labourers		House hold Industries Manufacture Processing Servicing and Repairs		Main Other Workers		Marginal Workers	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Thally	58187	36744	31122	15869	9027	9220	505	656	10605	3286	6928	7713
Hosur	109336	37166	12519	4014	7557	5888	1279	1233	79065	20084	8916	5947
Kelamangalam	50958	31919	18304	11119	9924	8844	896	1083	16378	4593	5456	6280
Shoolagiri	53594	31402	18447	9785	13310	11561	625	669	15879	4580	8916	5947
Veppanapalli	32526	21121	8674	5033	8285	7313	495	1045	10283	2992	4789	4738
Krishnagiri	62283	29533	8327	5266	7208	7163	795	839	40108	10369	5845	5896
Bargur	57740	34465	10852	6044	14631	13167	630	687	23299	6294	8328	8273
Kaveripattinam	54654	34465	13568	7613	12111	10784	705	651	23546	6019	7724	9428
Mathur	28529	20989	5823	3753	6818	7400	474	692	10381	2806	5033	6338
Uthangarai	50539	37393	12078	7967	14584	15444	686	711	16101	4984	7090	8287
District	**561634**	**316145**	**139714**	**76463**	**103455**	**96784**	**7090**	**8266**	**242645**	**66007**	**65442**	**67707**

Source: Statistical Hand Book, Krishnagiri District, 2013

The sectoral composition of workers includes cultivators, agricultural labourers, household workers, other workers and marginal workers. With regard to distribution of workers across major sectors, workers who are involved in agricultural activities are high. It is found from Table 3.2 that workers engaged in agricultural activities, both cultivators and agricultural labourers, are found to be more in the district with 56.89 per cent. Next to agricultural workers, household industry workers and marginal workers other workers also constitute considerable work force in total work force with 40.61 per cent in the district.

Agricultural Labourers

It is found that highest number of agricultural labourers is observed in the Uthangarai block with 30028 agricultural labourers and lowest number is in Hosur block with 13445 labourers.

Household Industries

With regard to household industries, manufacturers, processing, servicing and repair oriented workers, Hosur being industries dominant one, the highest number of workers are engaged in household industries with 2512 households industries followed by Kelamangalam block with 1979 household industries and Thally has the lowest number of household industries with 1161 household industries.

Registration and Placement

Employment registration provides an opportunity to the educated youth to enrol for government jobs in the country. The level of literacy makes a person to register for various jobs in employment exchange. Government institutions are playing a vital role in providing employment opportunities to the educated masses through their employment exchanges. The following Table provides an insight on the level of employment offered by government in different government sectors.

Table 3.3 Registration and Placement - 2013

Year	Registration	Placement	Percentage of Placement
2007	20603	167	0.81
2008	20650	83	0.40
2009	22879	110	0.48
2010	20119	156	0.78
2011	24378	163	0.67
2012	144356	250	0.17
2013	195800	200	0.10
Total	**448785**	**1129**	**0.25**

Source: District Employment Office, Krishnagiri district, 2014

It is observed from Table 3.3 that in Krishnagiri district by the year 2013 4.48 lakhs people registered for employment but only 1129 persons got placement. And the overall placement in the jobs stands at less than 1%.

Box 3.2 MGNREGA – Employment and Income

Workforce programmes have been important interventions in developed as well as developing countries for many years. These programmes typically provide unskilled manual workers with short-term employment on public works such as, irrigation infrastructure, reforestation, soil conservation and road construction. This programme provides income transfers to poor households during critical times and also enable consumption smoothing, especially during slack agricultural seasons or years.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an Indian law that aims to guarantee the right to work and ensure livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. MGNREGA aims at enhancing the livelihood security of the people in rural areas by guaranteeing hundred days of wage employment in a financial year, to a rural household whose members volunteer to do unskilled manual work. The objective of the act is to create durable assets and strengthen the livelihood resource base of the rural poor.

During the year 2013-14, the number job cards provided were 3.39 lakhs and mandays created was 111.10 lakhs. It was found that the jobs cards issued under MGNREGA increased by 53.36 % from 2009-10 to 2013-14. Among blocks, more number of job cards were issued in Uthangarai block and low number of jobs cards were issued in Hosur block during the year 2013-14. Similarly mandays created also increased by 69 % from 2009-10 to 2013-14. It is observed that more number of mandays was created in Uthangarai block and low number of job cards were issued in Hosur block.

Income

Per Capita Income

Per capita income is a one of the important indicators which portrays the standard of living of a person. Per capita income, also known as income per person, is the mean income of the people in an economic unit such as a country or city. It is calculated by taking a measure of all sources of income in the aggregate (such as GDP or Gross national income) and dividing it by the total population. The per capita income is based on various factors such as availability of livelihood means, natural resources, networking with different factors and education of a person. Higher the

affordability to the resources, higher the income, lower the accessibility of resources, lower the income.

It is observed from Table 1.3 that per capita income at constant prices (2004-05) of the district gradually increased over the years. The per capita income of the district between 2008-2009 and 2011-12 is increased by 49.08 per cent. The annual growth rate for the district as well as the state also increased.

The reasons that can be attributed for increase in per capita income in the district over the years are Krishnagiri district is highly endowed with agricultural and allied activities like horticulture, floriculture and well-known automobile companies have their ancillary-making units in Hosur and mango pulp units are located in and around Krishnagiri. Agriculture is the main stay for people in Krishnagiri district. The district covers a total area of 514325 hectares and out of this 184607 hectares are used for cultivation of different crops in the district which is also one of contributing factors for rise in per capita income in the district.

Box 3.3 Rose Flower Cultivation – Array of Hope for Livelihood

In Krishnagiri district floriculture has been serving as an important tool for providing perennial source of income to people particularly in Shoolagiri block. Rose flower cultivation in Shoolagiri block is renowned worldwide. Varieties of rose flowers are cultivated in the villages of Shoolagiri block. The rose flowers cultivated are exported to Europe, United States, Australian and Asian Countries. In Shoolagiri block, large number of farmers are engaged in rose flower cultivation. It is seen in Berigai panchayat. More than thousands of farmers are involved in cultivation of rose flowers in Ramapuram, Gopasanthiram, Bodur and Byenapalli villages. About 8000 families are involved in cultivation of rose flowers in more than 500 acres. Tajmahal, Kohinoor, Grand Gala, First Red, Gold Strike (Yellow) are the rose varieties which are large quantitatively cultivated in the region.

Good soil and conducive climate conditions are the main reasons for successful cultivation of rose flowers in the region. A farmer says about 5 lakhs to 10 lakhs rose flowers are exported every year. This could be increased if an easily accessible cold storage established in the region will helpful to augment the cultivation. An in-depth discussion with farmers reveals that lack of cold storage go-down is the major obstacle in cultivation of rose flowers. Moreover lack of irrigation and erratic rainfall also contribute to lack of enthusiasm among farmers to take up rose flower cultivation. As a result, most of the farmers are gradually giving up cultivation and moving toward Hosur and Bangalore to take up other employment opportunities.

Farmers expressed that a water canal from Kelavarapalli dam situated on Thenpennai river will serve as succor to their long term demand and need. Freight charges to airport when the flowers are exported make farmers to spend more on cost of cultivation. A cold storage is needed because, after the rose follower is plucked from the plant it has to be stored in 2 to 3 degree Celsius for at least 2 to 3 hours until it get packed for transporting. Government should come forward to support farmers to put up green house for cultivation of rose flowers and can provide good quality fertilizers and other inputs to the farmers at a concession rate. An excellent condition for cultivation of rose flowers would restore the livelihood of about 10,000 rose flower cultivators and bring back the farmers migrated to nearby towns and engage them in taking up cultivation of flowers.

Poverty and Inequality

Below Poverty Line is an economic benchmark and poverty threshold used by the government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid. It is determined using various parameters which vary from state to state and within the state.

Table 3.4 Trends in Poverty Level -2014

Blocks	Total No. of HHs	Total No. of BPL HHs	% of BPL families
Thally	56199	15204	27.05
Hosur	28170	7874	27.95
Kelamangalam	28964	9482	32.73
Shoolagiri	38175	10835	28.38
Veppanapalli	24453	7410	30.30
Krishnagiri	44351	11569	26.08
Bargur	27877	14265	51.17
Kaveripattinam	41614	14266	34.28
Mathur	36691	9191	25.04
Uthangarai	30335	15697	51.74
Total	**356829**	**115788**	**32.44**

Source: Department of Rural Development and Panchayat Raj Institution, Krishnagiri district, 2014

To promote welfare services to the needy people in the district, rural development department has generated a list on BPL households. It is observed from Table 3.5 that about 33 per cent of the households in the district were identified as BPL households. Among blocks with rural features, Uthangarai block has the highest number of BPL families with 51.74 percent followed by Bargur (51.17 per cent). Mathur block has the lowest number of BPL families with 25 percent.

Public Distribution System

Table 3.5 Family Card Holders - 2014

(in numbers)

Taluks	Types of Cards				Total
	Rice Cards	AAY Cards	Sugar Cards	No commodity Cards	
Krishnagiri	127728	18793	554	29	147104
Hosur	106328	15004	2947	155	124434
Denkanikottai	68981	17933	68	0	86982
Uthangarai	45417	10200	210	0	55827
Pochampalli	39625	6243	97	0	45965

Source: District Supply Office, Krishnagiri district, 2014

It is observed from Table 3.6 that about 4.46 lakhs family cards were provided to the people in the district. District administration has taken notable steps in availing food entitlements to the people in the district. Among taluks, Krishnagiri taluk has more number of households provided with family cards with 147104 cards followed by Hosur taluk with 124434 family cards. Pochampalli taluk has the least numbers of family cards with 45965 family cards. In terms of types of card being used in the district, rice card is more in numbers. 388079 rice cards are distributed in the district. AAY cards is also having considerable share in the district. 68173 AAY cards are distributed in the district.

Conclusion

Krishnagiri district has potential for improvement of primary sector since agriculture and horticulture are predominant livelihoods in the district. Moreover, mango being important horticulture crop in the district as well as state, government has a major role in diversification of horticultural crops especially for promoting livelihood opportunities to the people in the district. With regard to secondary sector, more number of industries could be set up in Hosur block as the block already has vast scope for setting up industries.

The total numbers of workers in the district increased from 7,52,794 workers to 877779 with an increase of 124985 workers during 2001 to 2011 with an increase of 16.60 per cent. As Krishnagiri district is endowed with the presence of large number of industries in Hosur, they provide more opportunities for taking up employment in formal organisations. As a result of spread effect, establishment of more industries is also seen in the district particularly in Hosur. Workers engaged in agricultural activities, both cultivators and agricultural labourers are found to be more in the district with 56.89 per cent. Next to cultivators and agricultural workers, other categories of workers also constitute considerable workforce in total work force with 40.61 per cent in the district. With regard to jobs provided to rural households under MGNEREGA, during the year 2013-14 the number of job cards provided were 3.39 lakhs and mandays created was 111.10 lakhs. It was found that the jobs cards issued under MGNREGA increased by 53.36 per cent from 2009-10 to 2013-14.

Per capita income (at constant prices 2004-05) of the district steadily increased over the years. The per capita income of the district between 2008-2009 and 2012-12 increased by 49.08 per cent. The average growth rate of the district (9.25 per cent) is considerably higher than the state growth rate (6.72) during the year 2010-11. About 4.46 lakhs family cards were provided to the people in the district. . In terms of types of card being used in the district, rice card is more in numbers. 388079 rice cards are distributed in the district.

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

Chapter IV

Demography, Health and Nutrition

Introduction

In the HDI, life expectancy is the indicator which is meant to capture the overall health status of the population. However, health is much more than just life expectancy; it includes questions of fertility, morbidity, mortality and nutrition. The other important point is that health status is rarely the outcome of government policies and programmes alone. In fact, it is often the outcome in spite of government programmes. This chapter documents the demographic, health and nutrition status of Krishnagiri district. It analyses the trends and changes in health and nutritional indicators in the district and the effectiveness of government policies and programmes in influencing health outcomes.

Demographic Trends and Health Indicators

Population and Demographic Transition

Demography as understood today provides an overview of its population size, composition, territorial distribution, changes such as nativity, mortality and social mobility. Demographic indicators have been divided into two parts – population statistics and vital statistics. Population statistics include indicators that measure the population size, sex ratio, density and dependency ratio. Vital statistics include indicators such as birth rate, death rate, natural growth rate, life expectancy at birth, mortality and fertility rates. These indicators help in identifying areas that need policy and programmed interventions, setting near and far-term goals and deciding priorities, besides understanding them in an integrated structure.

Table 4.1 Demographic Profile

Blocks	Population		Density		SC population %			ST population %		
	2001	2011	2001	2011	2001	2011	Growth Rate	2001	2011	Growth Rate
Thally	164532	180276	119	130	24477	28365	15.88	5814	6290	8.19
Hosur	247670	362060	623	911	36008	50072	39.06	424	797	87.97
Kelamangalam	145278	165392	239	272	18440	22006	19.34	4694	5206	10.91
Shoolagiri	150362	177608	267	316	19939	24560	23.18	1254	2294	82.93
Veppanapalli	82695	109963	263	351	10005	14181	41.74	199	585	193.97
Krishnagiri	187433	233324	562	700	23637	30079	27.25	843	1314	55.87
Bargur	180547	198412	381	419	23529	27382	16.38	2153	2187	1.58
Kaveripattinam	171112	187907	404	444	14294	18570	29.91	337	694	105.93
Mathur	91001	94843	363	379	13060	16117	23.41	175	435	148.57
Uthangarai	140488	173946	350	433	33122	40174	21.29	1049	2545	142.61
District Total	1561118	1879809	307	370	216511	267386	25.40	16942	22388	31.90

Source: Census, 2011

One of the basic demographic characteristics of the population is the sex composition. Sex ratio is defined as "the number of females per 1000 males". In any study of population, analysis of the sex composition plays a vital role. The sex composition of the population is affected by the differentials in mortality conditions of males and females, sex selective migration and sex ratio at birth.

Table 4.1 presents the features of the population of Krishnagiri district which increased from 1561118 in 2001 to 1879809 in 2011 and it accounts for 2.60 per cent of the state population. The decadal growth of the population is 20.41 per cent. With regard to blocks, Hosur block has largest population in the district with 247670 people and Veppanapalli with 82695 people has the lowest population. The density of population per sq.km in the district is 370 which is lower than the State's density of population 555 persons per sq.km. Among the blocks, the lowest density of population is seen in Thally block.

Among the blocks, high decadal growth was observed in Hosur block with 46.18 per cent and low growth rate was observed in Mathur block with 4.22 per cent. As Hosur is providing huge scope for employment opportunities due to presence of many industries and factories and located on border of three states – Tamil Nadu, Andhra Pradesh and Karnataka, people from nearby states are working in various jobs in the industries and have settled down in Hosur. Moreover Hosur is serving as significant location to the people of South Tamil Nadu. In Hosur, a good number of people from Madurai, Dindigul, Tirunelveli, Tuticorn districts are making a living their life either formally employed in industries or informally through business like running grocery shops, hotels, vegetable shops and other such businesses.

Crude Birth Rate and Crude Death Rate

Crude Birth Rate

The crude birth rate is the number of live births occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.

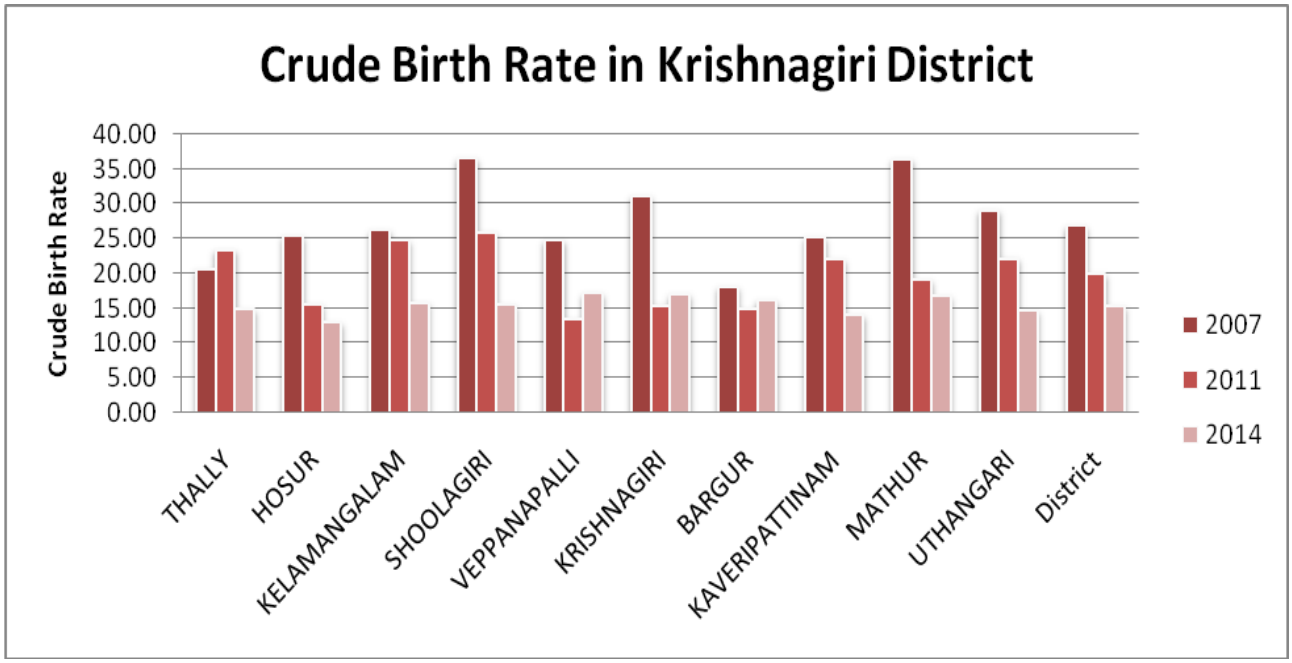


Figure 4.1Crude Birth Rate

The crude birth rate (15.3) of the district in the year 2014 slightly is lower than the state CBR of 15.9. Among blocks Mathur has recorded a greater fall in birth rate from 36.49 in 2007 to 16.80 in 2014. However, the lowest birth rate (13.00) is seen in Hosur block followed by Kaveripattinam (14.10) and Uthangarai (14.70) in the year 2014.

There is an appreciatable level of fall in crude birth rate in all blocks during the given years. It is due to district administration's sincere and continuous effort in reducing the crude birth rate over the years. In-depth discussion with district health officials reveals that massive changes in CBR from 2007 to 2014 are due to continuous efforts like implementation of medical programmes and follow-up in the areas where the incidence of CBR is exorbitant. The district's health department has vast scope for reducing the CBR further. It is understood the socio-economic factors and lifestyle of people also have a greater contribution in lowering the rate.

