District Human Development Report - 2017

Perambalur District

State Planning Commission
Tamil Nadu

PERAMBALUR

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Perambalur and
State Planning Commission, Tamil Nadu
in association with
Payir Trust

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.

ANIL MESHRAM
MEMBER SECRETARY
STATE PLANNING COMMISSION

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PREFACE

A District Human Development Report (DHDR) tries to depict the objective situation so that a roadmap to development can be arrived at. Basically, therefore, it is a tool to develop the strategy for ensuring equitable development.

The State Planning Commission (SPC) had published DHDR for 8 districts in the past which was appreciated by UNDP for its richness of contents. The report provided a comprehensive view of the development status of the district in terms of Health, Education, Income, Employment etc. The report became a useful tool for adopting appropriate development strategies and to address the gaps to bring equitable development removing the disparities.

The Government of Tamil Nadu in an effort to make an in-depth study and analysis of the quality of life of the people as well as to identify the areas needed for enhancing the capabilities and to effectively address the grey areas, has assigned preparation of DHDR for all Districts. As far as Perambalur District is concerned, the DHDR preparation has been entrusted with PAYIR Trust under the assistance of UNDP, SPC and District Planning Office.

When we talk of building of a strategy, all concerned who are expected to participate in its execution must be involved at the formulation stage. In other words, the whole exercise has to be participatory in nature. An attempt has been made to involve all the line departments in this exercise. At the same time

other stakeholders have also been involved in identification of the bottlenecks and solutions. We have included a number of case studies to capture the success stories from the district itself that can be scaled up to accelerate the pace of human development.

I avail this opportunity to thank the peoples' representatives, the administrators, the academicians and all those who have contributed to the preparation of this document, including the eminent members of the State Planning Board and the officials of the Development and Planning Department. I am sure that their efforts will be rewarded in the long-run when the district finds its place of eminence in the arena of Human Development.

(K. Nanthakumar)
District Collector,
Perambalur.

ACKNOWLEDGEMENT

The preparation of the Perambalur District Human Development Report (DHDR) has originated primarily from the initiative of the State Planning Commission, Government of Tamil Nadu, with the support received from the UNDP. The State Planning Commission took up the assignment as a constructive exercise towards strategizing the Government programs to yield the intended results. The task of preparing this report has been assigned to PAYIR TRUST by the State Planning Commission in collaboration with the District Administration. The District level core committee was constituted with the **District Collector as the Chairman** and PAYIR TRUST as the Resource Institution. This Human Development Report has been kept on track and been seen through to completion with the support and encouragement of numerous people. It is a pleasant task to express my thanks to all those who contributed in many ways to the formulation of the report.

First of all I would like to express my sincere thanks to **Tmt. SanthaSheela Nair, IAS (Retd),** Vice Chairperson, State Planning Commission, Government of Tamil Nadu for constantly reviewing the progress of this exercise and for supplementing with valuable suggestions. I am extremely indebted to **Thiru M. Balaji, IAS,** the then Member Secretary, State Planning Commission, who initiated this exercise and also my thanks are due to **ThiruSugatoDutt, IFS,** former Member Secretary i/c, State Planning Commission and **Thiru Anil Meshram**, **IAS,** Member Secretary, State Planning Commission for providing all necessary administrative support and resources to accomplish the task.

I owe a deep sense of gratitude to all the Resource persons who were involved in preparing this Human Development Report for Perambalur District.

I express my thanks to **Thiru P. Selvarajan,** Head of Division, Rural Development and District Planning, State Planning Commission and **Tmt. S. Namagiri,** Senior District Planning Officer, State Planning Commission, whose encouragement, and support from the preliminary to the concluding level enabled us to complete this task. I thank **Dr. G. N. KrupaSubramaniam**, Planning Officer, State Planning Commission for providing critical inputs which helped me in enriching the report.

I sincerely thank **Dr.Derez Ahmed, IAS,** District Collector, Perambalur for his constant encouragement and periodical reviews. My special thanks to **ThiruThamilSelvan,** thethenDistrict Planning Officer, Perambalur, and the Technical Assistants since this work would not have been possible without their continued support.

It is my pleasure to acknowledge the help rendered by the Block Development Officers (BDOs), the elected representatives of the district, SHG members, and Municipal Commissioners. Besides, the various heads of department at the district level provided invaluable assistance. Specifically Superintendent Engineer, TNEB, Joint Director, Health & Family Welfare, Joint Director, Agriculture, Deputy Director, Health Services, Chief Educational Officer, Chief Educational Officer (SSA), Project Officer, MahalirThittam, Executive Engineer, (Urban), TWAD; Executive Engineer, (RWS), TWAD, Deputy Director, Statistics, Special Deputy Collector, SSS, District Elementary Educational Officer; District Social Welfare Officer, Project Officer, ICDS; Labour Officer, Manager, Lead Bank; Manager, NABARD, All Executive Officers, All Town Panchayats; all Block Medical Officers; Perambalur District and others who have also co-ordinated with us in executing the work.

SENTHILKUMAR GOPALAN
PAYIR TRUST

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CHAPTER 1
PERAMBALUR DISTRICT - A PROFILE

Perambalur – A Profile

Perambalur is an administrative district in the State of Tamil Nadu in India. The district headquarters is located at Perambalur. The district occupies an area of 1,756 square Kilometers and has a population of 5,65,223 making it the least populous district in the state.

Perambalur District came into existence after trifurcation of Tiruchirappalli district with effect from 30.09.1995. In 19.11.2007 Government passed orders that Perambalur District be reorganized and bifurcated again into two districts Perambalur and Ariyalur, out of which Perambalur district has its Headquarters at Perambalur.

The total geographical area of the district is 175736 ha and net sown area and gross sown area are 2,16,422 ha and 2,37,136 ha respectively. The net area under irrigation is 71,624 ha. The district lies in the Southern plateau & hill zone of Agro-climate regional planning with characteristics of semi-arid climate. The soil is predominantly red loamy and black soil. The normal rainfall of the district is 908 mm which is less than 946.9 mm, the normal rainfall of the State. The precipitation during northeast monsoon, southwest monsoon and remaining winter hot weather period account for 52%, 34% and 14% of annual rainfall, respectively.

Topography

This district is bounded to the north by the Cuddalore district and Salem district, to the south by Tiruchirapalli district, to the west by Namakkal district and to the east by Ariyalur district,

Perambalur District is located and spread between 10.54' and 11.30' degree Northern latitude and 78.40' and 79.30' degree of the Eastern longitude. It is an inland district without coastal line. The District has Vellar River in the North and it has well marked natural divisions. The Pachamalai hill situated on the North boundary of Perambalur is the most important hill in the district.

History

The history of Perambalur district could be traced as early in the year of 1741 when the Marathas invaded Tiruchirappalli and took ChandaSaheb as captive. Chanda Saheb succeeded in securing freedom in 1748 and soon got involved in the famous war for the Nawabs place in the Carnatic against Anwardeen , the Nawab of Arcot and his son Mohammed Ali.

Mohamed Ali annexed the two palayams of Ariyalur and Udayarpalayam located within the present Ariyalur District on the grounds of default in payment of Tributes and failure to assist him in quelling the rebellion of Yusuf Khan. In November 1764, Mohamed Ali represented the issue to Madras Council and obtained military assistance on 3rd January 1765. The forces led by Umdat-Ul-Umara and Donald Campbell entered Ariyalur and captured it. The young Poligar together with his followers, there upon fled to Udayarpalayam. On the 19th of January, the army marched upon Udayarpalayam. The Poligar's troops were defeated and the palayams were occupied. The two poligars fled their town and took refuge in Tharangampadi, then a Danish Settlement. The annexation of the palayam gave the Navab un-interrupted possession of all his territories extending Arcot to Tiruchirappalli.

The history followed was a power struggle between Hyder Ali and later Thippu Sultan with the British. After the death of Thippu Sultan, the British took the civil and military Administration of the Carnatic in 1801. Thus Tiruchirappalli came in to the hands of the English and the District was formed in 1801. In 1995 Tiruchirappalli was trifurcated and the new Perambalur and Karur districts were formed. Later Perambalur was bifurcated into Perambalur and Ariyalur districts.

Language, Art and Architecture

The official language spoken in the State is Tamil, which is one of the oldest languages of India. It has undergone several panoramic changes with significant contributions made by poets, scholars and rulers over several centuries. Poetry and literature flourished for almost three centuries during the Sangam age. Sangam literature is remarkable for its high literacy quality and sophistication. The best known work of this age is 'Thirukkural' (couplets providing philosophy and guidelines for a righteous living), written by Saint Thiruvalluvar, which is relevant even today. Tamil is the medium of instruction in educational institutions and is widely used in the conduct of government business in the State.

In the villages of Arumbavur and Thazhuthalai, of Veppanthattai Block, villagers have cast Gods and Goddesses in wood. The art of wood carving that has been passed down through the generations and the artisans, who earlier thrived on building temple chariots, today cater to homes, offices and chiefly hotels with other works of art.

Tourism

Ranjankudi Fort is located about 17 Kms north of Perambalur . The Fort was built by Jaginthar under Nawab of Carnatic in the 17th century AD. The Fort was the scene of battle of

Valikondah between the British and Mohamed Ali on one side and Chandha Sahib and the French on the other side in 1751 AD. This Fort is under protection of Archaeological Survey of India.

The ancient Arulmigu Ekambareswarar and Thandayudhapani Swamy Temples are situated in Chettikulam village and was built by King Kulasekara Pandiyan 800 years ago. Thai Poosam festival and Panguni Uthiram festivals are celebrated in a grand manner.

Mathura Kali Amman at Siruvachur is one of the most popular shrine in the district . The presiding deity of the temple is known as Sri. Madura Kali Amman. She is one of the forms of Kali.