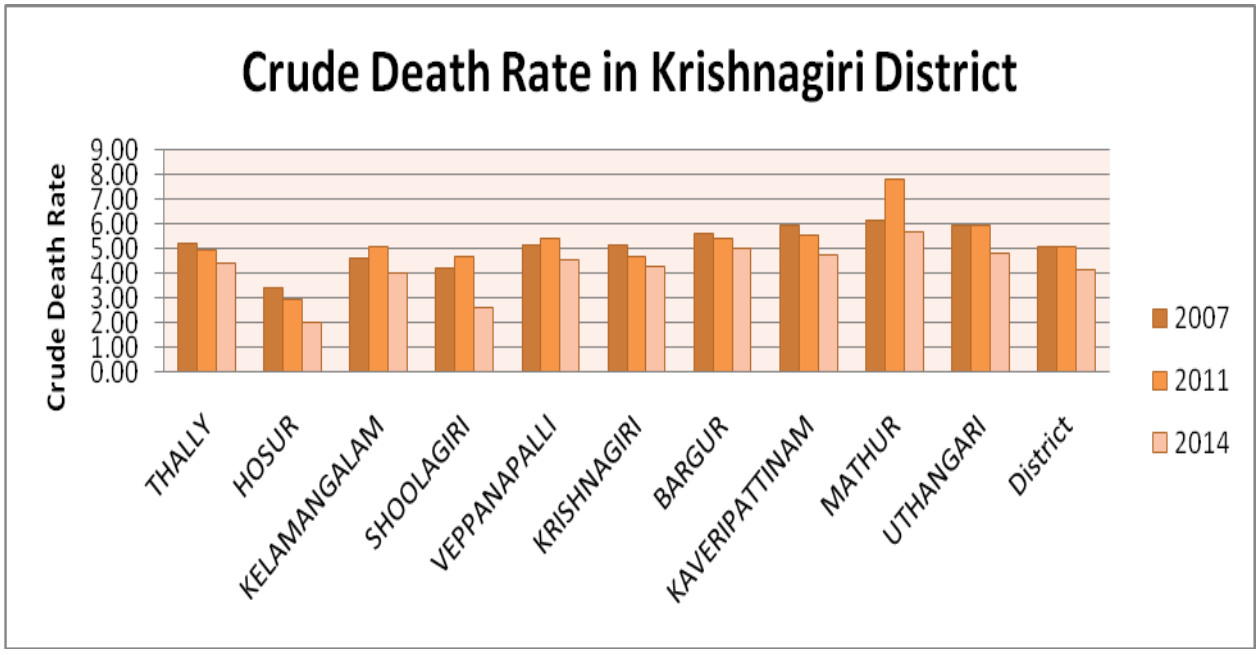


Figure 4.2 Crude Death Rate

With regard to crude death rate, in the district it is observed that CDR slightly decreased from 5.09 to 4.10 between 2007 and 2014. The lowest crude death rate is seen in Hosur (2.00) and the highest death rate is seen in Mathur (5.70) over the years 2007 to 2014. It is observed that the crude death rate decreased only marginally across all the blocks in the district. Better nutrition, improvement in medical and public health efforts (such as immunizations and antibiotics) and

improved sanitation and personal hygiene are the factors that contributed towards decline in crude birth rate.

Sex Ratio

Table 4.2 Sex Ratio

Blocks	Sex Ratio		increase or decrease
	2001	2011	
Thally	940	935	-5
Hosur	879	946	67
Kelamangalam	948	941	-7
Shoolagiri	956	942	-14
Veppanapalli	969	966	-3
Krishnagiri	986	999	13
Bargur	964	964	0
Kaveripattinam	964	967	3
Mathur	943	954	11
Uthangarai	931	943	12
District	944	958	14

Source: Census of India -2001 and 2011

The sex ratio of Krishnagiri district (958) is lower than the State sex ratio (995). High sex ratio was seen in Krishnagiri block with 999 females per 1000 males and low sex ratio was seen in Thally block with 935 females per 1000 males. Sex ratio unchanged in Bargur block between 2001 and 2011. Shoolagiri block has recorded a maximum decrease in sex ratio with 14. Overall in the district, the sex ratio remains the same between 2001 and 2011 with a slight increase of 14.

Child Sex Ratio in Krishnagiri District

Table 4.3 Child Sex Ratio in Krishnagiri District

Blocks	Total Population		Population in the age group of 0-6		% of 0-6 population		Child Sex Ratio	
	2001	2011	2001	2011	2001	2011	2001	2011
Thally	164532	180276	23313	18509	14.16	10.26	929	916
Hosur	247670	362060	34712	41920	14.01	11.57	930	902
Kelamangalam	145278	165392	22467	18431	15.46	11.14	825	923
Shoolagiri	150362	177608	23617	19841	15.70	11.17	897	931
Veppanapalli	82695	109963	11577	12118	14.00	11.02	825	865
Krishnagiri	187433	233324	25410	26544	14.70	11.37	839	887
Bargur	180547	198412	23106	20500	12.79	10.33	958	951
Kaveripattinam	171112	187907	20868	17776	12.19	9.45	917	959
Mathur	91001	94843	11558	10197	12.70	10.75	922	909
Uthangarai	140488	173946	18326	17894	13.04	10.28	940	935
District	1561118	1879809	214954	217323	13.77	11.56	905	924

Source: Statistical Hand Book, Krishnagiri district, 2013

It is observed from Table 4.3 that the child population in Krishnagiri district not increased during 2001-2011. It is observed that share of child population also decreased in all blocks. However the child sex ratio increased to 924 from 905 during the same period. Blocks like Kelamangalam, Shoolagiri, Veppanapalli, Krishnagiri and Kaveripattinam registered an increase in child sex ratio during 2001-11.

Infant Mortality Rate

The convention on the rights of child assures the rights of child to the enjoyment of the highest standard of health and facilities for the treatment of illness and rehabilitation of health. The State strives to ensure that no child is deprived of his/her right to access to healthcare services. Over the last few years, the State Government, with support from UNICEF, has focused extensively on improving facility based healthcare for new-borns and mothers with new-born care corners (NNBCs), special new born care units (SNCUs) and labour rooms in first referral units across the state.

Block-wise Infant Mortality Rate

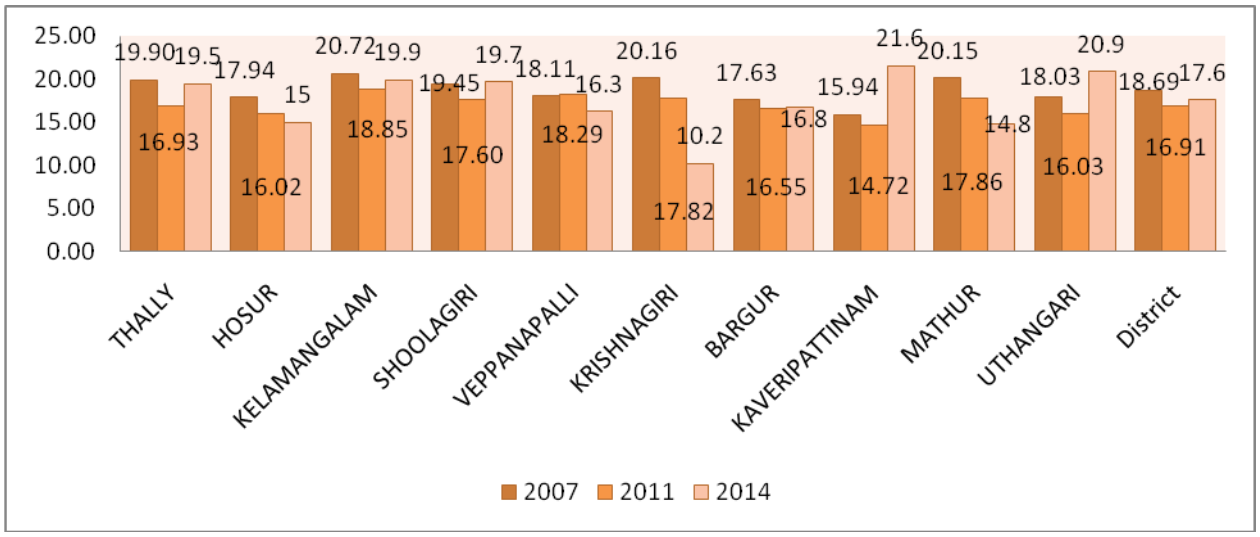


Figure 4.3 Infant Mortality Rate

It is found from Figure 4.3 that at the district level, the IMR decreased from 18.69 to 17.60 during 2007 to 2014. Among the blocks, Kaveripattinam (21.60), Uthangarai (20.09) and Krishnagiri (10.20) have the lowest IMR in 2014. Blocks such as Kaveripattinam, Uthangarai, Kelamangalam and Shoolagiri require immediate attention to reduce IMR. The high rate of IMR may be due to poor health seeking behaviour of the conceived mothers, prevalence of anaemia among conceived mothers, practice of child marriages and occurrence of home deliveries. The decrease in IMR over the years across the district is due to more access in public healthcare services and increase in institutional deliveries. The data shows that district health department has undertaken a variety of measures to reduce the incidence of infant mortality rate in the district.

Maternal Mortality Rate

Maternal Mortality Rate (MMR) measures number of women aged 15-49 years dying due to maternal causes per 1,00,000 live births. It refers to death of women, while pregnant or within 42 days of the termination of pregnancy, irrespective of the duration of the pregnancy, from any cause aggravated by the pregnancy and its management but not from accidental or incidental causes.

Table 4.4 Maternal Mortality Rate

Blocks	MMR- 2014
Thally	102
Hosur	39
Kelamangalam	36
Shoolagiri	110
Veppanapalli	181
Krishnagiri	78
Bargur	90
Kaveripattinam	72
Mathur	55
Uthangarai	42
Total	102

Source: Health Department, Krishnagiri district, 2014

It is observed from Table 4.4 that MMR in Krishnagiri is 102. The highest rate of MMR is observed in Veppanapalli block (181) followed by Shoolagiri (110) and Thally (102). All these blocks are having MMR above the district rate. The lowest MMR was observed in Kelamangalam (36) followed by Hosur (39) and Uthangarai (42).

Overall, still there is scope in scaling up the campaign activities in reducing MMR in the district. The health department of the district should scale-up the pre and post-natal care services to reduce maternal mortality rate. In-depth discussions with health officials reveal that massive distribution of iron tablets to pregnant mothers is extended to all parts of the district and involvement of the community in promoting healthcare measures for conceived mothers has also widened which result in controlling maternal mortality rate.

Place of Delivery

Institutional delivery means giving birth to a child in a medical institution under the overall supervision of trained and competent health personnel where more amenities are available to handle the situation and save the life of the mother and the child.

Institutional deliveries or facility based births are crucial for reducing maternal and neo-natal mortality. Besides reducing maternal and neo-natal mortality, institutional deliveries are also believed to improve health seeking behaviour and practices in the period following childbirth. Therefore institutional delivery can also be thought of as an investment in human capital and can play an important contributory role in the development process of the country. However, there are some barriers faced by women to undertake health facility to seek delivery case. They are, cost care, accessibility to health centre, quality of care and lack of health awareness.

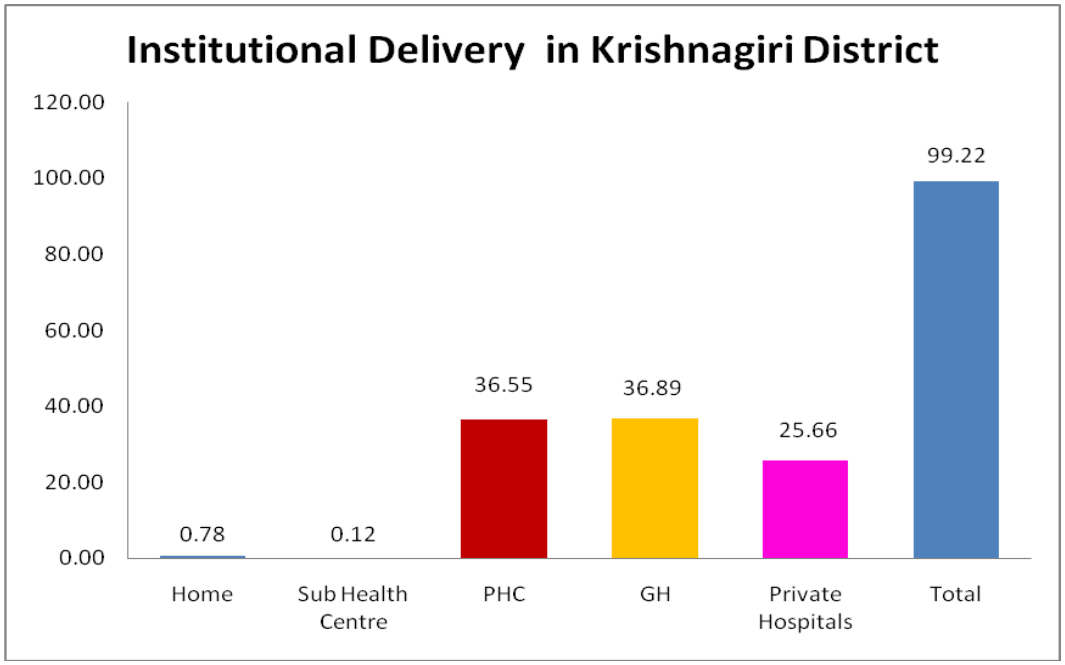


Figure 4.4 Institutional Delivery – 2013-14

It is observed from Figure 4.4 that 99.22 percent of the deliveries are occurred in the institutions like PHC, Government hospitals and Private Hospitals. The district has made significant progress in increasing the proportion of institutional deliveries. .Delivery is found to be high in Government hospitals (36.89 per cent) followed by PHC (36.55 per cent).

At the district level, deliveries in sub-health centre are found to be abysmally low with 0.12 per cent. Though the district is having 238 sub-health centers, its contribution to institutional deliveries is far below the other institutions. It is understood that both public and private healthcare providers play a significant role in increasing of institutional deliveries in the district.

Still Birth Rate

A stillbirth refers to a dead born fetus which can occur before the onset of labour (ante-partum death) or during labour (intra-partum) and it is expressed per 1000 of total births. In other words, it refers to a baby born with no sign of life at or after 28 weeks's gestation while preterm births are those which occur between 28 weeks to 32 weeks of gestation. Childbirth complications, maternal infections in pregnancy, maternal disorders, especially hypertension and diabetes, foetal growth restrictions and congenital abnormalities are the reasons for stillbirth.

Table 4.5 Still Birth rate

Blocks	2007	2008	2009	2010	2011	2012	2013	2014
Thally	4.40	5.87	10.65	11.52	15.43	14.62	11.99	17.15
Hosur	8.79	11.97	9.53	14.57	9.98	11.13	11.55	7.39
Kelamangalam	10.86	13.77	9.17	9.73	17.91	16.66	12.80	16.19
Shoolagiri	17.66	14.28	11.11	16.32	19.41	10.72	12.26	11.55
Veppanapalli	16.77	10.11	11.28	12.82	19.96	13.40	11.30	13.41
Krishnagiri	11.01	10.24	7.51	13.42	9.30	15.22	8.48	4.88
Bargur	11.23	7.94	9.11	14.65	7.80	6.57	8.33	7.67
Kaveripattinam	14.80	16.06	15.31	18.74	13.68	11.62	10.85	10.36
Mathur	11.83	11.12	13.37	15.53	8.52	9.59	5.84	8.30
Uthangarai	17.63	11.70	15.42	13.56	12.87	6.54	9.77	16.58
Rural Total	12.10	11.27	11.08	14.04	13.42	11.58	10.40	11.49
Krishnagiri Municipality	10.39	8.63	7.39	1.85	8.18	5.93	9.94	8.06
Hosur Municipality	31.42	2.44	8.13	0.00	4.64	11.98	6.96	4.81
Urban Total	23.83	4.91	7.74	0.94	6.27	8.83	8.49	5.92
District Total	13.15	10.88	10.85	13.10	13.15	11.36	10.25	10.85

Source: Health Department, Krishnagiri district, 2014

It is observed from Table 4.5 that SBR in Krishnagiri had been showing a fluctuating trend during 2007 to 2014. The SBR in the district is declined from 13.15 in 2007 to 10.85 in 2014. With regard to SBR in urban areas the data shows that there has been wide fluctuation. It is observed that the lowest SBR was recorded in the year 2013 with 10.25 and it increased to 10.85 in 2014. Similarly in rural areas also wide fluctuation was observed.

Nutritional Status

Nutrition level and Trend

The nutritional status of under – five children is categorized into four such as normal, severely under weighed, moderately under-weighed and over-weighed. For calculating the poor nutritional status, children under the categories of severely and moderately under-weighed to the total children with under five age is calculated. Malnutrition refers to the situation where there is an unbalanced diet in which some nutrients are in excess, lacking or in wrong proportion. Deficiencies in nutrition inflict long-term damage to both individuals and society. Compared with their better-fed peers, nutrition-deficient individuals are more likely to have infectious diseases such as pneumonia and tuberculosis, which lead to higher mortality rate.

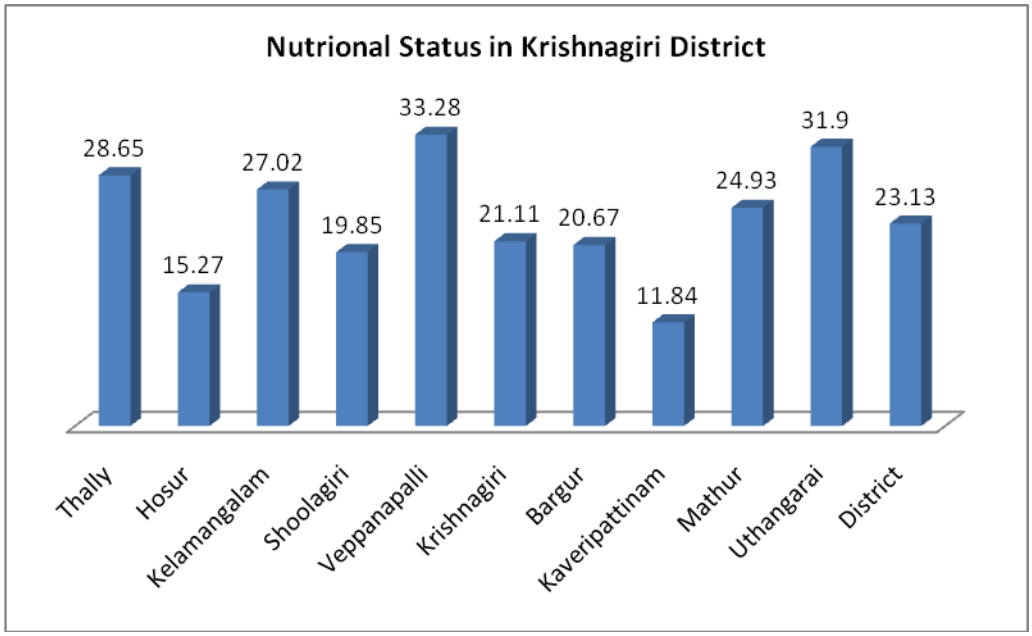


Figure 4.5 Nutritional Status in Krishnagiri District - 2014

It is observed from Figure 4.5 that the rate of malnutrition level of both severely under weight and moderately under-weight children in Krishnagiri district stands at 23.13 per cent. In terms of absolute numbers, the district has 28128 children of severely and moderately under-weight which is quite significant when compared to the total weighed children under age of five is 121613. Among the blocks, Veppanapalli block has the highest number of children with severely and moderately underweight with 33. 28 per cent and Kaveripattinam has the lowest number of severely and moderately underweight children with 11.84 per cent.

It shows that the children in rural areas are lacking in the essential nutritional components. The district health department can take steps to provide the essential nutritional components to the children in rural areas. Moreover, the district health department can conduct awareness programmes to the people in rural areas relating to food habits and efficacy of traditional food items such as small millets which are rich in micro-nutritional components and to incorporate along with their daily food.

Provision of IFA Tablets

To improve the availability of and access to quality healthcare, especially for those residing in rural areas, the poor, women, and children, the government recently launched the National Rural Health Mission for the 2005-2012 period. Nutritional deficiencies in women are often exacerbated during pregnancy because of the additional nutrient requirements of fetal growth. Iron deficiency anaemia is the most common micronutrient deficiency in the world. It is a major threat to safe motherhood and to the health and survival of infants because it contributes to low birth weight, lowered resistance to infection, impaired cognitive development, and decreased work capacity. The provision of iron and folic acid (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 recommendation is that women consume 100 tablets of iron and folic acid during pregnancy.

Table 4.6 Provision IFA Tablets in 2013-14

Block	Per cent of women who took IFA Tablets	Per cent of children who took IFA Tablets	Per cent of adolescent girls who took IFA Tablets
Thally	93.50	7.29	89
Hosur	86.51	24.18	80
Kelamangalam	80.81	18.30	79
Shoolagiri	88.60	18.21	87
Veppanapalli	92.80	23.37	76
Krishnagiri	73.87	14.59	97
Bargur	89.07	23.46	78
Kaveripattinam	83.14	18.07	93
Mathur	87.84	6.29	94
Uthangarai	91.73	23.24	83
Total	**86.59**	**17.52**	**85**

Source: Health Department, Krishnagiri district, 2014

It is observed from Table 4.6 that during the year 2013-14, 86.59 per cent of women were provided with IFA tablets in Krishnagiri district. Women who received IFA Tablets was high in Veppanapalli (92.80 per cent) followed by Uthangarai (91.73 per cent). Only 17.52 per cent of the children in the district took tablets during the year 2013-14. Among the blocks, Hosur (24.18 per cent) and Bargur (23.46per cent) were found to be high and Mathur (6.29per cent) and Thally (7.29per cent) were found to be low on IFA Tablets taken by children.

With regard to IFA tablets taken by adolescent girls, 85 per cent of the adolescent girls took IFA Tablets in Krishnagiri district. Among the blocks, Krishnagiri block (97per cent) has performed well in providing IFA tablets to adolescent girls and the lowest percentage is observed in Veppanapalli block (76 per cent).

Access to Drinking Water

Drinking water is an essential element for living. Article 47 of the Constitution of India makes it a top priority for the government to provide safe and clean drinking water to every citizen

of the country. Provision of safe drinking water is a basic necessity. Rural drinking water supply is a State subject and has been included in the Eleventh Schedule of the Constitution of India, among the subjects that may be entrusted to Panchayats by the States.

Drinking water being the basic requirement of life plays an integral role in maintaining and promoting public health. According to various government estimates, the diseases burden created in the rural areas due to poor water quality is huge. Close to 37.7 million people are affected due to water-borne diseases annually, 1.5 million children die due to diarrhea and 73 million working days are lost due to illness. Access to reliable, safe water reduces exposures to pollution, disease, and harmful contaminants, thereby promoting health and well-being.

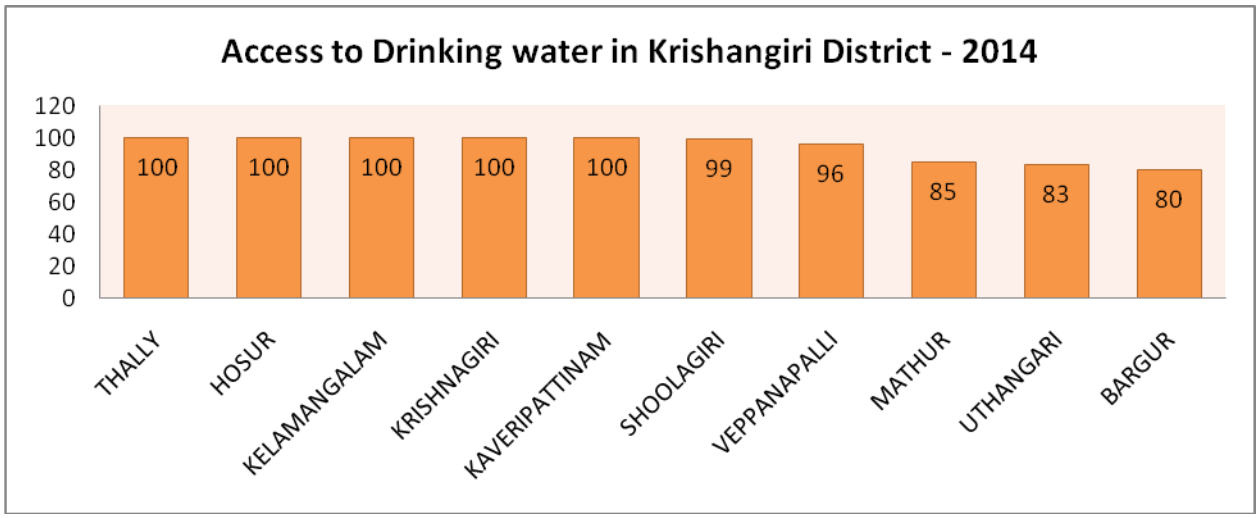


Figure 4.6 Access to Drinking Water in Krishnagiri District - 2014

It is seen from Figure 4.6 the status of drinking water coverage in Krishnagiri district. It is observed that about 4382 habitations are covered by drinking water in the district. Among blocks, Thally, Hosur, Kelamangalam, Krishnagiri and Kaveripattinam blocks have more number of habitations (100 per cent) covered under drinking water scheme followed by Shoolagiri (99 per cent). Bargur block has the lowest coverage with 80 per cent. Emphasis may be laid on the participation of stakeholders at all levels, from planning, design and location to implementation and management of drinking water issues. Steps may be taken to involve the community in maintenance of drinking water supply.

Sanitation

Access to improved sanitation facilities refers to the percentage of the population using improved sanitation facilities. The improved sanitation facilities include flush/pour flush (to piped sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet.India leads the world in open defecation. At least 636 million Indians lack toilets, according to the latest census data, a crisis that contributes to disease, childhood malnutrition, loss of economic output and, as highlighted recently, violence against women.

Table 4.7 Access to Toilets – 2013- 14

Blocks	Percentage of Coverage
Thally	70.44
Hosur	72.88
Kelamangalam	100
Shoolagiri	100
Veppanapalli	93.09
Krishnagiri	100
Bargur	100
Kaveripattinam	100
Mathur	100
Uthangarai	100
District	90.85

Source: Department of Rural Development, Krishnagiri District, 2014

Access to toilet in Krishnagiri district seems to be relatively high. It is found that 90.85 per cent of the households have access to toilets within their households. Among the blocks, Bargur, Mathur, Krishnagiri, Kaveripattinam, Shoolagiri, Kelamangalam and Uthangarai blocks, all the house (100 per cent) of houses have toilets. Thally block has the lowest percentage of households (70.44 per cent) with toilets. It is observed that more number of households in rural blocks are having toilets than urban blocks. The district administration can scale up measures to provide assistance to households for constructing toilets and facilitate panchayats to avail the financial assistance from Nirmal Bharat Abhiyan Scheme for constructing toilets in households.

Special Programmes

AIDS Control

Age and Sex-wise HIV Positives Cases

Table 4.8 HIV Positive Cases (in numbers)

Age-Group wise	2006-07		2010-11		2013-14	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
0-14	11	24	13	5	14	15
15-19	3	12	5	14	1	5
20-24	20	115	11	57	9	30
25-29	90	145	78	65	29	30
30-39	208	155	143	104	96	126
40-49	99	70	102	74	100	54
50&above	35	16	62	36	60	40
Total	**466**	**537**	**414**	**355**	**309**	**302**

Source: Health Department, Krishnagiri district, 2013

From Table 4.8, it is found that HIV Positive is high among the age group of 30-39 years in in all the reference year 2007, 2011 and 2014. Cases of HIV Positive declined by 33.69 per cent among males and 43.76 per cent among females in the year 2013-14.

Tuberculosis and Leprosy cases

Table 4.9 TB and Leprosy Cases

Blocks	Positive TB cases		Leprosy	
	2007	2011	2007	2011
Thally	121	46	76	97
Hosur	26	109	57	54
Kelamangalam	147	103	26	30
Shoolagiri	68	76	18	25
Veppanapalli	36	47	18	21
Krishnagiri	95	152	61	63
Bargur	112	69	45	45
Kaveripattinam	84	61	33	26
Mathur	41	56	30	25
Uthangarai	62	78	40	38
District Total	792	797	404	424

Source: Health Department, Krishnagiri district, 2013

Table 4.9 presents the total persons affected by TB and Leprosy. It is found that persons affected by TB and diagnosed are considered as TB positive cases are 797 cases in 2011 and persons affected by leprosy are 424. Among the blocks, high number of TB positive cases are found in Thally block (121 cases) followed by Bargur block (112 cases). In 2011 TB, cases are found high in Krishnagiri (152 cases) followed by Hosur (109 cases). Similarly, Leprosy cases are found to be high in Thally (97 cases) followed by Krishnagiri (63 cases) and the lowest cases are observed in Veppanapalli block (21 cases).

Conclusion

The demography and health profile of Krishnagiri district shows that there exists a sharp variation in time and space. Health indicators like death rate, birth rate, infant mortality rate, maternal mortality rate and still-birth rate are declining. The population in Krishnagiri district increased from 1561118 in 2001 to 1879809 in 2011 and it accounts for 2.60 per cent of the state population. The decadal growth of the population is 20.41 per cent. The demography and health profile of Krishnagiri district shows that there exists a sharp variation in time and space. Health indicators like death rate, birth rate, infant mortality rate, maternal mortality rate and still birth rate are declining in Krishnagiri district.

The crude birth rate (15.3) of the district in the year 2011 is higher than the state CBR 15.9. With regard to crude death rate, in the district it is observed that CDR slightly decreased from 5.09 to 4.10 between 2007 and 2014. The sex ratio of Krishnagiri district (958) is lower than the State sex ratio (995). The share of child population in Krishnagiri district declined by 1.10 per cent during 2001-2011. It is observed that share of child population also decreased in all blocks. It is found that at the district level, the IMR decreased from18.69 to 17.60 during 2007 to 2014. The MMR in the district is 102.

It is also observed that in all blocks institutional deliveries are nearing 100 per cent which show inclination attitude towards institutions for deliveries among people in the district. Adversely, the percentage of low birth weight babies increased during the period from 2008-09 to 2012-13. On the whole, it is understood that the district is showing a positive trend in attaining good health in spite of variations among the blocks.

It is observed from Figure that the rate of malnutrition level of both severely under-weight and moderately under-weight in Krishnagiri district stands at 23.13 per cent. In terms of absolute numbers, the district has 28128 children of severely and moderately under-weight which is quite significant when compared to the total weighed children under age of 5 is 121613. It is observed that about 4382 habitations are covered with drinking water in the district. Access to toilet in Krishnagiri district seems to be not bad. It is found that 90.85 per cent of the households have access to toilets within their households, and there is scope for further improvement.

CHAPTER 5

LITERACY AND EDUCATION

Chapter V
Literacy and Education

Introduction

Education is considered as an important factor in social and economic development of a country. It has been an important tool for individual development. Primary education is considered as foundation for human development. Firstly, it makes a person literate and provides opportunities for higher education. It is necessary that every child in school going age should have assesses to a school and these schools must impart proper education if an effective base for human capital development is to be achieved.

As per the Millennium Development Goals, the following targets in education are proposed to be achieved by 2015.

- All children to complete the full course of five years of primary school.
- Elimination of gender disparity in primary and secondary education by 2005 and in all education by 2015.

Sarva Siksha Abhiyan (SSA) was launched in 2001. The goals of SSA are as follows:

- All 6 – 14 age children in school/EGS (Education Guarantee Scheme) centre/Bridge Course by 2005.
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010.
- Universal retention by 2010.
- Focus on elementary education of satisfactory quality with emphasis on education for life.

The Human Development reports of UNDP have clearly identified the relation between education, employment and income. Education is the determining factor of many other social and economic indicators. It leads to many social benefits such as improvement in standards of hygiene, reduction in infant mortality rate, reduction in maternal mortality rate and improve the individual consciousness of health and hygiene. It also provides opportunities and choices for sustained improvement in wellbeing. Another important objective of improving the educational status is to promote social inclusion and to bring the weaker sections into the main stream of the society.

Literacy Rate in Krishnagiri District

Literacy and level of education are basic indicators of the level of development achieved by a society. Spread of literacy is generally associated with important traits of modern civilization such as modernization, urbanization, industrialization, communication and commerce. Literacy forms an important input in overall development of individuals enabling them to comprehend their social, political and cultural environment better and respond to it appropriately. Higher levels of education and literacy lead to a greater awareness and also contribute to improvement of economic and social conditions. Education acts as a catalyst for social upliftment enhancing the returns on investment made in almost every aspect of development effort, be it population control, health, hygiene, environmental degradation control, employment of weaker sections of the society.

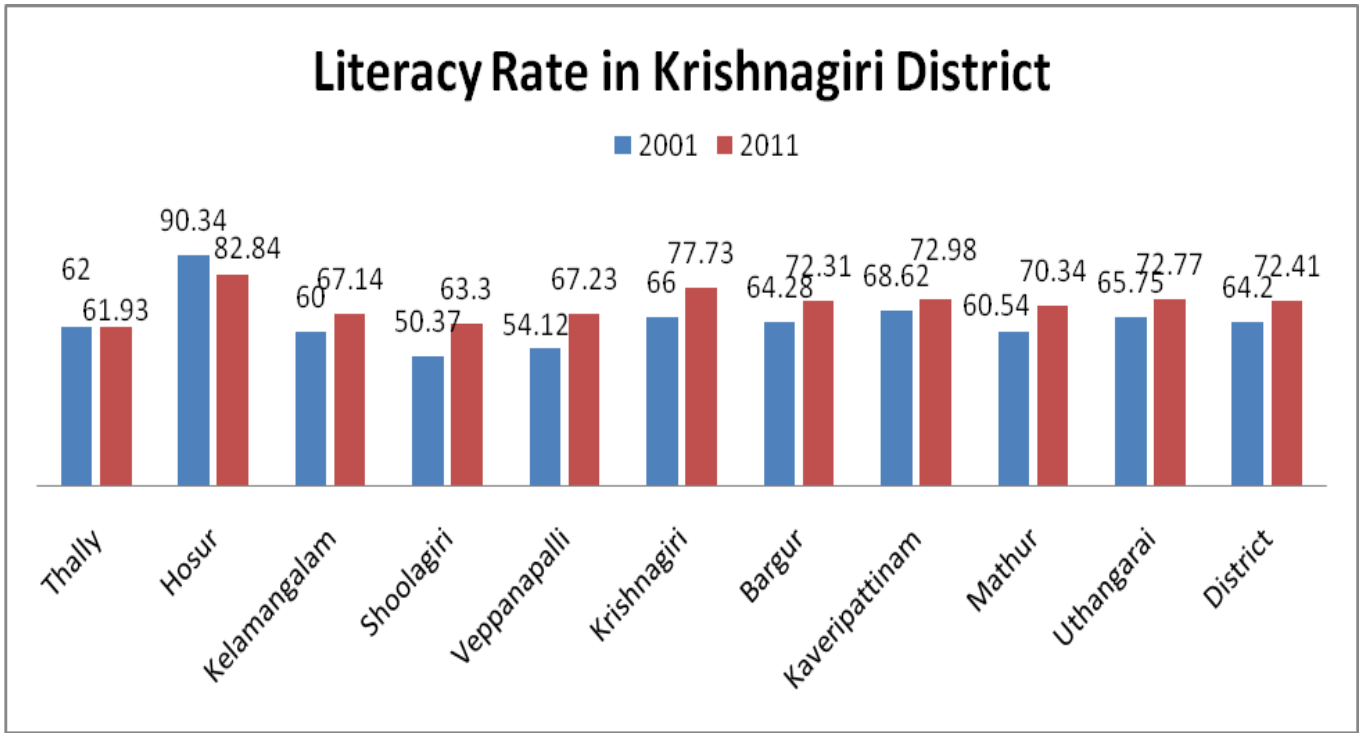


Figure 5.1 Block wise Literacy Rate in Krishnagiri District.

The total literacy rate of Krishnagiri district according Census 2011 is 72. 41 which is slightly lower than the state average 73.86. Among the blocks, Hosur has highest literacy rate at 82.86, followed by Krishnagiri at 77.73. The lowest literacy rate is observed in Thally block with 61.93. The following blocks have to improve their literacy rate: Thally, Shoolagiri, Kelamangalam, and Veppanapalli. As far as gender literacy gap is concerned, in Krishnagiri district the gap is 14.80. The

lowest gender literacy gap is found in Hosur block at 9.54 and the highest is in Kaveripattinam at 17.60. It is observed that percentage of literacy is increased by 8.21 per cent during 2001 and 2011. The level of literacy in Thally block remains the same in 2001 and 2011.

It is understood that the district education department has undertaken a number of measures in promoting education particularly enrolment in primary education and developing school infrastructure to attract students and to retain students from dropping out from the schools. However, the factors contributing for poor attainment in the level of education are remoteness, non-availability of teachers, lack of adequate schools and facilities and education institutions and road facilities. Despite many government programmes, some blocks are performing poorly in attaining full literacy which needs to be dealt with in a concerted manner.

Elementary Education

Primary Education

Table 5.1 Gender-wise Enrolment in Primary Education

Blocks	Boys		Girls		Total	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Thally	99.49	99.59	99.15	98.80	99.32	99.19
Hosur	99.79	99.89	99.45	99.10	99.62	99.49
Kelamangalam	97.09	97.19	96.75	96.40	96.92	96.79
Shoolagiri	99.57	99.67	99.23	98.88	99.40	99.27
Veppanapalli	98.99	99.09	98.65	98.30	98.82	98.69
Krishnagiri	99.69	99.79	99.35	99.00	99.52	99.39
Bargur	99.81	99.91	99.47	99.12	99.64	99.51
Kaveripattinam	99.40	99.50	99.06	98.71	99.23	99.10
Mathur	99.43	99.53	99.09	98.74	99.26	99.13
Uthangarai	99.23	99.33	98.89	98.54	99.06	98.93
District	99.25	99.35	98.91	98.56	99.08	98.95

Source: Department of Education Krishnagiri District, 2014

The Gross Enrolment Ratio refers to proportion of enrolled students who are in the age group of school education to total number of in the age group of school education. In Krishnagiri district, the enrolment ratio at primary education level slightly decreased from 99.08 per cent in 2012-13 to 98.95 per cent in 2013-14. At Primary education level, Bargur block has high enrolment rate (99.51 per cent) followed by Hosur (99.49 per cent). The district education department has taken a number of steps to improve to enrolment ratio at primary level. The data shows that almost all school going age children are admitted in schools. The enrolment ratio at primary level is commendable and it is due to effective implementation of government programs in Krishnagiri district. It is observed that though the enrolment ratio of boys marginally increased across blocks, the enrolment rate of girls in all blocks decreased marginally. There is need to examine the factors for decline in enrolment of girls in primary level of education, so that necessary steps can be taken to improve the GER of girls at the primary level.