Fossil tree at Sathanur: Geological study shows that more than 120 million years ago, the sea (which lies today about 100 km. East of Sathanur) had transgressed as far as 8 to 10 Km West of Sathanur. During this period which is Geologically known as the cretaceous, the sea abounded in a variety of marine animals similar to those found in the present day sea. These animals, after death, sank to the bottom and were buried by sands and clays brought down by the rivers. Along with them some of the trees which flourished on the seacoast or near shore were also buried after transport by flooded streams and were petrified in course of time. The large trunk of a petrified tree, which can be seen here, lies within the Trichinopoly group of rocks of about 100,000,000 years ago. This tree shows the presence of Conifers (The non-flowering plants) that dominated the land vegetation prior to the advent of Angiosperms (the flowering plants of the present of day).

The petrified tree trunk at Sathanur measures over 18 metres in length. Similar fossil trees measuring a few meters in length are found along the stream sections near Varagur, Anaipadi, Alundalipur and Saradamangalam. Dr.M.S.Krishnan of the Geological Survey of India first reported this fossil tree in 1940.This Fossil Tree is an important tourist site of the District.

Population Trend

The population of Perambalur district is 5,65,223 out of which 2,82,157 are Males and 2,83,066 are females. Perambalur is the least populated district in Tamil Nadu. There is an increase in the district population of 14.50% as against the total population in 2001. This is less than the State level increase of 15.60% during this decade. In the previous census of India 2001, Perambalur District recorded increase of 9.45% to its population compared to 1991. (Table 1.1)

TABLE 1.1—DISTRICT BASIC DEMOGRAPHIC INDICATOR

Sl. No	Indicators	2001	2011
1.	Population	493646	565223
2.	Decennial Growth (%)	9.45	14.50
3.	Density of population per sq. km.	282	323
4.	Urban population (%)		17.19
5.	Sex ratio	1006	1003

Source-Census documents 2001 and 2011

The population density of Perambalur is 323 Persons per square Km as against 555 in Tamil Nadu. The Sex-ratio of Perambalur is 1003 female per thousand male.

The sex ratio has come down from 1006 females to 1000 males in 2001 (1000:1006) to 1003 females to 1000 males (1000:1003) in 2011.

The population in the urban regions in the district is 17.19 percent. In total 97,163 people live in urban areas of which males are 48,231 and females are 48,932. Sex Ratio in urban region of Perambalur district is 1015 as per 2011 censu s data. Similarly child sex ratio in Perambalur district was 941 in 2011 census. Child population (0-6) in urban region was 10,199 of which males and females were 5,255 and 4,944 constituting 10.90 of the total urban population.

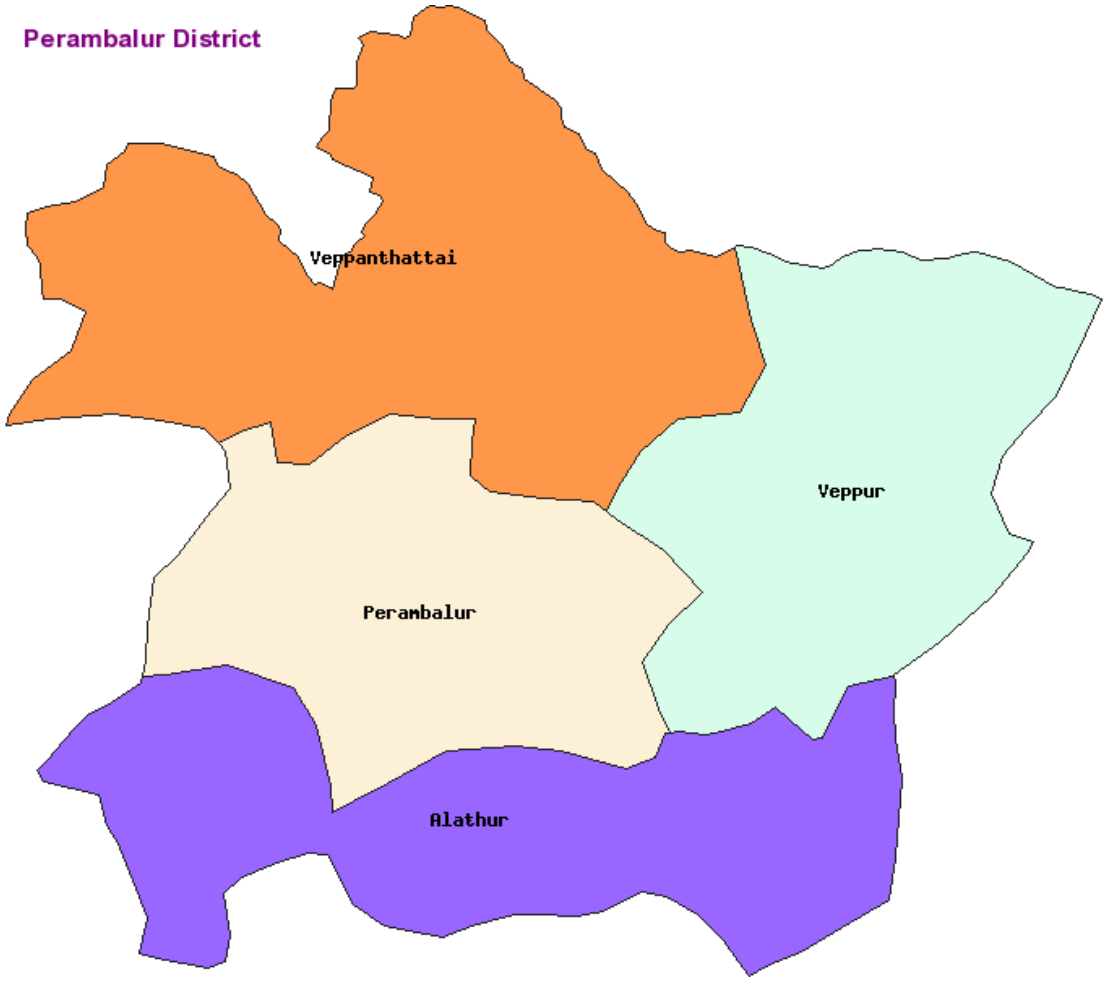
The population in the rural areas in this district is 82.81 percent. i.e 468,060 of which males and females are 233,926 and 234,134 respectively. In rural areas of Perambalur district, sex ratio is 1001 females per 1000 males. If child sex ratio data of Perambalur district is considered, figure is 908 girls per 1000 boys. Child population in the age 0-6 is 49,368 in rural areas of which 25,880 were male and 23,488 were female. The child population comprises 11.06% of total rural population of Perambalur district.

Major concerns such as female education, female infant mortality rate, female life expectancy are those things which need deeper care and attention. These are the vital issues related to women empowerment. However, the total sex ratio of this district shows a slight fall. The district had 1006 females in 2001 and 1003 females in 2011.

District Map

Perambalur District consists of one Revenue Division of Perambalur and four Taluks, namely Kunnam, Veppanthattai, Perambalur and Alathur. There are 4 blocks in this district – Perambalur block comes under Perambalur Taluk, Veppanthattai under Veppanthattai Taluk, Alathur under Alathur Taluk and Veppur under Kunnam Taluk.

There are 152 Revenue villages in this district – Perambalur Taluk has 27 villages, Veppanthattai Taluk has 39 villages, Kunnam Taluk has 47 villages and in Alathur Taluk there are 39 villages. Among the total of 121 village panchayats, Perambalur block has 20 village panchayats, Veppanthattai has 29, Veppur has 33 and Alathur has 39 village panchayats. Poolambadi, Arumbavoor, Kurumbalur and Lebbaikudikaadu are the four town panchayats in this district. Perambalur is the only Municipality in this district.



Source: Digital Map Source, TWAD Board, Chennai

No. of Revenue Division	1	Perambalur
No. of Taluks	4	Perambalur, Veppanthattai, Kunnam and Alathur
No. of Panchayat unions	4	Perambalur, Veppanthattai, Veppur and Alathur
No. of Revenue villages	152	
No. of village panchayats	121	
Town Panchayats	4	Poolambadi, Arumbavoor, Kurumbalur and Lebbaikudikaadu
No. of Municipality	1	Perambalur

Source: DRDA, Year 2012

The Economy

Agriculture

The temperature ranges between 22°C - 39° C with mean annual rainfall of 908 mm. North East monsoon period receives comparatively more rainfall i.e. 475 mm followed by 314 mm during South West monsoon, 91 mm during summer and 28 mm during winter season.

Black cotton soil, Clay loam and red sandy soil are the predominant soil types available. Wells and rainfall are the main source of irrigation in this region.

Maize, Cotton, Paddy, Onion, Turmeric, Tapioca, Chillies, Tomato, Brinjal, Lime, Groundnut, Sunflower and Sesame are the important crops in this district. Perambalur is the leading maize and onion producer in Tamil Nadu.

The share of agriculture to the net district product faces a slight fall in the past years due to monsoon failure. There are other concerns and constraints also in this district i.e dependence on monsoon, exploitation of ground water, the increase in value of the land. Promotion of appropriate technology and development strategies in dryland and rain-fed areas of this district would result in increasing the income of the small / marginal farmers enabling them to involve in plantation of traditional crops and thereby assuring ecological balance. The intensity of cropping area is 1.04 even though there are minimum water resources.

Agriculture in this district depends upon rain. If rain fails, there is severe drought in this area. In some places, open wells and bore-wells are there but that too with minimum water source. So the people depend on crops that could be cultivated with minimum water sources. Only 31% of the gross area is irrigated in this district.

Besides there are 112 check Dams, 12 Percolation Ponds, 10 Ooranies, 11 Recharge Pits, 2 Recharge trenches are the other sources of irrigation.

Among the total of 2,99,726 workers in the district, the Cultivators constitute 36% in 2011, a downfall of (-9.8%) against 2001. The agricultural labourers constitute 30% in 2011 as

against 23% in 2001, a positive growth to the effect that the traditional crops would also be safeguarded if more agricultural activities are carried out.