Completion Rate and Dropout Rate in Primary Education

Table 5.2 Completion Rate and Dropout Rate in Primary Education

Block	Completion						Drop Out					
	Boys		Girls		Total		Boys		Girls		Total	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Thally	97.52	98.14	97.52	98.19	97.53	98.17	1.44	0.98	1.51	1.04	1.48	1.01
Hosur	97.82	98.44	97.82	98.49	97.83	98.47	1.44	0.98	1.49	0.84	1.47	0.91
Kelamangalam	95.12	95.74	95.12	95.79	95.13	95.77	1.49	1.03	1.48	0.99	1.49	1.01
Shoolagiri	97.60	98.22	97.60	98.29	97.61	98.26	1.49	1.03	1.48	1.05	1.49	1.04
Veppanapalli	97.02	97.64	97.02	97.69	97.03	97.67	1.50	1.04	1.52	1.01	1.51	1.03
Krishnagiri	97.72	98.34	97.80	98.39	97.73	98.37	1.46	1.00	1.48	0.99	1.47	1.00
Bargur	97.84	98.46	97.94	98.51	97.85	98.49	1.41	0.95	1.46	1.01	1.44	0.98
Kaveripattinam	97.43	98.05	97.43	98.10	97.44	98.08	1.44	0.98	1.31	1.02	1.38	1.00
Mathur	97.46	98.08	97.46	98.13	97.47	98.11	1.46	1.00	1.46	1.01	1.46	1.01
Uthangarai	97.26	97.88	97.26	97.93	97.27	97.91	1.47	1.01	1.51	1.04	1.49	1.03
District	97.28	97.90	97.30	97.94	97.29	97.93	1.46	1.00	1.47	1.00	1.47	1.00

Source: Department of Education Krishnagiri District, 2014

The completion rate at primary level appears to have slightly increased in the district from 2012 - 2013. Increase in completion rate is due to District Education department's effort in persuading parents and children to attend school regularly. At the primary education level in Krishnagiri district, during the year 2013-14, the completion rate was 97.29. Bargur (98.49) and Hosur (98.47) are top in completion rate at primary level during the year 2013-14. With regard to gender in enrolment complete rate, girls performed better than boys in all blocks. Kelamangalam, Veppanapalli and Uthangarai blocks have achieved lower rate of completion rate than that of district enrolment rate. The district education department has a massive role in reaching the target of cent per cent completion rate in primary education because primary education is the basic education required for every school going children.

Dropout rate is the proportion of school aged children who do not complete a particular school cycle. The dropout rate gives an indication of the poor performance in school education. As per the data given by the district education department, the dropout rate in primary education in Krishnagiri district is 1.00 during the year 2013-14. During the year 2013-14, among the blocks, Hosur block has performed well in reducing dropout rate at 0.91 per cent. Although the rate of dropout across all the blocks seems to be minimal, attention may be given in all blocks to reduce the dropout completely.

Shoolagiri, Uthangarai and Veppanapalli blocks have poor performance in reducing dropout rate. In spite of educational assistances provided by government to school going children in the form of free geometric boxes, cycles, uniform, textbooks, notebooks etc., the dropout seems to be continuing in all blocks of the district. Socio-economic condition of the children's family is also one of the reasons for the dropout. The district education authorities should explore the reasons for dropout and provide the possible solutions to arrest the dropout rate completely.

Enrolment Rate in Upper Primary Education

Table 5.3 Enrolment Rate at Upper Primary Education

Blocks	Upper Primary								
	Boys			Girls			Total		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Thally	97.92	98.12	99.04	98.84	98.94	98.99	98.38	98.53	99.02
Hosur	98.22	98.42	99.34	99.14	99.24	99.29	98.68	98.83	99.32
Kelamangalam	95.52	95.72	96.64	96.44	96.54	96.59	95.98	96.13	96.62
Shoolagiri	98.00	98.20	99.12	98.92	99.02	99.07	98.46	98.61	99.10
Veppanapalli	97.42	97.62	98.54	98.34	98.44	98.49	97.88	98.03	98.52
Krishnagiri	98.12	98.32	99.24	99.04	99.14	99.19	98.58	98.73	99.22
Bargur	98.24	98.44	99.36	99.16	99.26	99.31	98.70	98.85	99.34
Kaveripattinam	97.83	98.03	98.95	98.75	98.85	98.90	98.29	98.44	98.93
Mathur	97.86	98.06	98.98	98.78	98.88	98.73	98.32	98.47	98.76
Uthangarai	97.66	97.86	98.78	98.58	98.68	98.93	98.12	98.27	98.96
District	97.68	97.88	98.80	98.60	98.70	98.75	98.14	98.29	98.78

Source: Department of Education Krishnagiri District, 2014

It is observed from Table 5.3 that enrolment rate at upper primary education level in Krishnagiri district slightly increased from 98.14 per cent in 2011-12 to 98.78 per cent in 2013-14. It is observed from Table that an increased trend is seen in all blocks in enrolment rate at upper primary level. This could be seen as efforts of the district education department to bring all school going children to the schools. It is observed that there is no significant variation among the blocks. However poor performance is seen Kelamangalam (96.62), Veppanapalli (98.52) and Mathur (98.76), which is lesser than the district's enrolment rate (98.78) during the year 2013-14. With regard to gender in enrolment at upper primary education, girls performed better than boys in all blocks. Priority may be given for the blocks at the bottom to improve enrolment rate along with other blocks.

Transition Rate

Transition rate refers to percentage of students advancing from one level of schooling to the next level of education. Transition rate from upper primary to secondary is derived by number of school students enrolled in upper primary school by number of students enrolled and passed out in primary school. From the given data it is assumed that the intake capacity of upper primary level schools is very high and accommodated more number of students and almost every student transited from primary level to upper primary level.

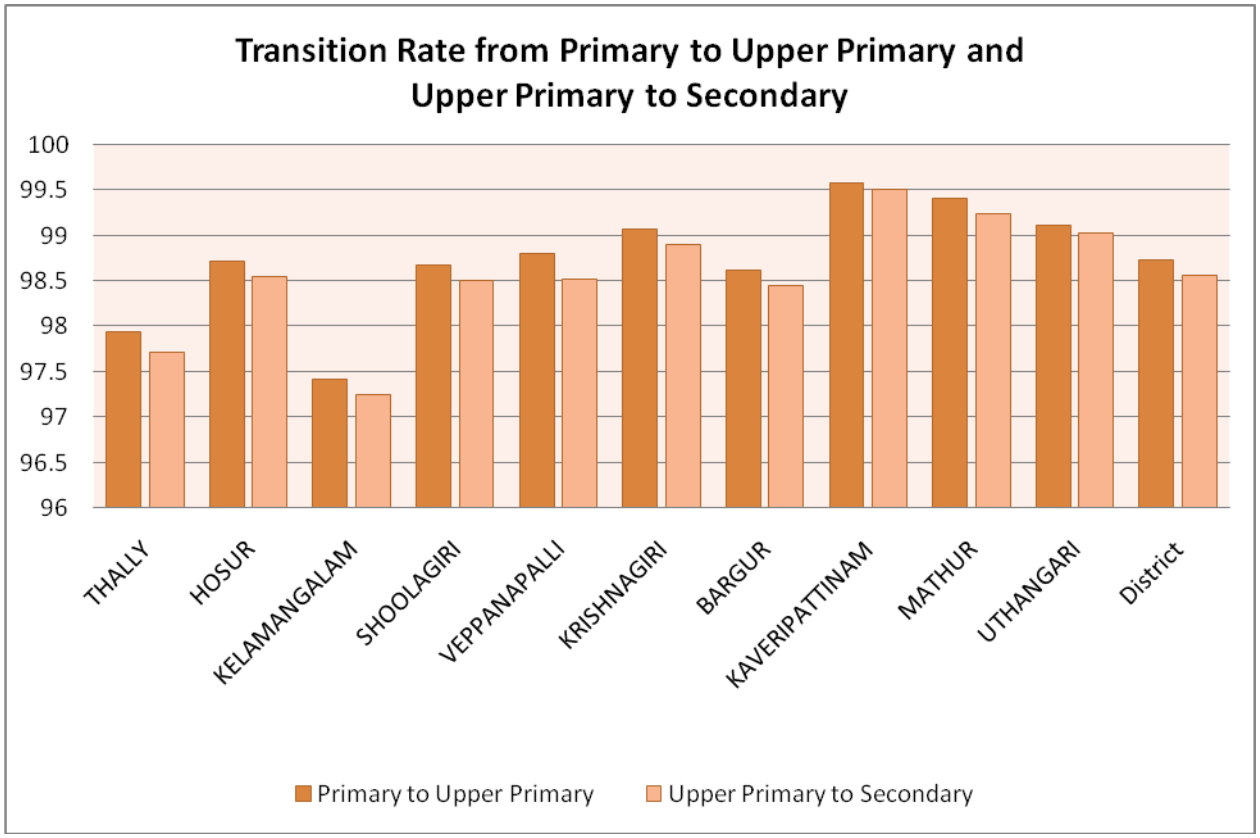


Figure 5.2 Transition Rate from Upper Primary to Secondary Education

Transition rate from primary to upper primary and upper primary to secondary education is given in Figure 5.2. The transition rate at primary level to upper primary in Krishnagiri district is 98.73 per cent (Vide Appendix Table 5.2) and 98.56 per cent at upper primary level to secondary level. It is observed across the blocks, higher transition rate from upper primary to secondary level is seen in Kaveripattinam (99.51) Mathur (99.23) Uthangarai (99.0) and Krishnagiri (98.90). All this

blocks are above the district average (98.56). The lowest transition rate is found in Kelamangalam (97.25).

However, there is no significant variation across the blocks in the district. District Education Department is making considerable amount of effort to provide secondary education for all children in the district.

Completion Rate and Dropout Rate at Upper Primary Level

Table 5.4 Completion Rate and Dropout Rate at Upper Primary Level

Block	Completion Rate						Dropout rate					
	Boys		Girls		Total		Boys		Girls		Total	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2011-12	2012-13	2012-13	2013-14	2012-13	2013-14
Thally	91.34	96.74	91.28	96.24	91.31	96.49	2.62	1.26	2.69	1.99	2.66	1.63
Hosur	91.64	97.04	91.58	96.54	91.61	96.79	2.44	1.08	2.54	1.84	2.49	1.46
Kelamangalam	88.94	94.34	88.88	93.84	88.91	94.09	2.52	1.16	2.72	2.02	2.62	1.59
Shoolagiri	91.42	96.82	91.36	96.32	91.39	96.57	2.45	1.09	2.58	1.88	2.52	1.49
Veppanapalli	90.84	96.24	90.78	95.74	90.81	95.99	2.53	1.17	2.54	1.84	2.54	1.51
Krishnagiri	91.54	96.94	91.48	96.44	91.51	96.69	2.44	1.08	2.68	1.98	2.56	1.53
Bargur	91.25	96.65	91.19	96.15	91.22	96.40	2.46	1.10	2.59	1.89	2.53	1.50
Kaveripattinam	91.66	97.06	91.60	96.56	91.63	96.81	2.50	1.14	2.58	1.88	2.54	1.51
Mathur	91.28	96.68	91.22	96.18	91.25	96.43	2.32	0.96	2.55	1.85	2.44	1.41
Uthangarai	91.08	96.48	91.02	95.98	91.05	96.23	2.32	0.96	2.54	1.84	2.43	1.40
District	91.10	96.50	91.04	96.00	91.07	96.25	2.46	1.10	2.60	1.90	2.53	1.50

Source: Department of Education, Krishnagiri District, 2014

Table 5.4 presents the completion rate and dropout rate in Krishnagiri district. It is observed from Table that the completion rate at upper primary education marginally increased from 91.07 in 2011-12 to 96.25 in 2012-13. During the year 2013-14, highest enrolment rate is found in Kaveripattinam block (96.81 per cent) followed by Hosur (96.79 per cent). The lowest completion rate was observed in Kelamangalam block (94.09 per cent) during the given years. Priority may be given to Kelamangalam block to achieve hundred per cent completion rate along with other blocks of the district.

It is observed that in all blocks, the performance of boys is better than that of girls. It is observed that the girls' education may be encouraged by way of providing better access to the schools and creating all facilities in the schools.

Dropout rate has more effect than enrolment ratio because it makes government to pay attention to improve education sector. It is widely assumed that lower the dropouts, higher the transition rate. The data shows that during intermediary years 2012-13 and 2013-14, the dropout rate decreased to 1.50 at upper primary level. From the data, it is clear that there has been marginal fall in dropout rate upper primary level.

No major variation in dropout rate among the blocks is observed during 2013-14. During the year 2013-14, the highest dropout rate is observed in Thally (1.63) and the lowest dropout is in Uthangarai (1.40). It is also observed that the dropout rate at upper primary level is slightly higher than dropout rate at primary level of education. Socio-economic condition of the children's family is also one of the reasons for dropout. The district education authorities should explore the reasons for dropout and provide the possible solutions to arrest the dropout rate completely.

Availability of Schools in Krishnagiri

Table 5.5 Availability of Schools in Krishnagiri District – 2014

Blocks	Number of habitations	Number of primary Schools	Number of upper primary schools
Thally	298	181	61
Hosur	197	107	50
Kelamangalam	279	116	62
Shoolagiri	348	127	71
Veppanapalli	177	79	35
Krishnagiri	388	90	61
Bargur	357	137	73
Kaveripattinam	407	113	54
Mathur	147	85	36
Uthangarai	294	97	58
District	2892	1132	561

Source: Department of Education Krishnagiri District, 2014

Table 5.5 shows availability of schools in Krishnagiri district. It is found that there are 1132 primary schools and 561 upper primary schools in the district. The data shows that one primary school covers about 2.5 habitations and one upper primary school covers about 6 habitations in the district. It is observed that more numbers of primary schools are found in Thally block with 181 primary schools. Veppanapalli block has minimum numbers of schools with 79 primary schools. With regard to upper primary schools, Bargur block has more number of schools with 73 schools and the lowest numbers of schools are found in Veppanapalli with 35 upper primary schools.

Pupil-Teacher Ratio and Pupil-School Ratio

Table 5.6 Pupil-Teacher Ratio and Pupil-School Ratio - 2014

Block	Primary School		Upper Primary School	
	Pupil-teacher Ratio	Pupil-school Ratio	Pupil Teacher Ratio	Pupil-school Ratio
Thally	29.12	99.37	30.42	146.56
Hosur	26.98	322.09	28.28	379.38
Kelamangalam	32.09	145.77	33.39	156.95
Shoolagiri	30.94	122.76	32.24	137.20
Veppanapalli	27.66	121.27	28.96	156.54
Krishnagiri	27.29	229.58	28.59	225.89
Bargur	22.52	134.10	23.82	159.75
Kaveripattinam	24.38	134.36	25.68	158.46
Mathur	25.94	92.11	27.24	113.50
Uthangarai	27.00	154.41	28.30	182.10
District	27.39	151.55	28.69	180.94

Source: Department of Education Krishnagiri District, 2014

The sanctioned strength as per the SSA norms is 1:40. The district data on pupil-teacher ratio brings to light that the district witnessed a low in pupil-teacher ratio at primary school level at 27.39 and 28:69 at upper primary level. It impacts on teachers showing more attention to students and improvement in standard of education among the students. Across the blocks, at primary level, Bargur block has low pupil-teacher ratio at 22.59 at primary level and Kelamangalam block witnessed high teacher ratio at 32:1. Similarly at upper primary level, Bargur block has low pupil-teacher ratio at 23.82 and Kelamangalam block has high pupil-teacher ratio at 33.39.

With regard to pupil-school ratio, the district has 151.55 ratio at primary level and 180:94 at upper primary level. At primary level, Mathur block has lowest ratio of pupil-teacher ratio at 92:1 and highest pupil-teacher ratio is found in Hosur block at 322: 1. Similarly, at upper primary level

highest pupil-school ratio is found in Hosur block at 379.38 and Mathur block has lowest ratio of pupil-teacher ratio at 113.50

The quality of education depends on the number of teachers available for teaching in a given school. A school with optimum number of teachers for the total strength of the students makes a conducing environment for both teachers and students and thereby students can improve the interaction level and quality of education.

Secondary Education

Table 5.7 Enrolment in Secondary Education

Blocks	Enrolment Rate (2012-13)
Thally	96.3
Hosur	122.0
Kelamangalam	98.70
Shoolagiri	108.60
Veppanapalli	103.80
Krishnagiri	120.6
Bargur	116.8
Kaveripattinam	118.9
Mathur	112.6
Uthangarai	123.8

Source: Department of Education Krishnagiri District, 2013

It is observed from Table 5.7 that out of ten blocks, except two blocks viz., Thally (96.30 per cent) and Kelamangalam (98.70 percent) have cent percent enrolment in secondary education. Uthangarai block has the maximum enrolment rate at 123.80 followed by Hosur at 122.0. Availability of more number of private schools, school bus facilities, provision of bi-cycles, and availability of modern school facilities (infrastructure) are the major factors contributed for attaining more than 100 per cent in enrolment rate in secondary education. Thally and Kelamangalam blocks have the unique character of the influence of Kannada and Telugu culture and remoteness of the

areas which deter the students to continue the secondary education as the availability of Telugu and Kannada medium schools is comparatively lower than Tamil medium schools.

Access to Higher Secondary Schools

Basic Infrastructure

Infrastructure and amenities in schools have a vital role in registering high rate of enrolment. The basic facility particularly toilet facility and drinking water play a vital role in improved enrolment ratio particularly the girl's enrolment ratio. Availability of safe drinking water, more class rooms, separate toilets for boys and girls, modern equipments, compound wall are having influential role in improving learning levels and getting more number of students.

Table 5.8 Availability of School Infrastructure in the Schools – 2014

Block	Total No. Of Schools	With 3 Class Rooms	More Than 3 Class Rooms	Without Girls Toilet	Without Electricity	Without Compound Wall	Without Drinking Water
Thally	241	188	53	16	1	56	27
Hosur	157	108	49	13	0	42	12
Kelamangalam	177	120	57	16	2	46	5
Shoolagiri	197	147	50	0	0	46	15
Veppanapalli	113	71	42	6	0	22	2
Krishnagiri	151	87	64	0	0	34	27
Bargur	209	126	83	19	0	48	24
Kaveripattinam	165	84	81	6	0	40	16
Mathur	121	69	52	0	0	37	19
Uthangarai	156	96	60	14	0	31	12
District	1687	1096	591	90	3	402	159

Source: Department of Education Krishnagiri District, 2014

From the above data given in Table 5.8, it is observed that out of 1687 schools, 1096 schools have at least 3 class rooms, 591 schools have more than 3 class rooms, 1597 schools have toilets, 1285 schools have compound wall, 1528 schools have drinking water facility.

The basic facility particularly toilet facility and drinking water play a vital role in improved enrolment ratio particularly the girl's enrolment ratio. A good number of studies proved that the major factor for dropout particularly among girl students is lack of toilet faculties in the schools. The district administration has to pay attention to ensure that the toilet facilities are provided with water facilities and due maintenance is taken care of in both boys and girls schools. The data has brought to light that out of 1687 schools in the district, 402 schools do not have compound walls to the schools which may face risks like environmental and hygiene issues in the premises and playground of the schools.

Hostel Facilities in Krishnagiri District

Table 5.9 Availability of Hostels in the District – 2012-13

Taluks	No of Hostels	No of Students Admitted
Krishnagiri	18	1068
Hosur	5	270
Denkanikottai	9	458
Pochampalli	11	737
Uthangarai	12	735
Total	55	3268

Source: Department of Education Krishnagiri District, 2014

It is found from Table 5.9 that in Krishnagiri district, there are 55 hostels constructed for government school children and 3268 are residing in those hostels. Among taluks, Krishnagiri taluk has more number of hostels and more number of students staying in the hostels. In Krishnagiri taluk, there are 18 hostels and 1068 students staying in the hostels. Lower number of hostels is seen in Hosur with five hostels and 270 students. This is one of the important services provided by the district administration to encourage the students from poor families to continue their studies. Hostels are also saving the time of commutation of students from their home and school thereby the improvement in standard of education is ensured as students get more time for reading and concentration on education.

Higher Education

Arts and Science Colleges

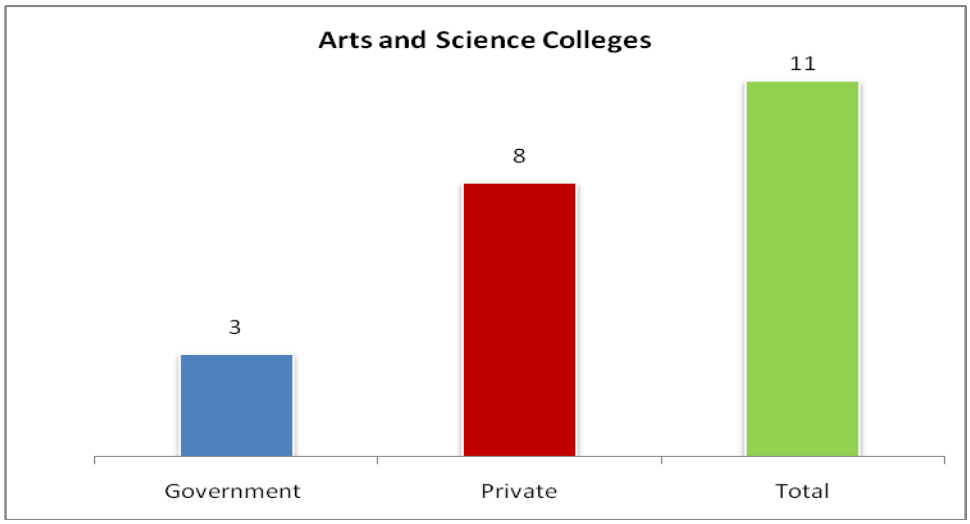


Figure 5.3 Arts and Science Colleges in Krishnagiri District

In the district, there are 7 arts and science colleges and 12 other institutions like engineering, polytechnic and teacher training institutions.

Table 5.10 Status of Higher Education in the District -2012-13

Name of Institution	Students			Teachers
	Boys	Girls	Total	
Govt. Arts College for Men, Krishnagiri	962	0	962	76
Govt. Arts College for Women, Krishnagiri	0	802	802	31
Govt. Women Arts & Science College, Bargur	0	2151	2151	11
M.G.R. College, Hosur	1942	1462	3404	134
Sri Vidya Mandir Arts & Science College	462	323	785	52
Aringar Anna College Arts & Science, Krishnagiri	894	978	1872	66
Gonzaga collage for Women, Kathampallam, Elathagiri	0	1180	1180	15
Total (7colleges)	4260	6896	11156	385
Enrolment in other Institutions (Engineering, Polytechnic and Teacher Training Institutions) (12 colleges)	13521	3346	16867	950
Total students enrolled in all categories	17781	10242	28023	1335

Source: District Hand Book, 2013

Table 5.10 provides the details of number of colleges, students enrolled and staff available in the college. In the district, there are 7 arts and science colleges and 12 other institutions like engineering, polytechnic and teacher training institutions. It is observed from Table that out of 11156 students enrolled in arts and science colleges, 61.81 percent (6896) of the students are girls and the rest 38.19 (4260) are boys and in other institutions enrolment of boys is higher (63.45 percent) than girls. College-wise student teacher ratio is 21 in all colleges which is higher than student teacher ratio of other institutions (18). In arts and science colleges, the student teacher ratio is 29.

Technical Education

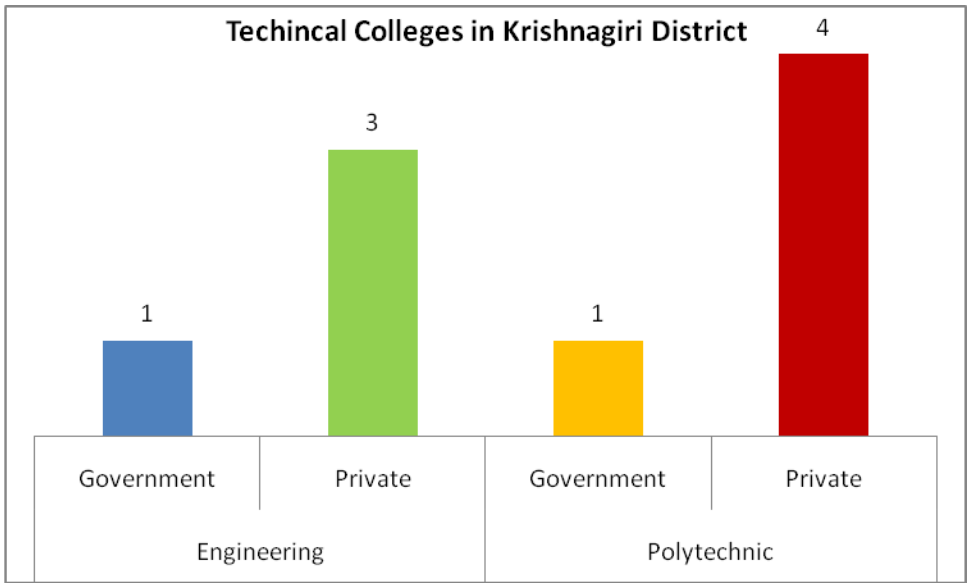


Figure 5.4 Technical Colleges in Krishnagiri District

With regard to technical colleges and professional institutions - Engineering, Polytechnic and Teacher Training Institutions, in the district, there are 12 colleges in which 16867 students are undertaking technical educations of various categories. The data shows that in Krishnagiri district, the access for technical and professional education in addition to the arts and science colleges is also available to a commendable extent for the students after school education.

Conclusion

Education is considered as an important factor of social and economic development in a country. It has been an important tool for individual development. In Krishnagiri district, the level of education is quite increasing over a decade. The enrolment rate of boys and girls from primary education to secondary education is showing a positive trend. However, the enrolment rate in primary education of boys is slightly more than that of girls. The completion rate in both primary and upper primary level is nearing 100 per cent in all blocks. Therefore, the district education department has to take specific measures for improving the completion rate in all blocks. There is no major variation in terms of dropout percentage in primary and upper primary school in all blocks of the district. Due to sincere efforts of district education department, except Thally and Kelamangalam blocks, all blocks have more than 100 per cent of enrolment in secondary education.

With regard to pupil-teacher ratio and pupil-school ratio, the district data on pupil-teacher ratio brings to light that the district witnessed a low pupil-teacher ratio at primary school level at 27:1 and 29:1 at upper primary level. In Krishnagiri district, the availability of toilet facility in schools is found to be about 95 per cent. It shows that schools are paying more attention in creating infrastructure in schools to get more number of students.

The drinking water availability in schools appears to be a problem as 159 schools are without drinking water facility within the premises of the schools and 402 schools are without compound walls . In Krishnagiri district the access for technical and professional education in addition to the arts and science colleges is also available for the students after school education as 17781 students are enrolled in various higher educational institutes.

CHAPTER 6

GENDER

Chapter VI

Gender

Gender equality and women's empowerment are essential for meeting aspirations of inclusive and sustainable development. Gender equality needs to be pursued in its own right for a just and equal society, and for better development outcomes - inclusive growth, faster poverty reduction and accelerated progress towards Millennium Development Goals (MDGs) attainment.

Women have remained backward owing to many factors though the scriptures laid down an exalted status for them. In recent years, there has been awareness and recognition of the fact that women who formed half of the society cannot be ignored. An increasing role of women in nation building is extremely vital. Women have a greater role in contributing to welfare and progress of the society. Empowerment of women has been recognized as a central issue in determining the status of women. Empowerment covers aspects such as women's control over material and intellectual resources. Empowerment is a process, not an event, which challenges traditional power equations and relations. Abolition of gender based discrimination in all institutions and structures of the society and decision-making processes at domestic and public levels are a few dimensions of women empowerment.

The issues taken up by the Human Development Report have vividly pointed to gender based inequalities. In this connection, Human Development Report 2003 is of immense significance which speaks of Millennium Development Goals (MDG) that prominently includes empowerment of women. In our own country, the principle of gender equality is enshrined in the Constitution, in its Preamble, Fundamental Rights, and fundamental duties and in Directive Principles. The Constitution not only grants equality to women but also empowers the state to adopt measures of positive discrimination in favour of women.

All-round development of women has been one of the focal points of planning process in India. The First Five Year Plan (1951-56) envisaged a number of welfare measures for women. Establishment of the Central Social Welfare Board (CSWB), organisation of Mahila Mandals or Women Clubs and the Community Development Programmes were a few steps in this direction. In the Second Five Year Plan (1956-61), the empowerment of women was closely linked with the overall approach of intensive agricultural development programmes.

The Third and Fourth Five Year Plans (1961-66 and 1969-74) supported female education as a major welfare measure. Similarly, the Fourth Five Year Plan (1969-74) continued the emphasis on women's education. The Fifth Five Year Plan (1974-79) emphasized the training of women, who were in need of income and protection. Functional literacy programmes got priority. This plan coincided with International Women's Decade and the submission of Report of the Committee on the Status of Women in India. In 1976, Women Welfare and Development Bureau was set up under the Ministry of Social Welfare. It was to act as a nodal point to coordinate policies and programmes for women's development.

The Sixth Five Year Plan (1980-85) saw a definite shift from welfare to development. It recognized women's lack of access to resources as a critical factor impeding their growth. The Seventh Five Year Plan (1985-90) emphasized the need for gender equality and empowerment. For the first time, emphasis was placed upon qualitative aspects such as inculcation of confidence, generation of awareness with regard to rights and training in skills for better employment.

The Eighth Five Year Plan (1992-97) focused on empowering women, especially at the grassroots level through Panchayati Raj Institutions. The Ninth Five Year Plan (1995-2000) adopted a strategy of Women's Component Plan, under which not less than 30 percent of funds/benefits were earmarked for women –specific programmes. The Tenth Plan (2002-07) approach aim at empowering women through translating the recently adopted National Policy for Empowerment of Women (2001) into action and ensuring Survival, Protection and Development of Women and Children through Rights Based Approach.

The Eleventh Five Year Plan (2007-12) aimed at inclusive development. Its vision was that every woman in the country should be able to develop to her full potential and share the benefits of economic growth and prosperity. Towards this end, the approach adopted was to empower women and recognize their Agency thereby seeking to make them partners in their own development. The Plan period saw the introduction of many new schemes and programmes targeted at particular groups or aimed at addressing specific issues. These included SABLA, for empowering adolescent girls, IGMSY for supporting poor women during the final stages of their maternity, Mahila Kisan Sashaktikaran Yojana for women farmers, a scheme for leadership training of minority women, Ujjawala for combating trafficking and Dhanalakshmi to tackle the issue of declining sex ratio.

Inclusion and mainstreaming of women also received special attention under programmes such as the MGNREGA, the Right to Free & Compulsory Education, National Rural Health Mission (NHRM), National Rural Livelihood Mission (NRLM) and National Skill Development Mission.

The Twelfth Five year plan (2012-17) broad objective "Faster, Sustainable and More Inclusive growth". The Planning Commission is pushing for special dispensation for single women, particularly those who are single by choice, under various government schemes in the 12th Five Year Plan. In addition to reserving a certain percentage of jobs for single women under centrally sponsored schemes, the plan has proposed promoting and strengthening federations of single women at the block and district level. In framing policies/ schemes for the 12th Five Year Plan, the special needs of women must be taken due care of. The Mahila Kisan Sahakatikaran Pariyojana (MKSP) which is a sub-component of NRLM (National Rural Health Mission) was recently launched to meet the specific attention needs to be given to leverage the enormous potential of empowering rural women in the farm sector, and also in the rural non-farmer sector.

Status of Women

Gender equality and women's empowerment are essential for meeting aspirations of inclusive and sustainable development. Gender equality needs to be pursued in its own right for a just and equal society, and for better development outcomes - inclusive growth, faster poverty reduction and accelerated progress towards Millennium Development Goals (MDGs) attainment.

Table 6.1 Status of Women in Krishnagiri District

Particulars	Women status
Total Number of Women	919577
Percentage in Total Population	48.91
Sex Ratio	958
Life Expectancy at birth	67.0
Maternal Mortality Rate	102
Female Child Population	104491
Literate	520896
Literacy Percentage	63.90
Percentage of women workers in agriculture sector	69.00
Percentage of women workers in non-agriculture sector	31.00

Source: Census Data, 2011

Table 6.1 details of the status of women in Krishnagiri district. It is seen from Table that the share of female population in the district is 48.91 percent which is slightly lower than the state share (49.88 percent). Sex ratio is 958 which is marginally lower than the state sex ratio (995). Life expectancy of female at birth is 67 years. The rate of literacy of female is 63.90 percent. It is observed from Table the performance of women in all aspects is lower than the state average which stresses for more attention towards uplift of women in the district.

Access and Control over Resources

Box 6.1 Self Help Groups in Krishnagiri District

Credit is one of the most crucial inputs in the process of development. Development has economic, social and political dimensions and is incomplete without developing women who constitute about 50 per cent of the population. The inability of the credit institutions to deal with the credit requirements of the poor particularly poor women in rural areas effectively has led to the emergence of the micro finance and micro credit system for the poor. The self help group approach focuses on organizing the poor into self help groups (Self Help Group) through social mobilization. This is a single cell self employment programme for the rural poor aimed at establishment of large number of micro enterprises. The linking of SHGs with the financial sector was good for both sides. The banks were able to tap into a large market, namely the low income households, transactions costs were low and repayment rates were high. The SHGs were able to scale up their operations with more financing and they had access to more credit products.

As on 31.03.2014 Krishnagiri district has 13899 self help groups with 196056 members. Self help groups in Krishnagiri district have accumulated a total savings of Rs. 197.40 crores and credit availed by the groups is 411.226 crores. Among blocks in the district, Hosur block has more number of groups with 34864 members and have a total savings Rs. 41.83 crores and credit availed by the groups is Rs. 97.84 crores.

It is understood that the performance of microfinance in Krishnagiri district is remarkable as the district has laudable level of saving accumulation and credit disbursement to the self help groups. The following factors seem to be appropriate as the district has laudable level of saving accumulation and credit disbursement to the self help groups

1. The maintenance of relationship with each other without giving scope for dropout.
2. In some groups dropouts become inevitable due to migration and varied reasons in which case dropouts are replaced by new members.

Employment

Women labour constitutes an important segment of the labour force in India and their participation in the labour force is gradually increasing in the labour market. Participation of women in employment activities is playing pivotal role in supporting families from economic vulnerabilities and it leads to purchasing power in the family. It also reduces the dependency of women on their spouse.

Trend in female employment in different sectors

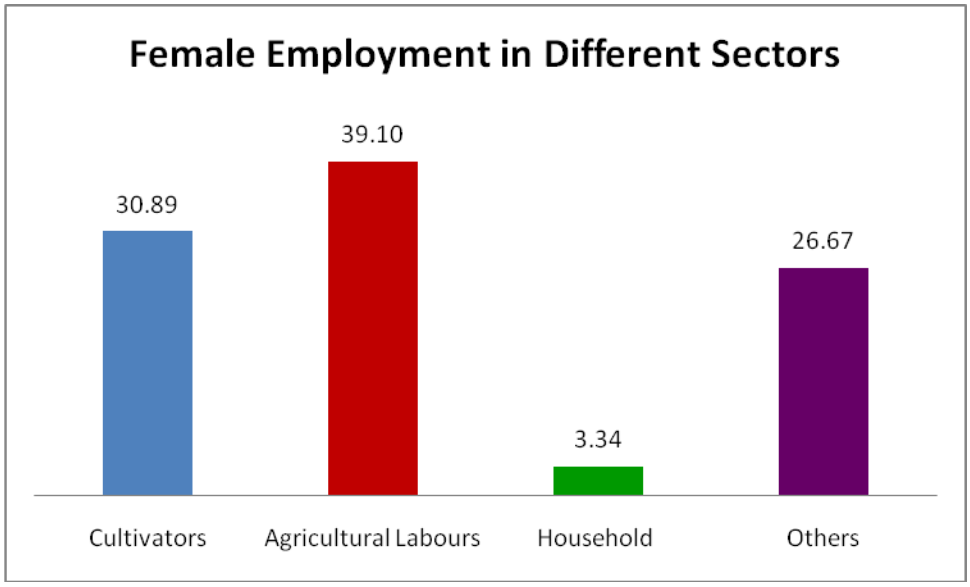


Figure 6.1 Female Employment in Different Sectors

It is observed from Figure 6.1 that women's participation in agricultural labour work is high (39.10 Per cent) among participation of women in different sectors. The reason that may be attributed is the availability of daily wage work in rural areas; particularly Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is high. The share of women in cultivation activity is also at considerable level at 30.89 per cent.

Furthermore, the presence of more industries and factories in Hosur do no fetch the employment opportunities to the women in the district. Hence the government can take up special measures for providing employment opportunities for women in the district. The economic participation of women in urban areas is comparatively lower than in rural areas.

Female Worker Participation Rate

The phenomenon of female economic activity and women's employment are main issues in the economy of all developing nations. Participation of women in economic activities in formal sectors of industries, services and agricultural sector is measurable, but activities of women in informal sectors such as household work, training and education of children, activities in agricultural sectors and household services are not easily measurable.