Sectoral Distribution of Gross District Domestic Product

Table 1.2 highlights the sectoral distribution of Gross District Domestic Product in Perambalur district during 2004-2012. During the year 2004, the district's GDDP was Rs.69,371 lakhs at constant prices of 2004-05.

TABLE 1.2—SECTORAL DISTRIBUTION OF GROSS DISTRICT DOMESTIC PRODUCT

Year	Primary	Secondary	Tertiary	Total
2004	24845	10216	34310	69371
2012	43059	18660	60239	121958

Source-Department of Statistics

It has grown continuously and reached to Rs.1,12,958 lakhs during 2011-12.

Under the horticulture crops, the area under fruit crops constitutes 0.4 percent, Vegetables 8.4 percent, Plantations 0.8 percent. The rest 12.1 percent is shared by the flower crops and the medicinal and aromatic crops.

There exists a good scope for horticulture development in the district. The district is suitable for growing both the tropical fruits such as mango, banana, papaya etc,. The major vegetable crops grown in the district are tapioca, onion(small)etc. Currently, Perambalur district is the top maize and Onion (small) producer in Tamil Nadu, with 27% and 50% of the state's share respectively.

Out of the total geographical area of 175736 Ha of Land, the forest constitutes 5.66%, the Barren uncultivable land 1%. Gross area sown are 37% exclusive of lands where other tree crops and groves are planted. 107840 Ha of land are put to non-agricultural purpose.

Industries

Perambalur District has various industries including the India Cements Limited, Grasim Industries Limited, Dalmia Cement (Bharat) Limited and Tamil Nadu Cements Corporation Limited.

The district is fairly rich in mineral deposits. Celeste, Lime Stone, Shale, Sand Stone, Canker and Phosphate nodules occur at various places in the district. A good deal of building stone (rough stone) is quarried in Perambalur, Kunnam and Veppanthattai Taluks.

The Public Sector factory Perambalur Sugar Mills at Eraiyur is functioning in the district with a crushing capacity of 3000 Tonnes per Day. Another Private Sugar Mill is also established here.

MRF Private Limited Company has established their factory here in the district from which nearly 800 people get employment. The contribution of Industries particularly the Cement Factories and the Sugar Mills add strength to the economic improvement of this district.

To provide employment generation and eliminate the industrial backwardness of the district, SIDCO industrial estate has been established in 2009 at Elambalur village with total extent of 4448 acres, comprising 95 developed plots, ranging from 10 cents to 1 acre. The formation of industrial estate provides avenues for budding entrepreneurs to start their enterprises. It is also proposed by SIPCOT to establish a textile park at Padalur village in association with Ministry of Textiles, Govt. of India. The total area of 100 acres has been identified and the acquisition process is in progress. The main objective of Textile Park is to promote textile based industries by providing massive rural employment and also to enhance the per capita income in the District.

Income & Poverty

Poverty is the inability of the people to secure a minimum level of living. Poverty may obstruct a country from its economic development. The Planning Commission has set 296.63 per capita per month in rural areas as poverty line in Tamil Nadu. In Perambalur district 39% of the total population are below poverty line. In the Blocks, Veppur records the highest number of people – 47% living below poverty line.

Per capita Income is one of the indicators that shows the people's standard of living. Per capita Income is calculated with gross national product divided by population. The Per capita Income of the district is 24256 very low in the ladder as compared to other districts in Tamil Nadu. The PCI of the state and district went up at current prices over a period of time but the growth rate was much slower than many other districts within the State . The district administration has taken steps to step up the development activities in order to raise the economy of Perambalur district in par with other developed districts in Tamil Nadu. (Table 1.3)

TABLE 1.3 PER CAPITA INCOME AT CONSTANT PRICES (In Rupees)

Sl. No	Year	District	State
1	2008-09	16,358	43,193
2	2009-10	16,963	47,394
3	2010-11	17,922	53,507
4	2010-11	17,922	53,507
5	2011-12	24.256	63,996

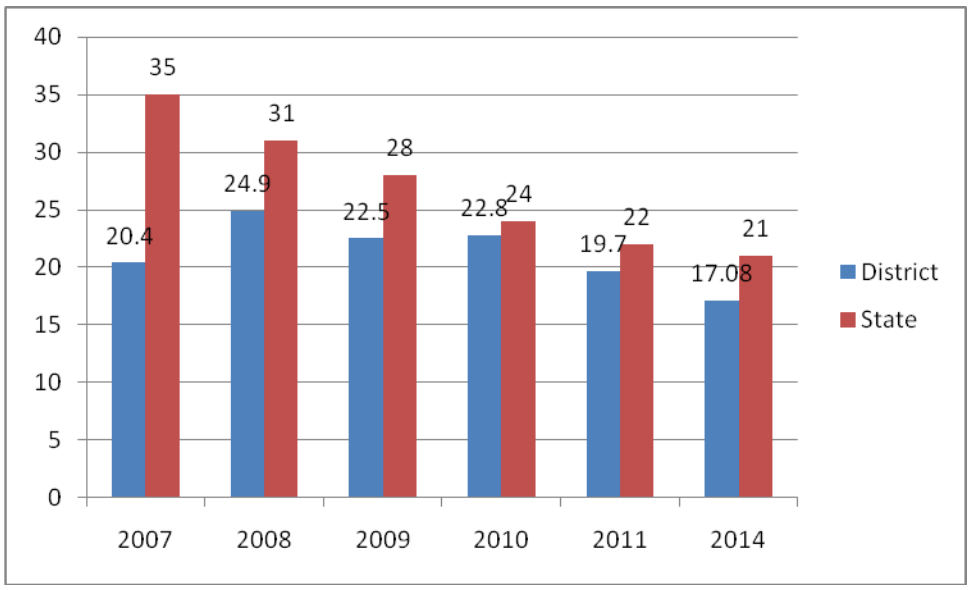
Source-Department of Economics and statistics, Chennai

Social Sector

The crude birth rate (CBR) for the district declined from 15.8 in 2010 to 14.7 in 2014. The crude death rate (CDR) declined from 5.7 in 2010 to 1.52 in 2014.

With respect to IMR, the district has made rapid progress. The IMR has been reduced from 20.4 in 2007 to 19.7 in 2011 and further reduced to 17.08 in 2014. (Figure 1.1)

FIGURE. 1.1 INFANT MORTALITY RATE TREND



Source-Health Department

Perambalur district has 100% institutional deliveries, through both Government and Private hospitals. These achievements are quite creditable and partly due to the government's policy of adopting the primary health care approach to provide free, curative and preventive health services to large sections of the population. However, some areas of concern still remain such as infant and maternal morbidity and mortality, and control of communicable and non-communicable diseases.

Literacy and Education

Tamil Nadu's human development achievements have been largely a result of its strong educational heritage. Even in the early years, education was actively pursued and promoted. The literacy rate of the district has been increasing progressively over the years.

Conclusion

This chapter explains the rationale behind preparing this DHDR – District Human Development Report. It outlines specific concerns and issues in the district and the suggestions to the district administration for accelerating the process of improvement in this district. These are all the efforts being made for the overall improvement of the district. In this context, the basic infrastructural facilities need improvement to a great extent in order to ensure better standard of living of people in this district.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

Status of Human Development in Perambalur District

Introduction

In 1990, the United Nations Development Program (UNDP) transformed the landscape of development theory, measurement, and policy with the publication of its first annual Human Development Report (HDR) and the introduction of the Human Development Index. HDR 1990 presented the concept of "human development" as progress towards greater human well-being, and provided country-level data for a wide range of well-being indicators. The UNDP's establishment of the HDR expanded both the availability of measurement and comparison tools used by governments, NGOs, and researchers, and our common understanding of development itself. Over the years, HDI has truly become the centerpiece and heart of the HDRs

The Human Development Index, or HDI, embodies Amartya Sen's "capabilities" approach to understanding human well-being, which emphasizes the importance of ends (like a decent standard of living) over means (like income per capita) (Sen 1985). Key capabilities are instrumentalized in HDI by the inclusion of proxies for three important ends of development: access to health, education, and goods. Empowered by these, and other, capabilities, individuals can achieve their desired state of being. HDI has shifted the focus from economic "utility" theory to Sen's human capabilities approach.

Presenting and analyzing the Human Development of Perambalur is unique in a way as it is the smallest District of Tamil Nadu with only 4 blocks and that has been mostly recently carved out in 2007 from the combined Perambalur District which had Ariyalur. Also, per 2003 TNSHDR report, Perambalur was among the bottom 5 performers in almost all parameters. So, it should be noted that due to unavailability of compatible and reliable data and a major portion of this small district being very backward in nature, constructing an analysis of Inter-block variations are in most cases skewed, rather the projection of Human Development of the District as a single region has greater meaning in understanding its "capabilities".

Human Development Index

Human development is a multidimensional feature. HDI is a composite index measuring average achievement in 3 basic Dimensions and 11 indicators of human development. The three

dimensions, standard of living, health and education are crucial for contributing towards the human development of the block and district. Details of the 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
Health	Infant Mortality Rate Maternal Mortality Ratio Under 5 Mortality Rate
Education	Literacy rate Gross enrollment in Primary Gross enrollment in secondary

HDI - Inter-Block Variations

The value of the HDI is usually measured on a scale of 0-1 and in places where the value is nearer unity, higher will be the human development. Based on the HDI values, Perambalur block (HDI 0.73), presents a picture of very high human development while the other three having low human development with Veppanathatai (0.65), Veppur (0.51) and Alathur (0.44). While the low human development among the 3 blocks gives a realistic picture of the region. (Appendix Table 9.1 and 9.2)

TABLE 2.1

TOP AND BOTTOM THREE BLOCKS IN HUMAN DEVELOPMENT INDEX

TOP 3		BOTTOM 3	
Block	**Value**	**Block**	**Value**
Perambalur	0.73	Veppanthattai	0.65
Veppanthattai	0.65	Veppur	0.51
Veppur	0.51	Alathur	0.44

Gender Inequality Index—Inter-Block Variations

The gender disparity is another dimension of human development. Along with HDI, UNDP constructed the gender –related development index (GDI) to analyze the gender disparities across the member countries. The **Gender Inequality Index (GII)** is a new index for evaluation of

gender disparity that has initiated in the 2010 Human Development Report of the UNDP. (Appendix Table 9.3 and 9.4)

There are three important dimensions used to measure gender inequality of inter blocks viz., Health, Empowerment and labor market. These three dimensions have fourteen indicators to compute the GII. The indicators have given below.