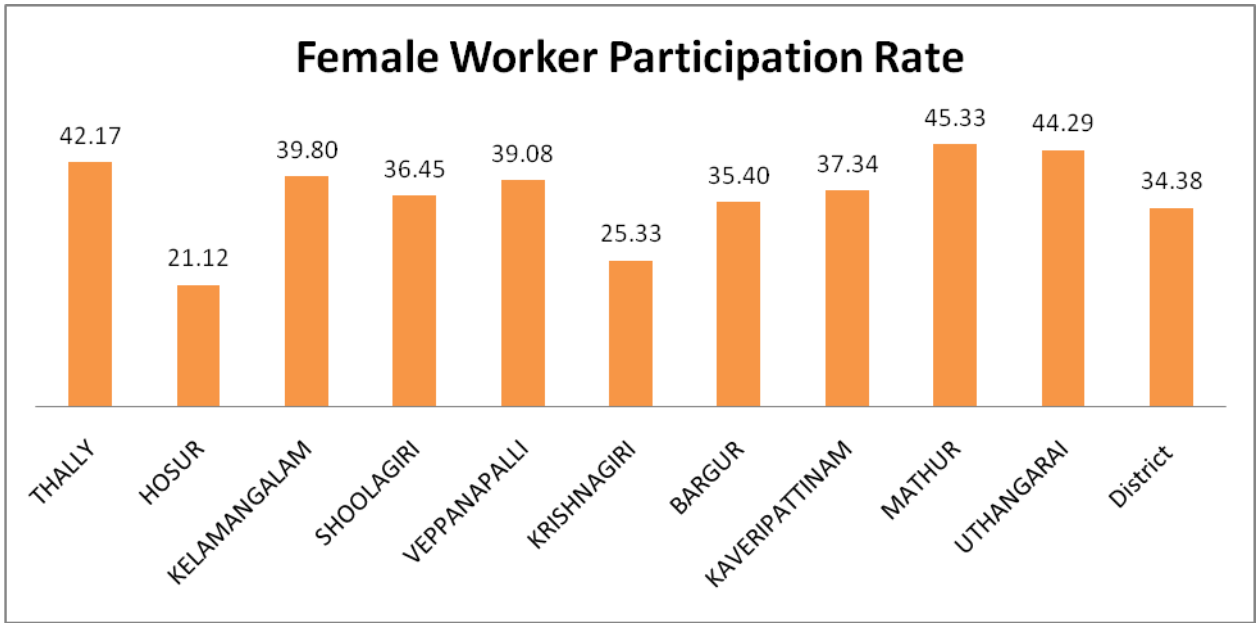


Figure 6.2 Female Worker Participation Rate

It is observed from Figure 6.2 that in Krishnagiri district the female workers participation rate stood at 34.38 per cent. Across the blocks, maximum level of participation is observed in Mathur (45.33), Uthangarai (44.29) and Thally (42.17). The reasons attributed for maximum participation rate in these blocks are these blocks are predominantly rural in nature which naturally provides opportunities for involving in agricultural activities and daily wage activities and majority of the men migrated to nearby towns and cities which induce women to engage in any sort of work. Interestingly blocks which are having urban features Hosur (21.12) and Krishnagiri (25.33) have minimum participation rate in the district.

Participation of Women in Local Bodies

The basic objective of human development is expanding choices for all sections of the people to take part in administrative and economic decision making. Experience from most of the countries across the world shows that a more broad based participation in decision-making influences in a positive way. Gender differences continue to exist across the world, but India has taken the lead as far as the Constitution and statutory initiatives are concerned.

The recent increase in participation of women in grassroots democracy has paved the way for women's increased mobility outside their home, creating space to voice their concerns. But still there is a long way to go before full participation. The 73rd and the 74th Constitutional Amendments in 1992, which went a long way in reactivating decentralized democracy in India, made it mandatory to reserve one third of seats in local bodies for women. This has facilitated women's participation in the political process not as passive voters or party workers alone, but as candidates.

Table 6.2 Participation of Women in Local Bodies - 2011

Block	Number of Males Elected	Number of Females Elected	Share of Women in Local Bodies
Thally	347	171	33.00
Hosur	185	93	33.45
Kelamangalam	203	104	33.87
Shoolagiri	302	149	33.03
Veppanapalli	176	90	33.83
Krishnagiri	212	107	33.54
Bargur	280	139	33.17
Kaveripattinam	267	134	33.41
Mathur	172	82	33.59
Uthangarai	244	123	33.51
District	2388	1197	33.38

Source: Department of Rural Development, Krishnagiri District, 2014

It is observed from Table 6.2 that in Krishnagiri district the total number of candidates elected were 2388 out of which number of women elected in local bodies were 1197 constituting about 33.38 per cent.

It is observed that in Krishnagiri district 73rd Amendment Act of Indian Constitution is followed in a great manner in such a way that 33 per cent reservation for women is properly implemented in all blocks.

Conclusion

Gender equality and women's empowerment are essential for meeting aspirations of inclusive and sustainable development. Gender equality needs to be pursued in its own right for a just and equal society, and for better development outcomes - inclusive growth, faster poverty reduction and accelerated progress towards Millennium Development Goals (MDGs) attainment.

The share of female population in the district is 48.87 percent which is slightly lower than the state share (49.88 percent). Sex ratio is 958 which is marginally lower than the state sex ratio (995). Life expectancy of female at birth is 67 years. The rate of literacy of female is 64.90 percent. In Krishnagiri district, the total number of candidates elected were 2388 out of which number of women elected in local bodies were 1197 constituting about 33.38 per cent.

CHAPTER 7

SOCIAL SECURITY

Chapter VII

Social Security

Introduction

Social security is both a concept as well as a system. It represents basically a system of protection of individuals who are in need of such protection by the State as an agent of the society. Such protection is relevant in contingencies such as retirement, resignation, retrenchment, death, disablement which are beyond the control of the individual members of the society. The concept of social security is now generally understood as protection provided by the society to its members through a series of public measures against the economic and social distress that otherwise is caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, occupational diseases, unemployment, invalidity, old age and death.

Social Security has been recognized as an instrument for social transformation and progress and must be preserved, supported and developed as such. Furthermore, far from being an obstacle to economic progress as is often said, social security organized on a firm and sound basis will promote progress, since once men and women benefit from increased security and are free from anxiety, will become more productive.

The Social Security Laws in India at present can be broadly divided into two categories, namely, the contributory and the non-contributory. The contributory laws are those which provide for financing of the social security programmes by contributions paid by workers and employers and in some cases supplemented by contributions/grants from the Government. The important contributory schemes include the Employees State Insurance Act, 1948 and the Provident Fund, Pension and Deposit Linked Insurance Schemes framed under the Employees' Provident Funds and Miscellaneous Provisions Act, 1948. The three major non-contributory laws are the Workmen's Compensation Act, 1923, the Maternity Benefit Act, 1961 and the Payment of Gratuity Act, 1972.

Demographic Profile 0f Population Aged Above 60

Table 7.1 Demographic Profile 0f Population Aged Above 60

District	Total Population	Population Aged above 60			Percent to Total Population
		Male	Female	Total	
Krishnagiri	1561118	76181	48701	124882	8.00
Tamil Nadu	37189229	1698396	1648776	3347172	9.00

Source: Department of Social Security, Krishnagiri District, 2013

The population of people aged above 60 in Krishnagiri district in the year 2013 is 1.25 lakhs. It is observed from Table 7.1 that the share of population aged above 60 in Krishnagiri district is eight per cent which is slightly lower than the state average (nine per cent).

Social Security Schemes

Table 7.2 Coverage of Social Security Schemes in Krishnagiri District

S. No	Scheme	Coverage			
		2013-14	2012-13	2011-12	2010-11
1	IGNOAP	34923	3075	8325	2046
2	Destitute Widow Pension	13395	2212	2080	840
3	Destitute Agriculture Labour Pension	2837	58	6320	6664
4	Social Security Scheme	52757	10776	573	392
5	Destitute Deserted Wives Pension	5976	444	680	227

Source: Department of Social Security, Krishnagiri District, 2014

It is observed from Table 7.2 that Indira Gandhi National Old Age Pension (IGNOAP) has more number of beneficiaries in the district. From 2010 – 11 to 2013 – 14 there were 48369 persons benefitted by IGNOAP. Destitute Agriculture Labour Pension (DALP) also has more number of beneficiaries. About 15879 persons were benefitted by DALP. Social Security Scheme also has reached considerable number of beneficiaries in the district with 64498 beneficiaries.

Box-7.1 Marriage and Maternity Assistance Programmes

In Krishnagiri district a total of 8179 non-degree women received marriage assistance till 2013-14. With regard to marriage assistance received by degree holders, only 1953 women received marriage assistance. The sum of marriage assistance to both non-degree and degree holders amounted to Rs. 34.59 crores.

Dr. Muthulakshmi Reddi Maternity Benefit Scheme

In Krishnagiri district during ante natal care period about 27047 women were benefitted by the Dr. Muthulakshmi Reddi Maternity Benefit Scheme. And during post-natal care period 22004 women were benefitted. In Krishnagiri district Rs. 19.62 crores was earmarked to cover the Dr. Muthulakshmi Reddi benefit scheme during the year 2011-12 to 2012 - 13. During the year 2013-14, 12814 women were benefited under this scheme. The total financial allocation is 153.77 crores.

Violence against Women

Incidence of violence against women can be seen in different forms throughout the world like female infanticide, rape, dowry death, Kidnapping and abduction, molestation, sexual harassment, cruelty by husband which are taking place in various institutions such as family, work place, schools, colleges, hospitals and roads. It is observed from Table 7.5 the various forms of crime against women took place in Krishnagiri district.

Table 7.3 Crimes against Women

Category	Number of cases
Rape	6
Dowry death	8
Kidnapping and abduction	38
Molestation	19
Cruelty by Husband	32
Sexual Harassment	1

Source: Office of Superintend of Police, Krishnagiri District, 2013

It is observed from Table 7.3 that more number of cases are registered against kidnapping and abduction (38 cases) followed by cruelty by husband (32 cases). Considerable number of cases (19 cases) are also registered against molestation of women in the district.

Conclusion

The share of population aged above 60 in Krishnagiri district is eight per cent which is slightly lower than the state average (nine per cent). In Krishnagiri district social security programs have reached a considerable number of beneficiaries. It is also observed that sizable amount of funds to meet out financial outlays is diverted towards social security programmes in Krishnagiri district. With regard to crime against women in Krishnagiri district, more numbers of cases are registered against kidnapping and abduction followed by cruelty by husband and molestation.

CHAPTER 8

INFRASTRUCTURE

Chapter VIII

Infrastructure

Introduction

Infrastructure is the basic physical and organizational structure needed for the operation of a society or enterprise or the services and facilities necessary for an economy to function. It can be generally defined as the set of interconnected structural elements that provide framework supporting an entire structure of development. Infrastructure is treated as an engine of growth and provides a basic framework and social progress. The prosperity of a country depends primarily on availability and adequacy of sound infrastructure in both rural and urban areas. Physical infrastructure like roads, telecommunication attracts prospective entrepreneurs and helps in alleviation of poverty and unemployment through numerous positive backward and forward linkage effects on primary, secondary and tertiary sectors of the economy. Similarly, social infrastructure like drinking water supply, sanitation, education and health etc. helps in improving the quality of life of millions of rural inhabitants.

Roads

Table 8.1 Distribution of Total Road Length (in KMs) - 2014

Blocks	Mud	WBM	BT	CC	Total
Thally	321.11	20.49	356.63	1.08	699.31
Hosur	88.61	13.55	168.64	1.86	272.66
Kelamangalam	242.46	8.70	227.34	3.30	481.80
Shoolagiri	218.30	15.07	238.04	1.58	472.99
Veppanapalli	94.56	10.85	131.49	1.55	238.45
Krishnagiri	135.57	11.64	158.71	3.02	308.94
Bargur	188.57	25.80	254.67	2.98	472.02
Kaveripattinam	104.13	9.56	238.85	3.71	356.24
Mathur	224.66	27.89	188.97	1.83	443.35
Uthangarai	315.39	40.22	217.47	2.42	575.50
Total	1933.36	183.77	2180.81	23.33	4321.26

Source: Department of Rural Development, Krishnagiri District, 2014

The total road length in the district (rural area) is 4321 kms and 50.46 per cent of the roads are covered by Bituminous road followed by 44.74 per cent of mud roads, cement road covers 0.54 per cent and WBM road covers 4.25 per cent of the total road length in the district.

As the 44.74 per cent of the total road length in the district is still mud road, the district administration has to take appropriate measures so that it can benefit a large number of people in rural areas and access to remote villages could be high. It otherwise also has impact on expansion of livelihood activities of the people who are deterred by lack of roads connecting to nearest peripheries.

Electricity

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

Table 8.2 Status of Electrification - 2014

Blocks	Revenue Villages	Hamlets	Towns	No.of Street Lights
Thally	58	589	0	6357
Hosur	87	188	1	13780
Kelamangalam	35	347	1	1084
Shoolagiri	88	270	0	3617
Veppanapalli	68	454	0	3256
Krishnagiri	27	465	1	2258
Bargur	38	720	1	7711
Kaveripattinam	33	628	2	8302
Mathur	58	391	0	4583
Uthangarai	139	442	1	1684
Total	631	4494	7	52632

Source: Department of Electricity, Krishnagiri, 2014

The electrification is found to be better in all the blocks. The coverage of electricity in Krishnagiri district is 631 revenue villages and 4494 hamlets. About 38779 street lights are put in use of people in the rural areas of the district. Among blocks more number of street lights are found in Hosur block with 13780 street lights followed by Kaveripattinam block with 8302 street lights. Low numbers of street lights are seen in Kelamangalam block with 1084 street lights and in Uthangarai block with 1684 street lights. A special importance to be given to Kelamangalam and Uthangarai blocks for erecting up the street lights in the villages of the blocks. It is assumed that the district to some extent has done well to provide the electricity connection in all parts of the district.

Cooperative and Commercial Banks

Table 8.3 Cooperative Societies and Commercial Banks in Krishnagiri District - 2014

Block	Number of co-operative societies	Number of Members	Commercial Banks	Number of account holders
Thally	27	33740	5	110950
Hosur	30	38190	50	103613
Kelamangalam	20	42099	9	101694
Shoolagiri	20	31392	9	105261
Veppanapalli	14	15870	6	56919
Krishnagiri	32	42401	28	87001
Bargur	27	63344	14	117575
Kaveripattinam	38	58574	11	103827
Mathur	16	22108	7	63701
Uthangarai	25	44170	8	87529
District	249	391888	147	938070

Source: District Lead Bank Indian Bank, & Joint Registrar Co-operative Societies, Krishnagiri 2014

It is observed from Table 8.3 that in Krishnagiri district there are 249 cooperative societies with 3.92 lakhs of members. Kaveripattinam block is found to be having more number of cooperative societies with 38 societies and Bargur block has more number of members in cooperative societies with 63344 members.

With regard to commercial banks in the district, 147 banks are currently operating in the district with 9.38 lakhs of bank accounts. Among blocks, Hosur block is having more number of commercial banks with 50 banks and Bargur block is having more number of account holders.

Telecommunication in Krishnagiri District

Table 8.4 Status of Telecommunication in Krishnagiri District -2014

Telecomm District	No. of Telephone Exchange s	No. of PCOs	No. of Land Lines	Number of Mobile phone towers
Krishnagiri	35	610	10272	90
Hosur	28	668	13506	83
District	63	1278	23778	173

Source: Department of Telecommunication, Krishnagiri District, 2014

The status of telecommunication in Krishnagiri district is presented in Table 8.4. In Krishnagiri district, there are 63 telephone exchange lines with 23778 telephone connections serving urban and rural areas. 1278 PCOs and 173 mobile phone towers are functioning in the district. The quite interesting point to observe is that in Hosur telecomm district, though the number of telephone exchanges is lesser than Krishnagiri telecom district, the number of land line connections in Hosur are about 35 per cent more than land line connections in Krishnagiri telecomm district.

Insurance

Insurance plays a vital role at the time of risk being faced by a man. It provides succor to overcome the difficulties faced by the people. The extent of insurance coverage in a district can be measured by the number of policies under operation.

Table 8.5 Insurance Companies – 2014

Name of the companies	No. of branches	Polices Issued
LIC	**5**	**44547**

Source: LIC of India, Krishnagiri, 2014

Insurance protect people from unprecedented human and material losses, it acts as a supplement financial source to the affected persons. Insurance is considered as a strategically measure for covering the risk in the future. In Krishnagiri there are five branches of LIC which is a pioneering insurance company of the country. And 44547 policies were under operation.

Transport Facilities

Krishnagiri district is the entry point to Tamil Nadu as the district is located on the border of Karnataka and Andhra Pradesh. This district is connected by Prime Minister's Golden Quadrilateral Project executed by National Highways Authority of India. This district has a network of National Highways converging.

- NH-7 (Kanyakumari-Kashmir) – 70 Km
- NH-46 (Krishnagiri - Ranipettai) – 21 Km
- NH-66 (Pondicherry-Krishnagiri) – 59 Km
- NH-207 (Sarjapur-Bagalur-Hosur) – 19 Km
- NH-219 (Krishnagiri-Kuppam) - 19 Km

Apart from this, state highways and district highways are linking almost all the towns and villages of the district. Four National highways that converge at the Headquarters of this district is unique. Regarding public transport, the district is well connected to different places of the state and other states as well. Bus transport in the district is excellent. More than 100 buses are plying through Krishnagiri and Hosur to Bangalore – Capital city of Karnataka.

Conclusion

Krishnagiri district has achieved significant development in terms of creating infrastructure facilities. It was observed that Krishnagiri district is covered with 218 Kms of BT followed by 1933 kms of mud roads. It is observed that 431 villages and 4494 hamlets are having grid connection which provides scope for undertaking entrepreneurial activities in villages. Four National highways that converge at the Headquarters of this district are unique. Regarding public transport, the district is well connected to different places of the state and other states as well. Bus transport in the district is excellent. More than 100 buses are plying through Krishnagiri and Hosur to Bangalore – Capital city of Karnataka.

CHAPTER 9

SUMMARY AND WAY FORWARD

Chapter IX

Summary and Way Forward

Introduction

For a long period, growth was measured in terms of economic indicators like GDP and GNP. But after a wider range of discussions and consultations, development is not only considered as producing goods and services, but also arrays of measures for developing the human living condition and satisfying human interest by promoting development and welfare goals. The UNDP in the year 1990 first took this initiative and prepared the Human Development Report. The UNDP stressed that the real wealth of the country is its people and the purpose of development is to create an enabling environment for them to enjoy long, creative and healthy lives. The three essential elements of Human Development are: to enable people to lead long and healthy lives; to access knowledge and education; and to possess the resources needed for a reasonable standard of living.

To identify the gaps and issues in human development aspects, several state and central governments have been involved in documenting the status of human development. Tamil Nadu is also engaged in preparing district-wise human development reports. In this way, an attempt has been made to document the human development in Krishnagiri district. The present chapter presents the glimpses of status of human development in Krishnagiri district. Recommendations are also put forward on broad facets of human development and measures for promoting a healthy and sustainable human development.

Human Development Index

The Human Development Report is an analytical report on human development with emphasis on the issues, trends and policies related to the growth of human development. The concept is elaborated through the Human Development Index (HDI), Inequality-adjusted HDI, Gender Inequality Index and Poverty Index. The HDI focuses on three basic dimensions of human development: (i) healthy life (ii) access to education (iii) access to resources needed for decent living. Human development, according to current definition of the concept, creates an enabling environment for people to lead a life according to their choices.

Human Development Status in Krishnagiri District

- HDI was calculated for ten blocks of Krishnagiri district using the methodology stipulated by Tamil Nadu State Planning Commission. It is observed that the HDI values range from 0.873 to 0.404 at the block level. Krishnagiri block (0.873) takes top position while Veppanapalli (0.404) is placed at the bottom.

- The GII constructed for all ten blocks in the district varies from 0.043 to 0.101.In terms of GII, Hosur (0.043), Uthangarai (0.043) and Kaveripattinam (0.046) are the top three performing blocks. While Bargur (0.101), Mathur (0.084) and Veppanapalli (0.083) are low performing blocks in the district. As, Bargur, Mathur and Veppanapalli blocks are endowed with rural features; they are with high GII which shows there is massive gender disparity.