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

The gender inequality index is a negative index. Here, the value closer to the 0 shows lower gender inequality and value closer to the 1, shows higher the gender inequality.

There is little to infer from the GII as the highest value of 0.03 for Perambalur block and the lowest of 0.67 for Veppur creates a false notion of a highly gender sensitized population demonstrating a very high parity between women and men in educational attainment, labour and representation in local governance.

TABLE 2.2—TOP AND BOTTOM THREE BLOCKS IN GENDER INEQUALITY INDICATORS

TOP 3		BOTTOM 3	
Block	**Value**	**Block**	**Value**
Perambalur	0.03	Veppanthattai	0.04
Veppanthattai	0.04	Alathur	0.07
Alathur	0.07	Veppur	0.67

The gender gap in literacy rate in Veppur Block is as high as 17.6%, while Alathur and Veppanthattai are around 15%. Perambalur block has significantly reduced the gender gap in literacy to 10 percentage points thus by achieving the 12th Plan targets.

Likewise, disparity among Female and Male worker participation rate, more adversely seen among the Non-Agricultural sector in all 4 blocks, with Perambalur block showing the maximum imbalance in both Agricultural and Non Agricultural sector, is a major concern for gender empowerment. The wage rates are also highly discriminatory and biased across all 4 blocks. The reason for these could be women's greater burden of unpaid work and gender division of work as per cultural norms.

Gender inequality is especially tragic not only because it excludes women from basic social opportunities, but also because it gravely imperils the life prospects of future generations. Gender equality is both a core concern and an essential part of human development. All too often, women are discriminated against in health, education and the labour market, which restricts their freedoms. Equity and social justice, valuable in their own right, are important for expanding capabilities. Progress in human development is difficult to sustain in the face of growing or persistent inequity. Inequity in specific capabilities for example, proxied political/local governance representation also impedes progress in human development, specifically the freedom of women to express and take decisive changes impacting women and child welfare - though the effects may be less pronounced.

Multidimensional poverty index

The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the household and individual level in health, education and standard of living. It uses micro data from household surveys, and—unlike the Inequality-adjusted Human Development Index—all the indicators needed to construct the measure must come from the same survey. Each person in a given household is classified as poor or non-poor depending on the number of deprivations his or her household experiences. This data are then aggregated into the national measure of poverty. The MPI reflects both the prevalence of multidimensional deprivation, and its intensity—how many deprivations people experience at the same time. It can be used to create a comprehensive picture of people living in poverty, and permits comparisons across urban or rural location, as well as other key household and community characteristics. Indicators used for MPI computation furnished below.

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

While going into a broader analysis of the MPI, there is quite an amount of disparity between the 4 blocks with Alathur's MPI at 0.39 while Veppur MPI is 0.73. (Appendix Table 9.5 and 9.6) While the vulnerability of the people of Perambalur to poverty is generally high because of the very low per capita income, malnourishment levels, where larger proportion of children are deprived of the essential nutrition.. Also, all blocks have very low access to toilet, which is an important factor of poverty according to MDG. While the access to drinking water is 100%, many a times this is from a shared source. The penetration of better fuel source for cooking is good in Perambalur, may be largely due to urbanization, 2/3 rd of people in the rest of the 3 blocks depend on wood or charcoal as cooking fuel. (Table 2.3)

TABLE 2.3—TOP AND BOTTOM THREE BLOCKS IN MULTI POVERTY INDICATORS

TOP 3		BOTTOM 3	
Block	**Value**	**Block**	**Value**
Alathur	0.39	Veppanthattai	0.54
Veppanthattai	0.54	Perambalur	0.62
Perambalur	0.62	Veppur	0.73

Child Development Index

Child development Index is calculated by the absolute data regarding U5MR, Nutrition, percentage of malnourished children, Gross enrolment rate in primary and secondary education and Child labour. Indicators used for CDI computation are furnished here.

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

Child development index for all the blocks is remarkable as the service delivery mechanisms in health sectors are effective in its implementation. As discussed earlier, the incidence of female foetus elimination is major contributing factor as Perambalur district is one of the newly emerging district with a high incidence of sex selective abortion as the sex ratio at birth for Perambalur district is less than the State average. (Appendix Table 9.7 and 9.8)

Though the district data claims that there is no prevalence of child labour, this is contradicted by the presence of the incidence of dropout rate. The dropout rate of secondary education is the highest (more than one) in all the block than other variables and in Alathur the dropout rate of both primary and secondary education is high. (Table 2.4)

TABLE 2.4

TOP AND BOTTOM THREE BLOCKS IN CHILD DEVELOPMENT INDICATORS

TOP 3		BOTTOM 3	
Name of Block	**Value**	**Name of Block**	**Value**
Alathur	0.75	Veppur	0.60
Veppur	0.60	Perambalur	0.51
Perambalur	0.51	Veppanthattai	0.50

Conclusion

Here is a comparison of the different indices and their rankings in the four blocks of Perambalur.

BLOCK LEVEL INDICATORS & RANKING

Block	HDI (Value and Rank)		GII (Value and Rank)		CDI (Value and Rank)		MPI (Value and Rank)	
Alathur	0.44	4	0.07	3	0.75	1	0.39	1
Perambalur	0.73	1	0.03	1	0.51	3	0.62	3
Veppanthattai	0.65	2	0.04	2	0.50	4	0.54	2
Veppur	0.51	3	0.67	4	0.60	2	0.73	4

Source-Refer Appendix 9.1 – 9.8 for detailed calculation

Analyzing the access to the basic requirements of Human development, in the 3 blocks of Veppanthattai, Alathur and Veppur, about 60% of the population do not have access to toilets. In spite of half of the population in these blocks have pucca houses which is a very positive outcome of the Tamil Nadu Government's rural housing schemes, most of these houses do not have toilets. Even in the largely urban block of Perambalur, still 70% of the population do not have access to toilets.

The penetration of electricity connection in Veppur is still only 80%. Universal access to electricity by 2023 being Tamil Nadu's vision, the implementation of rural electrification scheme needs to be accelerated in Veppur block.

In all 4 blocks, almost all of the populations have access to safe drinking water. With more than 50% of the population not having access to pucca houses it can be inferred that the large majority of the population still do nothave piped and pressurized water to individual homes.

In the 3 blocks of Veppanthattai, Alathur and Veppur, almost 70% of the population do not have access to cooking fuel. Perambalur block fares much better with 78% of the population have good cooking fuel. Given the fact that women are responsible for cooking, and firewood is the single largest source of energy, chronic lung diseases & cancer in women are some of the common fallouts (Swaminathan, 1997)

Tamil Nadu targets for the 12th Plan for IMR, MMR are 18 and 45 respectively. While Perambalur Block achieved better results than the target, the other 3 blocks are well on-track to achieve the targets. The same cannot be said for MMR. While Veppanthattai's MMR is close to the State MMR of 85 (2013-14),the MMR of Alathurat 187 is very high. Ensuring safe motherhood is one of the biggest challenges that is facing the District and in particular this block.

Literacy is one of the crucial components of the human development index. It is also linked with other key indicators of human development such as infant mortality, morbidity rate, nutritional status of children, empowerment of women, and health status. The widest mismatch

between the State's target and District's achievement and to a large extent the reason for the backwardness of the District is the literacy levels of the population. While the State target for the 12th Plan is 90%, Perambalur blocks have 73.41% literates while the other blocks are less than 65% with Veppur just having 62.53% literates.

CHAPTER 3

EMPLOYMENT, INCOME AND POVERTY

Employment, Income and Poverty

Introduction

The important factors that determine the human development are the proportion of population employed in productive work, quality of employment and also the quantity of remuneration received by the workforce. The shift in these trends indicate the direction of economic development happening affecting a particular population. In the process of decentralized economic transformation, one can expect the transfer of labour from the primary sector to the secondary sector and then to the tertiary sector.

Usually such transformations are brought by rapid socioeconomic structural changes through industrialization and urbanization in most of the urban areas. From a HD perspective, these processes offer enormous room for expanding people's capabilities. However, what needs to be given keen thought is that whether the processes that drive modern economic growth reinforce the social values of employment or not. The classical Marxist answer is that capitalist processes are fundamentally alienating for labour; the class conflict that follows is what makes capitalism so dynamic, rather than a harmony between social and economic values. As pointed out by Giovanni Arrighi, even Adam Smith viewed the division of labour within production units and the specialization of work into monotonous and uniform tasks as harmful to the moral and intellectual qualities of the labour force. This tension between productivity and social value can be observed today within increasingly complex and atomized factory systems of production and distribution.

The idea of 'social value' arguably needs to be anchored in a more nuanced sociological understanding, such as the social nature of basic needs. Like happiness, but unlike objective human development metrics, social values are inherently relative and subjective, such as the sense of security and dignity that people derive from work. These perceptions can adapt over time and to changing contexts. The perception of certain types of work as enhancing dignity in a rural agrarian context, for instance, might not persist through the course of urbanization. Structural and institutional transformations associated with development add even further complexities, particularly in a globalized setting where perceptions are conditioned by factors that extend far beyond the local.