- With regard to performance of blocks in CDI, the top three blocks are Krishnagiri, Hosur, and Bargur and bottom three blocks are Kelamangalam, Veppanapalli and Thalli. The CDI values range from 0.802 (Krishnagiri) to 0.227 (Kelamangalam).
- Hosur, Krishnagiri and Bargur are top three performing blocks and Mathur, Uthangarai, and Thally blocks are bottom three performing blocks in terms of multidimensional poverty index.

Employment Income and Poverty

- In Krishnagiri district, the total number of workers increased from 752794 workers to 877779 workers during 2001 to 2011 with an increase of 16.60 per cent. The proportion of main workers has increased marginally in all blocks. In the category of main workers, Krishnagiri district has recorded an increase of 17.79 per cent from 2001 to 2011.
- Hosur has the highest number of workers of all categories. It is found that 146502 workers are working in different sectors. Agricultural laborers in Krishnagiri district saw an increase of 25.38 per cent from 2001 to 2011.
- By the year 2011, 1.08 lakhs people were registered for employment in government sectors and 679 persons placed in government sectors jobs.
- Agriculture is the most important occupation in Krishnagiri district. Apart from agriculture, horticulture and floriculture are also important sources of the livelihood for people in the district. There is a good potential for agriculture and horticulture related activities like mango

processing, rose cultivation, etc. Establishment of cold storages, rural godowns and modern rice mills can improve the district's economy.

- To promote welfare services to the needy people in the district, rural development department has generated a list on BPL households. It was observed from that about 32.44 per cent of the households in the district were identified as BPL households. About 4.46 lakhs family cards were under circulation in the district. Per capita income of the district steadily increased over the years.
- The per capita income of the district between 2008-2009 and 2011-12 increased by 1.7 times. The growth rate of per capita income has fluctuated widely over the years from 2008-2009 to 2011-12 and variation was observed from 13.41 to 25.12. More than one half of the income is derived from the tertiary sector. It is also noted that there has been fluctuation in annual growth rate of sectoral income across the sectors.

Demography, Health and Nutrition

- The population in Krishnagiri district increased from 1561118 in 2001 to 1879809 in 2011 and it accounts for 2.60 per cent of the state population. The decadal growth of the population is 20.41 per cent. The share of Scheduled castes in the district is 14.41 per cent and Scheduled Tribes is 1.19 per cent. The sex ratio of Krishnagiri district (958) is lower than the State sex ratio (995). .
- The density of population per sq.km in the district is 370 which is lower than the density of population in the state (555 persons per sq.km). In Krishnagiri district, a majority of the population (77.25per cent) lives in rural areas and the share of the urban population is 23.75per cent. The share of 0 – 6 population in Krishnagiri district (10.82 per cent) is higher than the State share (9.56 per cent).
- For the district, the birth rate was decreased marginally from 25.2 to 18.8 between 2007 and 2011. The crude birth rate (15.4) in the year 2014 is lower than the State CBR of 15.9. CDR slightly decreased from 5.09 to 4.10 between 2007 and 2014. There has been slight decline in IMR from 18.68 in 2007 to 17.60 in 2014 in the district. The same trend is observed across the blocks. Still birth rate in the district was decreased from 13.15 in 2007 to 10.85 in 2014.

Literacy and Education

- The percentage of literates in Krishnagiri district in 2011 was 72.41 per cent. In Krishnagiri district, the enrolment ratio at primary education level decreased from 99.08 in 2012-13 to 98.95 in 2013-14. The rate of enrolment at upper primary level in the district marginally increased from 98.14 per cent in 2011-12 to 98.78 per cent in 2013-14. In Krishnagiri district, transition rate from primary to upper primary level stood at 98.73 and upper primary level to secondary at 98.56.
- During intermediary years 2012-13 and 2013-14, the dropout rate decreased to 1.47 to 1.00 at primary level and 2.28 at upper primary level. It is clear that there has been slight fall in dropout rate both at primary and upper primary level. The rate of dropout in the district at both the levels is on par to all blocks in 2013-14.
- The district witnessed a low pupil-teacher ratio at primary school level at 27:1 and 29:1 at upper primary level. With regard to pupil-school ratio, the district has 152: 1 ratio at primary level and 181:1 at upper primary level.
- It was observed that out of 1687 schools in Krishnagiri district, 1096 schools have at least 3 class rooms, 591 schools have more than 3 class rooms, 1597 schools have toilets, 1285 schools have compound wall, and 1528 schools have drinking water facility. It shows that schools are paying more attention in creating infrastructure in schools to get more number of students.

Gender

- The share of female population in the district is 48.87 percent which is slightly lower than the state share (49.88 percent). Sex ratio is 958 marginally lower than the state sex ratio (995). Life expectancy of female at birth is 67 years. The rate of literacy of female is 64.90 percent.
- As on 31.03.2014, in Krishnagiri district there are 12424 self help groups with 193861 members. Self help groups in Krishnagiri district have accumulated a total savings of Rs. 197.40 crores and credit availed by the groups is Rs. 517.62 crores. In Krishnagiri district, the total number of candidates elected were 3585 out of which numbers of women elected in local bodies were 1197, constituting about 33.38 per cent.

Social Security

- The population of people aged above 60 in Krishnagiri district is 1.25 lakhs. The share of population aged above 60 in Krishnagiri district is eight per cent which is slightly lower than the state average (nine per cent).
- IGNOAP has more number of beneficiaries in the district. From 2010-11 to 2013-14, 48369 persons benefitted by IGNOAP. About 15879 persons were benefitted by DALP.
- Social Security Scheme also has reached considerable number of beneficiaries in the district with 64498 beneficiaries. In Krishnagiri district, a total of 8179 non-degree women received marriage assistance till 2013-14.
- With regard to assistance received by degree holders, only 1953 women received marriage assistance. The sum of marriage assistance to both non-degree and degree holders amounted to Rs. 17.71 crores during 2013-14.
- In Krishnagiri district, during ante-natal care period about 27047 women were benefitted by the Dr. Muthulakshmi Reddi Maternity Benefit Scheme. And during post-natal care period 22004 women were benefitted.
- In Krishnagiri district Rs. 173.39 crores was earmarked to cover the Dr. Muthulakshmi Reddi benefit scheme during the year 2011-12 to 2013-14.
- More number of cases registered against kidnapping and abduction (38 cases) followed by cruelty by husband (32 cases). Considerable number of cases (19 cases) also were registered against molestation of women in the district.

Infrastructure

- The total road length in the district is 4321.26 kms and 50.47 per cent of the roads are covered by Bituminous road followed by 44.73 per cent of mud roads and the cement road covers 4.25 per cent of the total length road in the district.
- The electrification is found to be good in all the blocks. The coverage of electricity in Krishnagiri district is 631 revenue villages, and 4494 hamlets. About 52632 street lights are put in use for people in the rural areas of the district.
- In Krishnagiri district, there are 249 cooperative societies with 3.92 lakhs of members. 147 banks are currently operating in the district with 9.38 lakhs of bank accounts. .

- In Krishnagiri district, there are 63 telephone exchange lines with 23778 telephone connections serving urban and rural areas. 1278 PCOs and 173 mobile phone towers are functioning in the district.

- Four National highways converging at the Headquarters of this district is unique. Regarding public transport, the district is well connected to different places of the state and other states as well. Bus transport in the district is excellent. More than 100 buses are plying through Krishnagiri and Hosur to Bangalore – Capital city of Karnataka.

Way Forward

- Krishnagiri district has potential for improvement of the primary sector since agriculture and horticulture development provide livelihood in the district in a prominent way. Moreover, mango being an important horticulture crop in the district can be diversified and expanded especially for promoting livelihood opportunities to the people in the district as mango is extensively cultivated across the district.
- With regard to secondary sector, more number of industries could be set up in Hosur block as the block already has vast scope for setting up industries.
- It is imperative to orient the officials who are involved health related activities to be sensitive on health related outcomes. Similarly, health related awareness may be given to people's representatives in local bodies, self help group members and school students.
- To reduce MMR, SBR, lactating mothers can be provided regular nutritional supplements both at antenatal and postnatal stage. They may also be given awareness on balanced diet and mobile health unit may be set up to avail timely health services.
- Sensitizing and strengthening Parent-Teacher Associations (PTA) should be undertaken to improve the educational condition. Steps can be taken to expand the distribution of freebies like bicycle, free uniform and other such items provided by government and see that they properly reach the needy students.

- Efforts can be taken to reduce dropout rates at upper primary level. Habitations without primary schools should be provided with primary schools. Residential schools may be set up to arrest the dropout rates as dropout is correlated with the problem of migration in the areas where migration is predominant. Furthermore, special intervention may be made to improve the status of high school and higher secondary school education.
- Women may be provided with higher wages to improve their earnings so that they stand on their own feet. More number of agricultural and allied activities may be taken up to involve women. Special need based and vocational training courses may be conducted to improve entrepreneurial skills of the women. Self Help Group women should be motivated to venture into entrepreneurial activities by providing financial assistance and backward and forward linkages with developmental agencies. Training programmes may also be conducted for women to take up livelihood and entrepreneurial activities.
- Government officials and agencies which are involved in working with people at grassroot level should be educated on the issues affects human development. They can also be oriented towards the need of sustainable human development. All stakeholders who are contributing directly or indirectly towards attainment of goals of human development are to be consulted while implementing policies and programmes.
- People must be sensitized on various issues which affect their quality of life such as drinking water, toilet facilities, public health, education, public distribution system. Participatory approach should be adopted at all levels from identification of projects to implementation.
- Community based organisations are to be promoted to take up welfare oriented activities to the needy masses. Panchayati Raj Institutions may be empowered to take decisions made more autonomous for undertaking people centric measures. Linkages with all line departments should be created at the grassroots level. Gram sabha should be oriented towards the facets of human development.

ANNEXURES

ANNEXURES

Tables

1.1 Crude Birth Rate and Crude Death Rate in Krishnagiri and Tamil Nadu

Particulars	Crude Birth Rate
	2013-14
Krishnagiri	15.3
Tamil Nadu	15.9

Source: Department of Health, Krishnagiri District

1.2 Infant Mortality Rate – 2013-14

Particulars	IMR
Krishnagiri	17.6
Tamil Nadu	21

Source: Department of Health, Krishnagiri District

Human Development Index

Table A 2.1 Block-wise HDI Indicator Values

Blocks	Standard of Living					Health			Education		
	Cooking Fuel	Toilet Facilities	Drinking Water	Pucca Houses	Electricity	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
	2011	2013-14	2013-14	2011	2011	2013-14	2013-14	2013-14	2011	2013-14	2013-14
Thally	23.76	70.44	100	98	91.46	19.5	102	21.9	61.93	101.18	94.27
Hosur	63.86	72.88	100	100	96.02	15	39	18.1	82.84	102.18	104.62
Kelamangalam	31.30	100	100	98	92.13	19.9	36	25	67.14	101.94	97.6
Shoolagiri	20.98	100	99	98	90.61	19.7	110	24.5	63.30	102.7	94.32
Veppanapalli	19.45	93.09	96	95	89.00	16.3	181	20.5	67.23	101.65	90.79
Krishnagiri	51.24	100	100	100	92.30	10.2	78	13.7	77.73	102.77	104.25
Bargur	22.38	100	80	97	89.36	16.8	90	18.6	72.31	101.63	112.64
Kaveripattinam	26.04	100	100	95	89.87	21.6	72	24.5	72.98	101.93	90.53
Mathur	21.69	100	85	93	87.80	14.8	55	16.5	70.34	101.85	86.32
Uthangarai	29.32	100	83	97	86.70	20.9	42	23.4	77.77	102.84	116.37

Source: Computed

Table A 2.2 Human Development Indicators Index Computed Values

Blocks	Standard of Living					Health			Education		
	Cooking Fuel	Toilet Facilities	Drinking Water	Pucca Houses	Electricity	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
Thally	0.13	0.19	1.00	0.88	0.75	0.31	0.60	0.41	0.23	0.86	0.43
Hosur	1.00	0.26	1.00	1.00	1.00	0.65	0.98	0.68	1.00	0.94	0.70
Kelamangalam	0.30	1.00	1.00	0.88	0.78	0.28	1.00	0.18	0.42	0.92	0.51
Shoolagiri	0.07	1.00	0.96	0.88	0.70	0.30	0.55	0.22	0.28	0.99	0.43
Veppanapalli	0.04	0.81	0.86	0.69	0.61	0.55	0.11	0.51	0.42	0.90	0.34
Krishnagiri	0.73	1.00	1.00	1.00	0.79	1.00	0.74	1.00	0.81	0.99	0.69
Bargur	0.11	1.00	0.29	0.82	0.63	0.51	0.67	0.64	0.61	0.90	0.90
Kaveripattinam	0.18	1.00	1.00	0.69	0.66	0.16	0.78	0.22	0.64	0.92	0.33
Mathur	0.09	1.00	0.46	0.57	0.54	0.66	0.88	0.80	0.54	0.92	0.22
Uthangarai	0.25	1.00	0.39	0.82	0.48	0.21	0.96	0.30	0.81	1.00	1.00

Table A 2.3 Human Development Indicators Overall Index Value and Rank

Blocks	Standard of Living Index	Health Index	Education Index	Overall Index	Rank
Thally	0.44	0.42	0.44	0.435	9
Hosur	0.76	0.76	0.87	0.795	2
Kelamangalam	0.73	0.37	0.58	0.541	5
Shoolagiri	0.54	0.33	0.49	0.442	8
Veppanapalli	0.42	0.31	0.51	0.404	10
Krishnagiri	0.90	0.91	0.82	0.873	1
Bargur	0.43	0.60	0.79	0.592	3
Kaveripattinam	0.61	0.30	0.58	0.473	7
Mathur	0.42	0.77	0.48	0.538	6
Uthangarai	0.52	0.39	0.93	0.577	4

Source: Computed

Gender Inequality Index

Table A 2.4Block-wise Gender Inequality Indicators

	Health			Empowerment						Labour					
Sl. No	1	2	3	4	5			6	7	8	9			10	11
Blocks	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
	2009	2012-13	2012-13	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012-13	2012-13
Source	Health Department			Census				RD&PR Department		Census				DOES	
Unit	**rate**	**%**	**nos**	**%**	**%**	**%**	**%**	**%**		**%**	**%**	**%**	**%**	**%**	**%**
Thally	125.4	96	95.70	48.45	51.55	48.32	51.68	36	64	42.17	62.47	15.48	75.92	150	250
Hosur	95.3	98	87.80	48.93	51.07	48.73	51.27	34	66	21.12	58.76	67.74	104.47	150	200
Kelamangalam	30.6	99	94.10	47.96	52.04	47.63	52.37	37	63	39.80	59.82	25.31	81.33	150	200
Shoolagiri	92.6	100	93.40	47.83	52.17	48.95	51.05	33	67	36.45	58.60	20.78	78.17	100	200
Veppanapalli	118.7	100	94.60	48.20	51.80	47.42	52.58	36	64	39.08	58.16	26.46	79.32	100	200
Krishnagiri	75.1	100	100.10	48.15	51.85	47.81	52.19	35	65	25.33	53.35	45.84	90.33	130	250
Bargur	176.4	100	101.40	47.29	52.71	48.20	51.80	41	59	35.40	57.14	28.03	83.55	150	220
Kaveripattinam	102	100	102.80	45.22	54.78	48.01	51.99	35	65	37.34	57.21	28.01	81.46	120	250
Mathur	10	100	103.00	45.21	54.79	46.38	53.62	39	61	45.33	58.77	27.31	83.43	100	250
Uthangarai	77.1	100	97.60	45.63	54.37	47.01	52.99	37	63	44.29	56.46	21.89	76.79	100	200

Table A 2.5 Block-wise Gender Inequality Indicators

Blocks	Health			Empowerment						Labour					
	1	2	3	4	5			6	7	8	9			10	11
	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
Thally	0.08	0.96	0.96	0.48	0.52	0.48	0.52	0.36	0.64	0.42	0.62	0.15	0.76	1.00	1.00
Hosur	0.10	0.98	0.88	0.49	0.51	0.49	0.51	0.34	0.66	0.21	0.59	0.68	1.04	1.00	0.29
Kelamangalam	0.33	0.99	0.94	0.48	0.52	0.48	0.52	0.37	0.63	0.40	0.60	0.25	0.81	1.00	0.29
Shoolagiri	0.11	1.00	0.93	0.48	0.52	0.49	0.51	0.33	0.67	0.36	0.59	0.21	0.78	0.17	0.29
Veppanapalli	0.08	1.00	0.95	0.48	0.52	0.47	0.53	0.36	0.64	0.39	0.58	0.26	0.79	0.17	0.29
Krishnagiri	0.13	1.00	1.00	0.48	0.52	0.48	0.52	0.35	0.65	0.25	0.53	0.46	0.90	0.67	1.00
Bargur	0.06	1.00	1.01	0.47	0.53	0.48	0.52	0.41	0.59	0.35	0.57	0.28	0.84	1.00	0.57
Kaveripattinam	0.10	1.00	1.03	0.45	0.55	0.48	0.52	0.35	0.65	0.37	0.57	0.28	0.81	0.50	1.00
Mathur	1.00	1.00	1.03	0.45	0.55	0.46	0.54	0.39	0.61	0.45	0.59	0.27	0.83	0.17	1.00
Uthangarai	0.13	1.00	0.98	0.46	0.54	0.47	0.53	0.37	0.63	0.44	0.56	0.22	0.77	0.17	0.29

Table A 2.6 Block-wise Gender Inequality Indicators

Blocks	Female Health Indices	Male Health Indices	Female Emp Indices	Male Health Indices	Female LF indices	Male LF indices	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
Thally	0.42	1	0.44	0.55	0.40	0.78	0.42	0.76	0.54	0.71	0.50	0.59	0.59	0.089	9
Hosur	0.45	1	0.43	0.56	0.52	0.56	0.47	0.68	0.55	0.72	0.49	0.54	0.58	0.045	2
Kelamangalam	0.67	1	0.44	0.56	0.47	0.52	0.52	0.66	0.58	0.84	0.50	0.49	0.59	0.017	1
Shoolagiri	0.47	1	0.42	0.56	0.23	0.51	0.36	0.66	0.46	0.73	0.49	0.37	0.51	0.093	10
Veppanapalli	0.43	1	0.44	0.56	0.26	0.51	0.36	0.66	0.47	0.72	0.50	0.38	0.51	0.089	7
Krishnagiri	0.51	1	0.43	0.56	0.43	0.78	0.45	0.76	0.57	0.76	0.50	0.61	0.61	0.067	3
Bargur	0.39	1	0.45	0.54	0.46	0.65	0.43	0.71	0.54	0.69	0.50	0.56	0.58	0.070	5
Kaveripattinam	0.47	1	0.42	0.57	0.37	0.78	0.42	0.76	0.54	0.73	0.50	0.57	0.59	0.089	8
Mathur	1.01	1	0.43	0.56	0.27	0.79	0.49	0.76	0.60	1.00	0.50	0.53	0.64	0.068	4
Uthangarai	0.50	1	0.43	0.57	0.25	0.50	0.38	0.66	0.48	0.75	0.50	0.38	0.52	0.076	6