This clearly shows that, for a district like Perambalur, comprising majorly of rural, agrarian, and backward population, the issue of employment is not a single faceted issue to tackle, by introducing new opportunities mainly through industrialization and replacing traditional crops with cash cropping, but a more complex one. In this chapter, not only aspects of employment will be discussed, but also about income and poverty, the topics that closely intertwined with employment,

though they are not the only factors that affect the quality of life.

Employment

Traditionally, employment generation has been considered the most important issue to be addressed in order to reduce poverty. Perambalur's PCI in 2001 being 13926, which was far below the TN average then, which was 24256 in 2012, reinforcing the importance of policies to ensure employment in this region, should have been one of the most important development agendas in the previous decade for Perambalur. And presumably, this reason and others would have made the way for the mines, industries and quarries that have sprouted in the district in the last 1 or 2 decades.

Analysis of how the coming of these economic activities have influenced the employment opportunities and income levels of people of Perambalur and also how they have affected the eco system of the region, has to be dealt in detail so as to understand whether the change that has inevitably happened due to these economic growth activities has been a suitable and sustainable one for a predominantly rural population, and whether carrying a positive influence over various aspects of life like happiness, sense of security and dignity on a long run. The changes in agricultural activities too, carry a high importance when we are concerned about sustainable positive changes over above said life aspects. With the data available, though the possibility of discussing the intricate details of finer aspects poses difficulty, on a broad sense, still getting a sense of the scenario is possible.

TABLE 3.1—TOTAL WORKERS AND NON-WORKERS

Sl. No	Blocks	Total worker (in %)		Main Workers (in %)		Marginal Workers (in %)		Non-Workers (in %)		Total Population (in %)	
	Year	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Perambalur	65202	77308	58549	68855	6665	8459	66785	85042	131986	162356
2	Veppanthattai	74706	81158	63658	71605	11035	9549	61694	67589	136401	148743
3	Veppur	69310	79243	51289	59626	18014	19613	59370	68899	128674	148138
4	Alathur	56489	62017	49104	55017	7389	7006	40092	43974	96585	105986
	District	265707	299726	222600	255103	43103	44627	227941	265504	493646	565223

Source-Department of Statistics

Table 3.1. clearly indicates that the percentage of total workers of Perambalur block is lesser than those of other 3 blocks which are predominantly rural in background. It is not very clear whether this fall is due to a possibility that a decent size of the total population is engaged in training

their soft skills or pursuing higher education, a behavior influenced by urban exposure or due to lack of skills and or opportunities in the developing urban set up. In all blocks the numbers of main workers have increased while the numbers of marginal workers have come down in Veppanthattai and Alathur blocks.

It is interesting to note that Perambalur is been least covered compared to other 3 blocks by MGNREGA scheme. It is not very sure whether this or the previously mentioned factors or all of them cause the fall in the main workers' number in Perambalur.

Worker Participation

The available work distribution data gives information that 66.29% of total workers are involved in agriculture related activities, which is a primary sector, which is understood by Perambalur being primarily and traditionally an agrarian district. The fall of cultivators in all blocks except Alathur is more than 10% but the rise in agricultural labourers is more than 35% in all blocks with a maximum of 72.9% in Veppur and 51.6% in Veppanthattai. It is to be noted that the lands from Veppur and Veppanthattai have been acquired for SEZ in the last decade. Also there is a significant migration from these 2 blocks. (Table 3.2)

The WPR of females in Perambalur (49.4%) is among the highest among all districts in the State.

Sectoral composition of workers

TABLE 3.2 DISTRIBUTIONS OF WORKERS

Sl. No	Block wise/District	Total workers		Cultivators		Agri. Labourers		Household & Other workers	
		2001	2011	2001	2011	2001	2011	2001	2011
1.	Perambalur	65202	77308	25618	22826	13931	18999	25653	35483
2.	Veppanthattai	74706	81158	33112	27500	20664	31335	20930	22323
3.	Veppur	69310	79243	31740	28383	13124	22691	24446	28169
4.	Alathur	56489	62017	28711	28833	12839	18110	14939	15074
	District	265707	299726	119181	107542	60558	91135	85968	101049

Source-Department of Statistics

Among the districts in the State, proportion of cultivators to total workers was the highest in Perambalur (39.1%). It indicates that Perambalur district is agrarian based and least urbanized. In spite of majority of work force getting involved in agriculture, the net domestic product of primary sector of the district (12.04% being its growth rate) lies much below that of the

tertiary sector with 53.00% growth rate. Moreover, 37% of total land is put under cultivation, exclusive of lands where other tree crops and groves are planted, which emphasizes the large extent of agricultural activity happening in the district. The agriculture's share of GDP is 32.24%.

The GDDP of the state in 2004-05 was 69371 lakhs and that of the district was 69371 lakhs which contributed to 0.36%. Whereas in 2012 the contribution of Perambalur district to the state's GDDP was only 0.26%. (Table 3.3)

TABLE 3.3 SECTOR WISE GROSS DOMESTIC PRODUCT PRIMARY/SECONDARY/TERTIARY

Sl. No	Year	District In Lakhs			State		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1	2004	24845	10216	34310	1718782	3533653	7975692
2	2012	43059	18660	60239	3872767	13039248	26411788

Source- Department of Economics and statistics, Chennai

The distribution of workers in the agricultural sector is the maximum whereas the GDDP of primary sector has grown to 73.31% while the secondary sector has shown the growth of 83% and the tertiary sector has shown 75.57% growth. This situation is not holding good for the Three-sector hypothesis of economy. According to the theory, the main focus of an economy's activity shifts from the primary, through the secondary and finally to the tertiary sector. While we see a gradient transformation from primary to tertiary sector in Tamil Nadu's GDDP, the share of respective values of Perambalur do not follow the conventional pattern. The growth of tertiary sector is way more than the primary sector and the secondary sector is showing a negative growth. With a low per capita income (indicating the major share of primary sector), Perambalur district being a backward district, the primary sector should have shown the highest growth rate.

Registration and Placement

Unemployment here we refer as long-term unemployment. This is a good measure of the numbers who are still in search of regular employment

However, in urban areas the female unemployment rate is higher. But these figures do not really explain the true unemployment situation. On the other hand, it is also clear that not all the registered persons are necessarily unemployed. However, it is evident from the fact that educated unemployment is on the increase both in the district as well as in the State. Among job seekers, 70 per cent have tenth standard qualifications at least. Proper wage employment program and other development program could be introduced to meet the problems of the educated unemployed.

Their skills need to be properly utilized by matching jobs with qualifications and expectations.

Box 3.1—CHILD LABOUR DECLINE IN DISTRICT

In 2011, Perambalur district has been declared child labour free in respect of hazardous and non-hazardous employment both in organized and unorganized sectors. Several rounds of checks were conducted by special teams in each block and over the year there was no report of any child labour being employed in the district. The declaration has been made on the basis of reports obtained from village panchayat presidents, voluntary organizations and employers' organizations.

To achieve this, the Education Department conducted a survey for identifying the dropouts in the age group of 6-14 and an enrolment drive was launched for their benefits. Committees were set up at the rural, urban, taluk and district level for identifying child labourers.

The committees in rural areas were led by the village panchayat presidents and comprised of the panchayat secretary and the headmaster of the local school as members. The urban committee comprised of the ward councillor, the bill collector and the health inspector.

The taluk committee was led by the tahsildar, while the district committee included officials of the Education Department, representatives of service organizations' and the Inspectors of Factories. These committees identified child labourers.

During the initial rounds of checks, about 10 children below the age of 14 who were found employed in different places were rehabilitated and admitted to schools.

Village panchayats, adopted resolutions against child labour. Similarly, all government departments were also asked to submit status reports.These were cross-checked by field verifications. This apart, objections and information from the public were also invited.

Consultative meeting with representatives of voluntary organisations, employers associations and officials of government agencies were conducted regularly. It was mandatory on the part of all government departments to report to the district administration if they find any child labourer in the district.

The public brought to the notice of the district officials whenever they found any children being employed in individual households, hotels, commercial establishments, industries or quarries either in writing or over the telephone by dialling 1098.

All these synergetic efforts cumulated in Perambalur becoming 'child labour free'. Periodic meetings are held to ensure that the district remained child labour free.

TABLE 3.4 REGISTRATION AND PLACEMENT

S. No	Year	Registration	Placement	% of placement
1	2007	24152	416	1.72%
2	2008	28393	398	1.40%
3	2009	31174	226	0.75%
4	2010	12764	253	1.99%
5	2011	14842	276	1.86%
	District	**111325**	**1569**	**1.40%**

Source-Department of Statistics

Table 3.4 shows the number of registrations in the District Employment exchange from 2007 to 2011 is 111325 out of which only 1569 got employment i.e a placement of 1.40% only. The number of people still waiting for employment is 109756.

Income

Table 3.5 SHARE OF SECTORAL INCOME

Sl.No	% Share to Gross District Domestic Product				GDDP (Rs.Lakh)
	Year	Primary	Secondary	Tertiary	
1	2004-05	35.04	16.16	48.8	76920
2	2010-11	30.7	11.66	57.64	99584
3	2011-12	35.31	15.30	49.39	121958

Source-Department of Economics and statistics, Chennai

Analysis of the share of sectoral income revealed that both primary and secondary sectors are losing their shares to tertiary sector. It is imperative that intensification of technical know-how in the agricultural sector, creation of storage facilities, assured price for agricultural produce are addressed. Moreover, 66.29% being agriculturists, a marked development in this field would significantly contribute to rise in PCI on the district. Through district employment exchange, only 1.40% of placement is provided and MGNREGA coverage for the district is 80%. This implies that there has not been a positive shift in employment generation, which could probably lead to low per capita income growth rate with respect to the fast growing population rate. (Table 3.5)

"Wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else" (Sen, quoting Aristotle, 1999). What Aristotle said is also repeated in different terms by the 1996 Human Development Report: "human development is the end – economic growth the means" (Ravallion, 1997) Income per capita measures the wealth that is

ultimately only the means to something else for almost all humans. This fact alone does not diminish its importance when looking at the world and especially developing nations. When considering human welfare, money or income itself is not desirable but it is the products and services that income can buy and the social standing it might create. Higher income will almost certainly lead to higher quality of life since people will have better access to goods like food, shelter, and clothing when their income rises.

There has been an increase in the Per capita Income of the district from 13926 in 2001 to 24256 in 2012 – an increase of 43%. But as compared to the State which has the per capita income of 63996 in 2012, with growth rate of 32%. The decadal population growth rate of the state for the same decade is 15.60% and that of Perambalur is 14.5%. While there is much less difference in population growth between the State and the district, there is a big difference in the per capita income growth. The prospects of the District has been improving at a much better rate as reflected by the 2011-12 GDDP with the Per capita income rising to Rs. 24,256.

Poverty and Inequality

Poverty is a social as well as a multidimensional phenomenon. According to the World Bank, "poverty is pronounced deprivation in wellbeing." AmartyaSen in his capability approach perhaps gave the broadest meaning to well-being. According to him well-being comes from a capability to function in society. Poverty arises when people lack key capabilities due to inadequate income or education, or poor health, or insecurity, or low self-confidence, or a sense of powerlessness, or the absence of rights such as freedom of speech. (Table 3.6)

TABLE 3.6 Below Poverty Line during 2013-14 in Perambalur district

Sl.No.	Name of the Block	BPL Percentage
1	Veppanthattai	31.87
2	Veppur	31.43
3	Alathur	30.11
4	Perambalur	32.93
	District	**31.56**

Table 3.6 clearly shows the extent of people living below the poverty line in the 4 blocks of Perambalur district. Some of the blocks have the poverty level above the district average

of 31.56%. Perambalur block has the highest average of 32.93% in the district followed by Veppanthattai block 31.87%, Veppur31.43%. Alathur block alone has the average of 30.11% which is lower than the district average.

Tamil Nadu's estimated percentage of poor in 2011-12 is 21.9%, whereas Perambalur's BPL percentage is 31.56%.

Public Distribution Systems

TABLE 3.7 FAMILY CARD HOLDERS

Sl. No	Name of the Taluk	HH provided with family cards
1	Perambalur	44129
2	Veppanthattai	43704
3	Kunnam	74786
	District	162619

Source-DRDA Perambalur, 2011

By and large the family card coverage is good.

Mahatma Gandhi National Rural Employment Guarantee Scheme - Tamil Nadu

MGNREG Scheme was introduced in 2005 and extended to Perambalur district from 01.04.2008. The Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA) guarantees 100 days of employment in a financial year to any rural household whose adult members are willing to do unskilled manual work. This Act is an important step towards the realization of the right to work. The focus of this scheme is also to enhance for the sustainable livelihood of the people by developing the economic and social infrastructure in rural areas.

In Perambalur district, for the Year 2012 – 2013, a total of 108383 people were employed to complete a total of 855 works of accumulative total budget of Rs. 48,920 crores.

Table 3.8 PERCENTAGE OF HH PROVIDED EMPLOYMENT UNDER MGNREGA 2012 – 2013

Sl. No	Block wise/District	Total No. of HH	HH provided jobs under MGNREGA	% of HH provided with jobs
1	Perambalur	33862	21103	62%
2	Veppanthattai	32816	26964	82%
3	Alathur	30920	24183	78%
4	Veppur	38713	36133	93%
	District	136311	108383	80%

Box 3.2 MGNREGA –EMPLOYMENT AND INCOME

Mahatma Gandhi National Rural Employment Guarantee Act was introduced to eradicate poverty and to bring employment in the rural areas. Under this Act, Employment is provided towards constructing assets of durable nature. This scheme offers employment to 2 members of each BPL family. The Central and State Government share the cost of the program on a 90:10 basis.

In Perambalur district, out of the total 136311 number of Households, 108383 (80%) households were provided with employment under this scheme. Veppur block tops the list with 93% of households provided with employment followed by Veppanthattai 82%, Alathur 78% and Perambalur 62%.

Leaving alone whether the right wage is being given everywhere or not, this scheme has truly provided people with employment and fairly has done its job of alleviating poverty.

Works undertaken for Year 2013 in Perambalur are:

- Drought Proofing: 58
- Micro Irrigation Works: 19
- Provision of Irrigation facility: 762
- Land development: 19, Rural connectivity: 168
- Rural sanitation: 2033, Bharat Nirman: 102
- Water Conservation and Water Harvesting: 173
- Renovation of traditional water bodies: 790

Conclusion

Unemployment and poverty are inextricably linked in that one can't be delineated from the other. Unemployment is the major cause of poverty. Unemployment leads to loss of income, self-reliance, skill and self-confidence, psychological and physical health, worker motivation and increases in ailment, morbidity and mortality. Poverty is characterized by deprivation of basic capabilities as well as low and inadequate income.

All the 4 blocks need eradication of poverty by the implementation of wage and self-employment schemes and programs.

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

Demography, Health and Nutrition

Introduction

It has been known, for a while, the direct relationship of the health and nutrition of a society with the economy and wellbeing of the society (Strauss & Thomas, 1998). In essence, the better the health and nutrition, the better the progress, prosperity and productivity of the society.

This chapter assesses the important parameters of demography, health and nutrition in Perambalur. It also probes into the effectiveness of Government policies and programs and takes effort to assess the impact of such programs.

Demographic Trends and Health Indicators

Demography is the study of human population, size, structure and dynamics. It deals with the size, structure, and statistical details of population. The study also relates to births, deaths and migration. The demographic study gives us a holistic idea of society on various aspects.

Population and Demographic Transition

The decadal (2001 – 2011) growth rate of population was 14.50 in Perambalur. The district's population in 2011 was 5,65,223 as per the census, of which 2,82,157 were males and 2,83,066 were females. The distribution of the population in urban and rural was 17.19% and 82.81% respectively.

In 2001, the district population density was 282/sq.km, against the State density of 480/sq.km. In 2011, the population density rose to 323/sq.km in the district, accompanied by a similar increase to 555/sq.km in the State (refer to table 4.1).

TABLE 4.1 POPULATION SIZE AND DENSITY

Sl. No	Block wise/District/State	Population		Sex ratio		Density	
		2001	*2011*	*2001*	*2011*	*2001*	*2011*
1	Block						
	Perambalur	131986	162356	972	990	392	482
	Veppanthattai	136401	148743	1008	1017	238	259
	Veppur	128674	148138	1017	1003	300	345
	Alathur	96585	105986	1015	1012	231	254
2	District	493646	565223	1006	1003	282	323
3	TamilNadu	62405679	72138958	987	995	480	555
4	India	1028610000	1210193422	934	940	325	382

Source-Census documents 2001 and 2011

Population trend at Block level

There are 4 blocks in this district – Perambalur, Veppanthattai, Veppur and Alathur. Perambalur Block constitutes 29%, Veppanthattai 26%, Veppur 26% and Alathur 19% of the total population in the district. The percentage of increase in population in the blocks – Perambalur (23%), Veppanthattai (9%), Veppur (15%) and Alathur (10%) clearly indicates there is gradual growth in all the blocks. According to 2011 census, the Scheduled Castes population in Perambalur accounted for 31.69%, the third highest concentration after Thiruvarur and The Nilgiris.

TABLE 4.2 DEMOGRAPHIC PROFILES

Sl. No	Block wise/District	Population		Sex ratio		Density		Sc pop %		ST pop %	
		2001	**2011**	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**	**2001**	**2011**
	Block										
1.	Perambalur	131986	162356	972	990	392.81	483.20	31%	31%	0.25%	0.32%
	Veppanthattai	136401	148743	1008	1017	573.11	624.97	30%	30.36%	1.37%	1.23%
	Veppur	128674	148138	1017	1003	430.35	495.44	34%	34.42%	0.10%	0.14%
	Alathur	96585	105986	1015	1012	231.19	253.69	27%	31.00%	1%	0.20%
2.	**District**	493646	565223	1006	1003	382.20	437.61	30.5%	31.69%	0.68%	0.46%

Source-Census documents 2001 and 2011

Percentage of Population in the age group of 0-6

The population of children at 0-6 years is 59567 and constitutes 10.54% of the total population in Perambalur district as against 60478 (12.25%) in 2001. Among the blocks, Veppur has 11.38% followed by Veppanthattai 10.67%, Alathur 10.65% and Perambalur 9.74% of population in the age group of 0-6 in Perambalur district.

TABLE 4.3 PERCENTAGE OF POPULATION IN THE AGE GROUP OF 0-6

Sl. No	Block wise/District	Total Population	Population in the age group of 0-6	% of 0-6 population
1	Perambalur	162356	15818	9.74%
2	Veppanthattai	148743	15877	10.67%
3	Veppur	148138	16584	11.38%
4	Alathur	105986	11288	10.65%
	District	565223	59567	10.54%

Source-Department of Statistics, 2011

Health Indicators

Crude Birth Rate and Crude Death Rate

The crude birth rate (CBR) is defined as the number of births per 1,000 people (Figure 4.1). Similarly, the number of deaths per 1,000 people is indicative of the crude death rate (CDR).