Child Development Index

Table A 2.7 Block-wise Child Development Indicators and Index

Block name	Health		Nutrition	Education				
	U5MR	Juvenile Sex Ratio (0-6)	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children Never Enrolled	Transition Rate from Primary to Upper Primary	Transition Rate from Upper Primary to Secondary
Thally	26.64	934.87	28	84.38	107.3	1.69	97.94	82.51
Hosur	22.24	950.58	18	162.61	140	0.77	98.71	102.75
Kelamangalam	26.90	909.35	27	89.16	133.9	1.38	97.42	92.8
Shoolagiri	26.55	959.02	20	85.39	116.9	0.74	98.67	91.07
Veppanapalli	21.96	901.76	30	73.25	116.8	1.33	98.80	88.22
Krishnagiri	23.29	916.26	20	169.30	120.6	0.20	99.07	104.38
Bargur	26.17	874.18	21	79.91	116.8	0.39	98.62	102.45
Kaveripattinam	32.31	923.39	11	86.27	114	0.25	99.57	101.69
Mathur	33.42	864.85	28	69.40	131.6	0.30	99.40	100.58
Uthangarai	33.15	887.15	31	103.57	133.9	0.94	99.11	114.03

Table A 2.8 Block-wise Child Development Indicators and Index

Block	U5MR	Juvenile Sex Ratio (0-6)	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children Never Enrolled	Transition Rate from Primary to Upper Primary	Transition Rate from Upper Primary to Secondary	Health Index	Nutrition Index	Education Index	Overall Index	Rank
Thally	0.592	0.744	0.150	0.150	0.000	0.00	0.242	0.000	0.592	0.150	0.050	0.264	8
Hosur	0.975	0.910	0.650	0.933	1.000	0.62	0.600	0.642	0.975	0.650	0.850	0.825	1
Kelamangalam	0.569	0.473	0.200	0.198	0.813	0.21	0.000	0.326	0.569	0.200	0.406	0.392	7
Shoolagiri	0.599	1.000	0.550	0.160	0.294	0.64	0.581	0.272	0.599	0.550	0.364	0.504	5
Veppanapalli	1.000	0.392	0.050	0.039	0.291	0.24	0.642	0.181	1.000	0.050	0.190	0.413	6
Krishnagiri	0.884	0.546	0.550	1.000	0.407	1.00	0.767	0.694	0.884	0.550	0.802	0.745	2
Bargur	0.633	0.099	0.500	0.105	0.291	0.87	0.558	0.633	0.633	0.500	0.423	0.518	3
Kaveripattinam	0.097	0.622	1.000	0.169	0.205	0.97	1.000	0.609	0.097	1.000	0.447	0.514	4
Mathur	0.000	0.000	0.150	0.000	0.743	0.93	0.921	0.573	0.000	0.150	0.559	0.236	9
Uthangarai	0.023	0.237	0.000	0.342	0.813	0.50	0.786	1.000	0.023	0.000	0.553	0.192	10

Multi-Dimensional Poverty Index

Table A 2.9 Block-wise Multi-Dimensional Poverty Indicators and Index

Block Name	Health			Education		Living Standards				
	IMR	High Order Birth Rate	Malnourished Children	Drop out in primary	Drop out secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Electricity	Pucca house
Thally	24.13	11.9	28	1.53	3.98	23.76	19.71	97.11	91.46	97.48
Hosur	20.34	7.7	18	1.43	2.77	63.86	66.46	92.02	96.02	98.86
Kelamangalam	23.85	16.3	27	1.53	5.04	31.30	31.02	95.1	92.13	94.66
Shoolagiri	23.46	14.8	20	1.56	6.51	20.98	36.65	96.7	90.61	97.77
Veppanapalli	17.80	16.2	30	1.55	5.89	19.45	11.34	95.19	89.00	94.61
Krishnagiri	19.53	15.9	20	1.00	2.49	51.24	44.88	88.6	92.30	95.59
Bargur	23.23	14.1	21	1.50	3.98	22.38	45.21	94.31	89.36	85.27
Kaveripattinam	30.61	13	11	1.52	3.38	26.04	30.81	91.24	89.87	83.82
Mathur	31.88	15.6	28	1.53	4.68	21.69	11.46	93.09	87.80	74.28
Uthangarai	27.37	16.5	31	1.55	5.19	29.32	19.07	97.96	86.70	71.96

Table A 2.10 Block-wise Multi-Dimensional Poverty Indicators and Index

Blocks	Health			Education		Living Standards					Overall Average	Rank
	IMR	MMR	Malnourished Children	Drop out in primary	Drop out in secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Electricity	Pucca house		
Thally	0.55	0.52	0.15	0.05	0.63	0.10	0.15	0.91	0.51	0.95	0.548	5
Hosur	0.82	1.00	0.65	0.23	0.93	1.00	1.00	0.37	1.00	1.00	0.200	1
Kelamangalam	0.57	0.02	0.20	0.05	0.37	0.27	0.36	0.69	0.58	0.84	0.604	7
Shoolagiri	0.60	0.19	0.55	0.00	0.00	0.03	0.46	0.87	0.42	0.96	0.592	4
Veppanapalli	1.00	0.03	0.05	0.02	0.15	0.00	0.00	0.70	0.25	0.84	0.695	8
Krishnagiri	0.88	0.07	0.55	1.00	1.00	0.72	0.61	0.00	0.60	0.88	0.370	2
Bargur	0.61	0.27	0.50	0.11	0.63	0.07	0.61	0.61	0.29	0.49	0.581	3
Kaveripattinam	0.09	0.40	1.00	0.07	0.78	0.15	0.35	0.28	0.34	0.44	0.610	6
Mathur	0.00	0.10	0.15	0.05	0.46	0.05	0.00	0.48	0.12	0.09	0.850	10
Uthangarai	0.32	0.00	0.00	0.02	0.33	0.22	0.14	1.00	0.00	0.00	0.797	9

Table A 4.1 Crude Birth Rate and Crude Death Rate

Blocks	CBR			CDR		
	2007	**2011**	**2014**	**2007**	**2011**	**2014**
Thally	20.63	23.46		5.21	4.93	4.4
Hosur	25.44	15.60		3.40	2.94	2
Kelamangalam	26.24	24.83		4.57	5.10	4
Shoolagiri	36.61	25.99		4.20	4.66	2.6
Veppanapalli	24.84	13.51		5.16	5.37	4.5
Krishnagiri	31.18	15.50		5.13	4.68	4.3
Bargur	18.13	15.00		5.59	5.39	5
Kaveripattinam	25.23	22.11		5.91	5.56	4.7
Mathur	36.49	19.16		6.12	7.83	5.7
Uthangarai	29.14	22.22		5.94	5.92	4.8
Total	**26.9**	**20.05**		**5.09**	**5.09**	**4.1**

Source: Department of Health, Krishnagiri District,2014

Table A 4.2 Infant Mortality Rate in Krishnagiri District

Block	2007	2008	2009	2010	2011	2012	2014
Thally	19.90	17.59	17.16	18.60	16.93	15.87	19.5
Hosur	17.94	17.39	16.77	15.07	16.02	15.18	15
Kelamangalam	20.72	19.74	19.91	16.81	18.85	17.16	19.9
Shoolagiri	19.45	18.79	19.33	17.61	17.60	17.07	19.7
Veppanapalli	18.11	17.57	18.53	17.65	18.29	17.17	16.3
Krishnagiri	20.16	19.26	18.89	15.67	17.82	17.43	10.2
Bargur	17.63	17.27	17.17	16.19	16.55	16.47	16.8
Kaveripattinam	15.94	15.24	15.44	18.68	14.72	14.06	21.6
Mathur	20.15	19.43	18.87	17.49	17.86	17.58	14.8
Uthangarai	18.03	17.45	16.54	16.54	16.03	15.12	20.9
Total	**18.69**	**17.86**	**17.70**	**16.90**	**16.91**	**16.16**	**17.6**

Source: Department of Health, Krishnagiri District,2014

Table A 4.3 Institutional Delivery in Krishnagiri District

Block	Home	Sub health centre	Primary Health centre	GH	Private Hospitals	Total
Thally	4.06	0.33	53.17	28.63	13.80	95.94
Hosur	1.52	0.10	9.72	46.73	41.93	98.48
Kelamangalam	1.05	0.64	45.46	38.24	14.61	98.95
Shoolagiri	0.26	0.00	53.03	29.96	16.76	99.74
Veppanapalli	0.00	0.00	46.99	35.52	17.49	100.00
Krishnagiri	0.15	0.00	26.83	44.55	28.47	99.85
Bargur	0.06	0.06	33.86	37.99	28.03	99.94
Kaveripattinam	0.03	0.03	47.14	26.38	26.41	99.97
Mathur	0.00	0.00	43.34	35.25	21.41	100.00
Uthangarai	0.12	0.00	38.66	42.51	18.71	99.88
Total	**0.84**	**0.13**	**39.65**	**36.41**	**22.97**	**99.16**

Source: Department of Health, Krishnagiri District,2014

Annexure A 4.4 Nutritional Status in Krishnagiri District

Block	Number of AWCs	Weighed Children of 0-5 years	Normal Children		SUW Children		MUW Children		% of Underweight (MUW +SUW)
			0-5 years	%	0-5 years	%	0-5 years	%	
Thally	275	14422	10290	71	6	0.04	4126	28.61	28.65
Hosur	145	11557	9792	85	21	0.18	1744	15.09	15.27
Kelamangalam	166	11445	8353	73	27	0.24	3065	26.78	27.02
Shoolagiri	225	14198	11379	80	7	0.05	2812	19.81	19.85
Veppanapalli	116	8629	5757	67	28	0.32	2844	32.96	33.28
Krishnagiri	189	13396	10568	79	1	0.01	2827	21.10	21.11
Bargur	227	14488	11493	79	3	0.02	2992	20.65	20.67
Kaveripattinam	170	12353	10890	88	2	0.02	1461	11.83	11.84
Mathur	117	8268	6207	75	7	0.08	2054	24.84	24.93
Uthangarai	166	12857	8756	68	5	0.04	4096	31.86	31.90
District	**1796**	**121613**	**93485**	**77**	**107**	**0.09**	**28021**	**23.04**	**23.13**

Source: Department of ICDS, Krishnagiri District,2013

Annexure A 4.5 Access to Drinking Water in Krishnagiri District

Block	No of Habitations covered
Thally	100
Hosur	100
Kelamangalam	100
Shoolagiri	100
Veppanapalli	100
Krishnagiri	99
Bargur	96
Kaveripattinam	85
Mathur	83
Uthangarai	80

Source: Department of Rural Development, Krishnagiri District, 2014

Table A 5.1 Literacy in Krishnagiri District

Blocks	2001			2011			Gender Literacy Gap
	Male	Female	Total	Male	Female	Total	
Thally	68.00	56.00	62.00	69.47	53.86	61.93	15.61
Hosur	93.22	87.45	90.34	87.48	77.94	82.84	9.54
Kelamangalam	60.10	38.03	60.00	74.59	59.26	67.14	15.33
Shoolagiri	61.60	39.14	50.37	70.93	55.18	63.30	15.75
Veppanapalli	65.30	42.94	54.12	75.64	58.61	67.23	17.03
Krishnagiri	71.00	61.00	66.00	85.40	70.14	77.73	15.26
Bargur	74.03	54.53	64.28	79.94	64.42	72.31	15.52
Kaveripattinam	76.07	61.17	68.62	81.66	64.06	72.98	17.60
Mathur	67.78	53.29	60.54	78.10	62.30	70.34	15.80
Uthangarai	73.50	58.00	65.75	81.25	63.84	72.77	17.41
District	**71.06**	**55.16**	**64.20**	**79.65**	**64.85**	**71.46**	**14.81**

Source: Department of Education, Krishnagiri District, 2014

Table A 5.2 Transition Rate from Primary to Upper Primary and Upper Primary to Secondary -2013-14

Blocks	Primary to Upper Primary	Upper Primary to Secondary
Thally	97.94	97.71
Hosur	98.71	98.54
Kelamangalam	97.42	97.25
Shoolagiri	98.67	98.5
Veppanapalli	98.8	98.51
Krishnagiri	99.07	98.9
Bargur	98.62	98.45
Kaveripattinam	99.57	99.51
Mathur	99.4	99.23
Uthangari	99.11	99.03
District	98.73	98.56

Source: Department of Education, Krishnagiri District, 2014

Table A 5.3 Higher Education in Krishnagiri District

Type of Institutions	Engineering	Polytechnic	Arts and Science College
Government	1	1	3
Private	3	4	8
Total	**4**	**5**	**11**

Source: Department of Education, Krishnagiri District, 2013

Table A 6.1 Female Employment in Different Sectors

Type of Work	No of Women Involved	Percentage
Cultivators	76463	30.89
Agricultural Labours	96784	39.10
Household	8266	3.34
Others	66007	26.67
Total	**247520**	**100**

Source: Department of Census, Krishnagiri District, 2013

Table A 6.2 Female Worker Participation Rate - 2011

Blocks	Participation Rate
Thally	42.17
Hosur	21.12
Kelamangalam	39.80
Shoolagiri	36.45
Veppanapalli	39.08
Krishnagiri	25.33
Bargur	35.40
Kaveripattinam	37.34
Mathur	45.33
Uthangarai	44.29
District	**34.38**

Source: : Census Data 2011

TECHNICAL NOTES

Construction of Human Development Index (HDI)

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	Methods of obtaining indicators	Nature of indicator
Living standards	Percentage of HHs having access to Cooking fuel	No. of households using modern fuels like LPG, Electricity, Gas etc/ Total number of households *100.	Positive
	Percentage of HHs having access to Toilet	No. of households having toilet /Total no. HHs. *100.	Positive
	Percentage of HHs having access to Water	No. of households provided with safe drinking water/Total no. HHs.*100.	Positive

Dimensions	Indicators	Methods of obtaining indicators	Nature of indicator
	Percentage of HHs having access to Electricity	No. of households having electricity /Total no. HHs.*100.	Positive
	Percentage of HHs having access to Pucca house	Total no. of HHs. with pucca houses/Total no. of HHs. * 100	Positie
Health	Child Mortality Rate	Number of Infant Deaths (under the age of 5 years) in a Year / Total Number of live Births * 1,000	Negative
	Maternal Mortality Rate	Number of Maternal Deaths in a Year / Total Number of Live Births * 100,000	Negative
Education	Literacy Rate	2011 Census	Positive
	Gross Enrolment Rate (Primary+secondary) Schools	Gross Enrolment at primary & secondary schools / No. of children in the age group of 6 to 14	Positive

There are two indicators for measuring health, three for education and seven 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)

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

5. 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. For measuring GII, three dimensions are considered by the report. They are:

1. Reproductive Health
2. Empowerment
3. Labour market

Indicators considered for measuring GII

Dimensions	Indicators	Nature of Indicator
Reproductive Health	Maternal Mortality Rate (MMR)	Negative
	Share of Institutional deliveries (ID)	Positive
	Share of pregnant women with Anemia (ANE)/Anti-natal coverage	Negative
Empowerment	Share of female and male elected representatives in PRIs and ULBs (PR_F and PR_M)	Positive

	Share of female and male literacy (LIT_F, LIT_M)	
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)

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:

- **Health:** the under-five mortality rate (the probability of dying between birth and five years of age, expressed as a percentage on a scale of 0 to 340 deaths per 1,000 live births). This means that a zero score in this component equals an under five mortality rate of 0 deaths per 1,000 live births, and a score of 100 equals our upper bound of 340 deaths per 1,000 live births. The upper bound is higher than any country has ever reached; Niger came the closest in the 1990s with 320 under-five deaths per 1,000 live births.

- **Nutrition:** the percentage of under fives who are moderately or severely underweight. The common definition of moderately or severely underweight, which we use here, is being below two standard deviations of the median weight for age of the reference population.

- **Education:** the percentage of primary school-age children who are not enrolled in school. For our measure of education deprivation, we use the opposite of the Net Primary Enrolment rate, i.e., 100 – the NER. This gives us the percentage of primary school-age children who are not enrolled.

Indicators for Child Development

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

Dimension	**Indicator**	**Nature Of Indicator**
Health	U5MR	Negative
Nutrition	Percentage of Malnourished Children	Negative
	Enrolment in Primary and Secondary	Posittive
	Child labour	Negative

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 values for each of the indicators can be calculated by using the following formuls as explained earlier

  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	Nature of Indicator
Health	IMR	Negative
	MMR	Negative
	Malnourished Children	Negative
Education	Drop out in primary and secondary	Negative
Living Standards	Access to cooking fuel	Positive
	Access to toilet facilities	Positive
	Access to drinking water	Positive
	Access to Electricity	Positive
	Pucca house	Positive

Computation of Multi-Dimensional Poverty Index

- The indicators have been broadly categorized under the 3 parameters Health Education and Standard of Living.
- The data collected for the above indicators has to be used for calculating the index values. This would help in making the values unit-less and would allow summation of the index values of all the indicators.
- The index values have to be calculated for each of the indicators after identifying whether the indicators are positive or negative. This is done to make the index values unidirectional.
- 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)

  E.g.: 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 block and 1 indicating highest ranking of the block
- The consolidated index for each of the parameters/sectors/dimensions will be the average index value of all the indicators
- The composite index is the average of the indicators of all the three parameters – availability, accessibility and absorption - this will be used to assign the ranks for the blocks within the district.

ABBREVIATION

AAY	Annaporna Annadoya Yojana
AIDS	Acquired Immune Deficiency Syndrome
AWC	Anganwadi Centre
BPL	Below Poverty Line
BT	Bitumonous
CBR	Crude Birth Rate
CDI	Child Development Index
CDP	Community Development Programme
CDR	Crude Death Rate
CSWB	Central Social Welfare Board
DALP	Destitute Agriculture Labour Pension
EGS	Education Guarantee Scheme
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GH	Government Hospital
GII	Gender Inequality Index
HDI	Human Development Index
HHs	Households
HIV	Human Immunedeficiency Virus
IFA	Iron and Folic Acid
IGNOAP	Indira Gandhi National Old Age Pension
IMR	Infant Mortality Rate
LIC	Life Insurance Corporation of India
MDG	Millennium Development Goals
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MKSP	Mahila Kisan Sahakatikiran Pariyojana
MMR	Maternal Mortality Rate

MPI	Multi-dimensional Poverty Index
MUW	Moderately Under Weight
NDP	National Domestic Product
NER	Net Enrolment Rate
NH	National Highways
NNBC	New Born Baby Corners
NRHM	National Rural Health Mission
NRLM	National Rural Livelihood Mission
PCO	Public Call Office
PHC	Primary Health Centre
PRI	Panchayat Raj Institutions
RLB	Rural Local Bodies
SBR	Still Birth Rate
SC	Scheduled Caste
SHG	Self Help Group
SIDCO	Small Industries Development Corporation
SIPCOT	Small Industries Promotion Corporation of Tamil Nadu
SNCUs	Special New-Born Care Units
SOAS	School of Oriental and African Studies
SSA	Sarva Siksha Abhiyan
ST	Scheduled Tribe
SUW	Severely Under Weight
TB	Tuberculosis
U5MR	Under-Five Mortality Rate
ULB	Urban Local Bodies
UNDP	United Nations Development Project
UNICEF	United Nation Children's Fund
VIP	Ventilated Improved Pit
WBM	Water Bound Macadum