FIGURE 4.1 TRENDS IN CRUDE BIRTH RATE

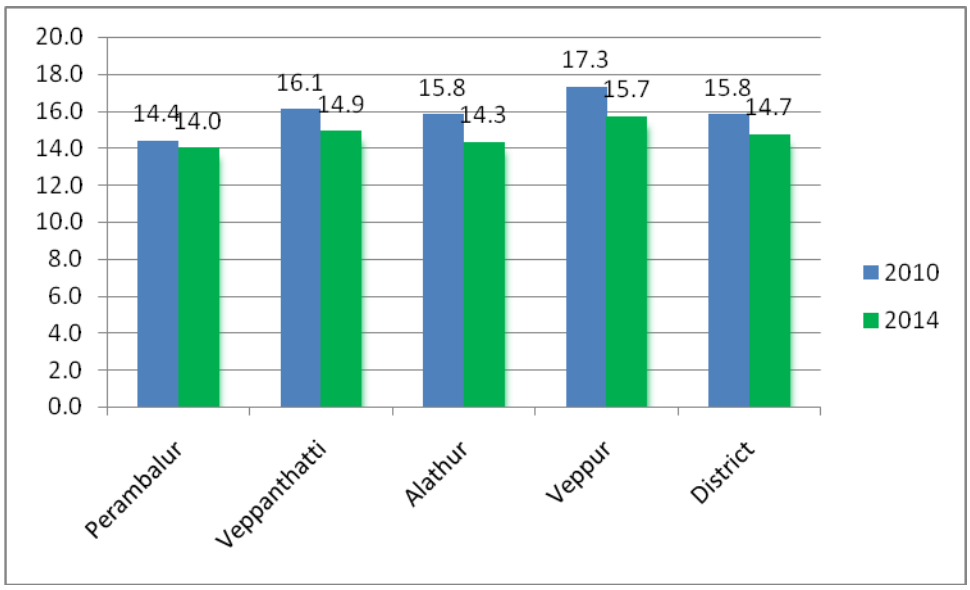
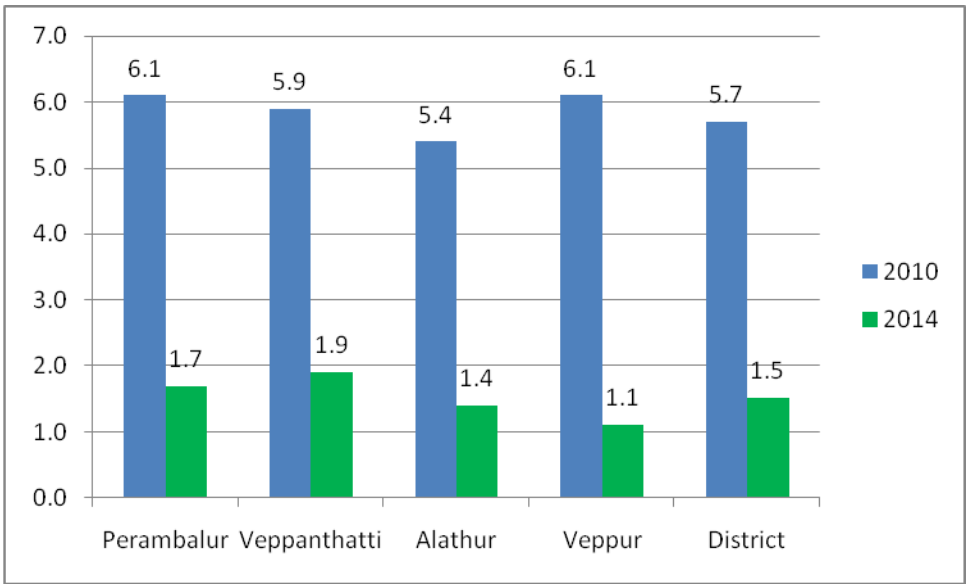


FIGURE 4.1 TRENDS IN CRUDE DEATH RATE



CBR and CDR within Perambalur district

The district CBR declined from 15.8 in 2010 to 14.7 in 2014. (Appendix Table 9.9 and 9.10) Among the blocks, Perambalur had the lowest CBR of 14 in 2014, while the Veppanthattai block had the highest CBR of 14.9 in 2014. (Figure 4.1)

The CDR for the district declined from 5.7 in 2010 to 1.52 in 2014. Among the block, Veppur had the lowest CDR of 1.1 and Veppanthattai block the highest CDR 1.9 in 2014.

CBR and CDR, comparison with districts in Tamil Nadu

An analysis of the 2008 vital events survey gives an indicator of the relationship between CBR and CDR with the development of a district. It is well known that Perambalur ranks amongst the least developed districts in Tamil Nadu. Perambalur has a CBR of 16.4 per 1000 people, which is above the State value of 16.3 per 1000 people. These figures can be interpreted using simple economics. The need for large families stems from the concept of 'larger the family, more the earning power of the family.' This concept, although a fallacy, is widely used around the world in developing and under developed nations, without realizing that a big family only leads to a higher percentage of uneducated and unskilled labour.

The CDR is an indicator, amongst other factors, of the effectiveness of the public health system and the health and sanitation practices of the public. Perambalur, once again ranks above the average of the state (6.3) with a CDR of 7.0.

Sex Ratio

Sex ratio has been one of the more problematic health indicators in India. The practice of female infanticide, the attitude of men towards women are among the many reasons of the present scenario. Although there are natural, biological factors that influence sex ratio in the population, the differences we see in India between the male and female population cannot be explained by such factors. Perambalur boasts of a sex ratio of 1003 in 2011, as against 1006 in 2001.

There has been an increase in sex ratio for Perambalur block from 972 in 2001 to 990 in 2011 and in Veppanthattai block from 1008 in 2001 to 1017 in 2011. Whereas in Veppur block there is a downfall in sex ratio from 1017 in 2001 to 1003 in 2011 and Alathur block from 1015 in 2001 to 1012 in 2011 (Table 4.2). Focus Group Discussions (FGDs) with stakeholders indicate that there is a sporadic incidence of female infanticide in the district.

According to the provisional 2011 data provided, it can be seen that Perambalur is well above the State average of 995 females per 1000 males. Perambalur ranks behind Ariyalur, Kanniyakumari, Karur, Nagapattinam, The Nilgiris, Pudukottai, Thanjavur, Thiruchirapalli, Thirunelveli, Thiruvarur, Thoothukudi and Virudhunagar.

TABLE 4.4 SEX RATIO

Sl. No	Block wise/District /State	2001	2011
1	**Block**		
	Perambalur	972	990
	Veppanthattai	1008	1017
	Veppur	1017	1003
	Alathur	1015	1012
2	**District**	1006	1003
3	**State**	987	995

Source-Census documents 2001 and 2011

Child Sex Ratio

While the general sex ratio has increased in Tamil Nadu between 2001 and 2011, the Child sex ratio has decreased from 948 to 946.

The child sex ratio for Perambalur district in 2011 was 913. Among the blocks, Alathur has the highest child sex ratio of 1026 followed by Perambalur (919) and Veppanthattai

(914). Veppur recorded the lowest sex ratio of 829 as on 2011. This trend of declining sex ratio has been attributed to a number of factors: missing women through undercounting, the lower status of women contributing to their being considered dispensable, higher mortality during childhood because of less care and nutrition, higher mortality during childbirth, female infanticide and recent technological developments that aid sex-selective abortions.

The 2011 provisional data shows that Perambalur has a child sex ratio (913) (Refer Table 4.5) below the average of the state (946). Ariyalur has the least child sex ratio of 892 while the Niligiris district has the highest of 982.

TABLE 4.5 CHILD SEX RATIO

Sl. No	**Block wise/District**	**Population in the age group of 0-6**		**Sex-ratio**
		Male	Female	
1	Block			
	Perambalur	8242	7576	919
	Veppanthattai	8297	7580	914
	Veppur	8651	7174	829
	Alathur	5945	6102	1026
2	**District**	31135	28432	913

Source-Census documents 2011

Box: 4.1 CHILD SEX RATIO – SUCCESS STORY

Perambalur district has shown a dramatic improvement in sex ratio. According to the latest report of the Directorate of Public Health and Preventive Medicine, Government of Tamil Nadu, Perambalur district tops the Sex Ratio at Birth with 1003 (number of live births of girls per 1000 boys) for the period April-October 2014.

The district with a population of 5.64 lakh is at the bottom of the State in per capita GDP and its human development index too is one of the lowest in the State. Its female literacy rate is 59.28 % against the State average of 73 %.

A focused program was launched in 2011. Its purpose was to improve sex ratio, stop female foeticide, and detect and save missing girl children. Its priorities were to eliminate sex determination, avoid death due to multiple abortions, reduce higher order birth, and motivate families on the pride of having girl child.

For this, the district administration adopted a number of strategies, including audit all second trimester abortions. Besides, audit of all male child births in a month was undertaken. A campaign against sex determination and female foeticide was launched involving other government departments and civil society members.

The medical officers were asked to interact with mothers and the public and educate them regarding prevention of female foeticide in the meetings of PHCs and village panchayats. They were asked to audit the second trimester abortions and monthly male child birth. They were also involved in reviewing activities against sex determination and abortions in the combined monthly review of village health nurses (VHNs) and anganwadi workers (AW)

The VHNs were deployed to ensure 100 per cent early registration and careful monitoring of mothers in second trimester. Besides, they were instructed to have interpersonal communication with mothers and relatives to avoid sex determination. The AW workers were asked to closely follow up all antenatal mothers in coordination with the VHNs. They were also asked to share the data with VHNs and attend review meetings.

The district administration was involved in monthly review of second trimester abortions and sex ratio at birth. It was engaged in sensitising public to the schemes offered to girl children by the government through Social Welfare Department.

Special efforts were taken to provide shelter to families who have two girl children under the Indira AwasYojana and the Green House Scheme. As many as 52 houses were allotted for below poverty line families of those mothers who underwent sterilisation after giving birth to two live female children. The district administration learnt that 60 per cent of the 174 dowry death cases related to under-age marriage. Hence, focus was accorded to prevention of child marriage and during 2011-12 alone 92 child marriages were stopped.

The Child Sex Ratio (number of females per 1000 males in the age group of 0-6 years) showed a dramatic improvement – from 843 in April 2011 to 953 in April 2012 and reached 1163 in May 2012. Besides, the average second trimester abortions reduced to less than 20 from 45 per month. Also, abortions decreased from 561 in 2006-07 to 420 in 2011-12. Audit had revealed the high role played by sex determination in female foeticide – 47 cases.

Above all, the monthly review of male child birth audit and second trimester abortion audit had started yielding considerable results. The sex ratio audit, second trimester audit, and male child birth audit taken up at monthly review meetings at PHC and at the district level almost on par with maternal death and infant death audits had resulted in bringing down female foeticide.

Life Expectancy at Birth

One of the major indicators of Human Development is Life Expectancy at Birth (LEB). LEB is a long-term measure of economic development. It is a sum total of the impact of economic intervention. Life Expectancy (LE) is dependent on the health status of the people, which

in turn is influenced by factors such as per capita income, economic and Social structures, availability of basic amenities etc. Besides LEB, there is also fertility, mortality and nutritional Status of the population. The health Status of the people is predicted not only by the outcome of Government Policies and Programs but also by the curative and Preventive measures taken by the individuals. (Table 4.4)

The LEB for the District as in 2013-14 was 69.1 years for males and 72.6 for females.

TABLE 4.6 LIFE EXPECTANCY AT BIRTH

Sl. No.	District	2014	
		Male	Female
1	Perambalur	69.1	72.6

Source-DRDA, Perambalur

Infant Mortality Rate

The IMR is a reliable indicator of socio-economic conditions. Improvements in MMR and institutional deliveries have a direct bearing on an economy in reducing the infant mortality rate. The IMR is a sensitive indicator, not just of the state of health, nutrition and caring, accessible to infants below one year of age, but also of the general well-being of the community.

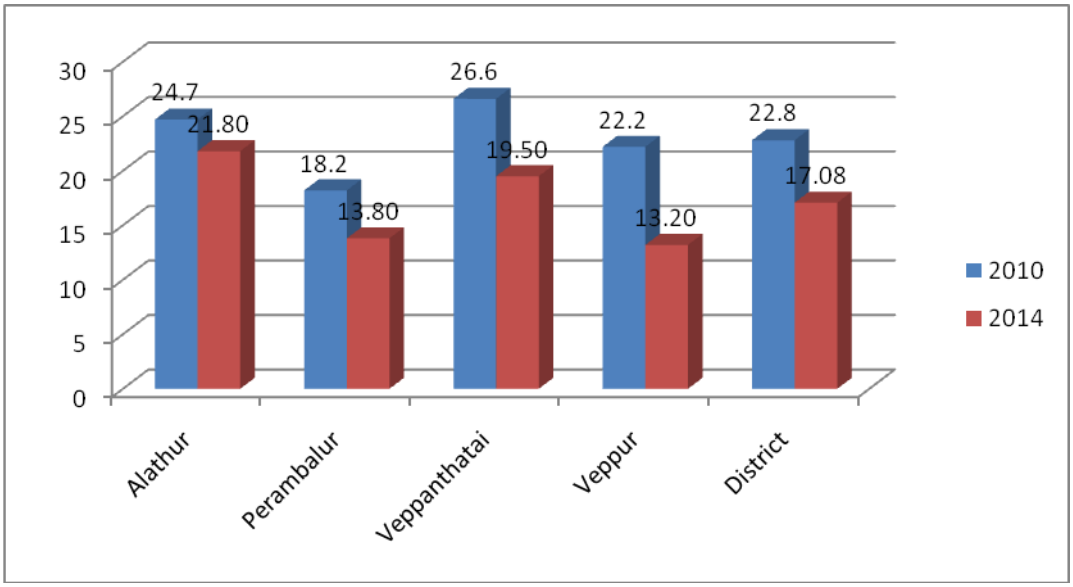
The low IMR is correlated with the good health status of the community, but is not the only indicator of the health status.

In Perambalur district the IMR in 2007 was 20.4 and it increased gradually in the succeeding years i.e 23.8 in 2008, 22.5 in 2009, 22.8 in 2010. In 2011, the IMR dropped drastically compared to the previous year to 19.7. In 2014, IMR came down further to 17.08. (Figure 4.2)

Among the blocks, Alathur recorded the highest IMR of 21.8 in 2014. Veppur, registered the lowest IMR of 13.2. The report emphasizes that the adequate ante-natal and post-natal care are to be initiated for blocks with a high incidence of IMR. (Appendix Table 9.11 and 9.12)

The major causes of infant deaths were birth asphyxia (17.7%), low birth weight (14.6%), acute respiratory infection (13%) and pre-maturity (7.1%). The effective implementation of ante-natal and post-natal care are prerequisites for rural areas. Additionally, improvement in female literacy will produce a synergistic impact and a holistic approach to improve health indicators is required.

FIGURE 4.2: INFANT MORTALITY RATE



Source-Health Department

The 2008 vital events survey shows that Perambalur district ranks above the average of the State (21.2).

Maternal Mortality Ratio

An in-depth analysis of the reasons for maternal death in Tamil Nadu reveals the fact that a large number of cases are preventable. There are well identifiable direct and indirect obstetric causes for maternal death. Socio-economic and cultural factors and also malnutrition play a crucial role. MMR is conditioned by patriarchal attitudes and malnutrition. Gender roles are often conditioned by cultural factors. The gap in transport and communication facilities especially in rural areas hardens the delivery of health facilities. Besides, the lack of quality of essential and emergency obstetric services is acting as an impediment for an effective health delivery system.

One of the major reasons for Maternal deaths is Hemorrhage. This emphasizes the need to create blood banks in all main PHCs for saving maternal lives. Other major reasons include pregnancy-induced hypertension and eclampsia, rupturing of the uterus on account of obstructed labour, puerperal sepsis and septicemia. Important indirect obstetric causes include anemia, heart ailment, jaundice and malaria.

The causes for MMR discussed above are equally applicable to the Perambalur district. In 2010, Veppanthattai block had recorded the highest MMR of 163.4 and it increased

invariably in 2011 to 212 and it declined to 84.6 in 2014. In Alathur block it was 117.6 in 2010 declined to 63.5 in 2011 and increased to 187 in 2014. In 2014, MMR for the District stood at 81.17.

Most of the maternal deaths were due to bleeding, nutritional disorder and non-availability of transport facilities in rural areas. It stresses that the 24-hour blood bank services in the PHC and proper transport facilities are important. This measure would go a long way in reducing the MMR in the district (Table 4.5).

Perambalur ranks above the average of the state, with an MMR of 81.17 as compared to the State average of 68.

TABLE 4.7 MATERNAL MORTALITY RATIO

Sl.No	Block wise/District	2009	2010	2011	2012	2014
1	Block					
	Perambalur	357.1	67.2	72.5	264.9	53.10
	Veppanthattai	126.4	163.4	212	79.3	84.60
	Alathur	179.4	117.6	63.5	236.5	187.0
	Veppur	249.1	118.9	0.0	77.6	0.00
2	District Total	217	116.7	87.2	137.4	81.17

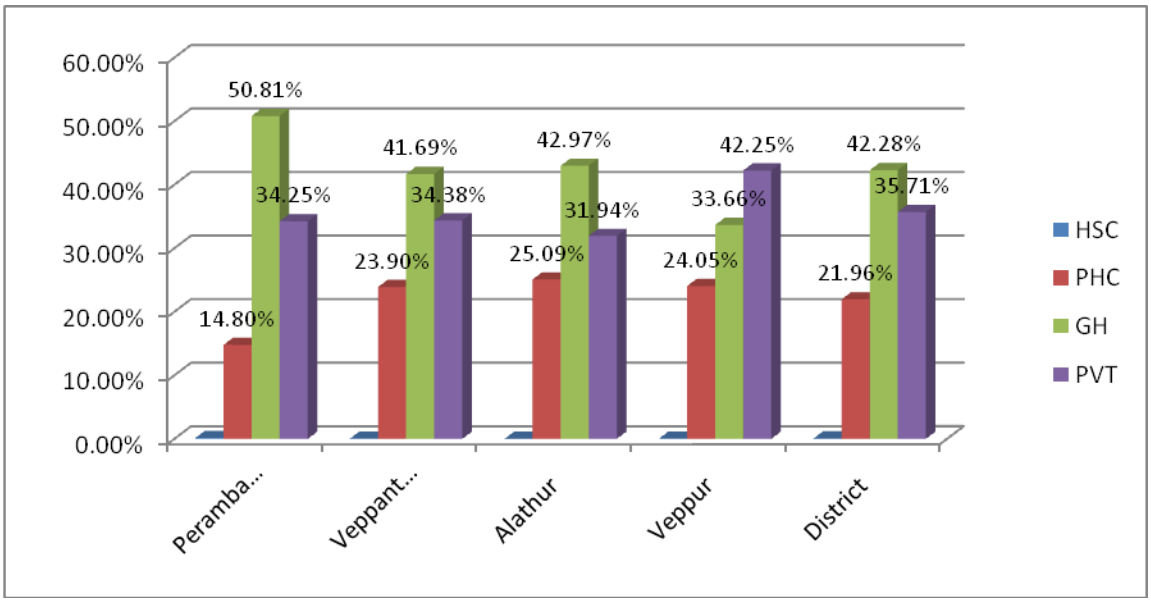
Source-Health Department

Place of Delivery

The district made rapid strides in increasing the number of institutional deliveries, which would help reduce the incidence of IMR and MMR. In addition, institutional deliveries provide the opportunity for government interventions such as census taking, immunization etc.

According to the data provided, the Government institutional deliveries in the district stood at 62 percent whereas 38 percent accounted for private institutional deliveries in 2011. (Appendix Table 9.13) Indeed, this is a commendable change for improving human health and development. In 2013-14 too, 100% of the deliveries were institutional – either Government hospitals or private.(Figure 4.3)

FIGURE 4.3 PERCENTAGE OF INSTITUTIONAL DELIVERY



Source-Health Department, 2012

Still Birth Rate

Still birth rate is also one of the important indicators in human development. This occurs principally due to malnutrition of the expectant mothers and their illiteracy in health education leading to a poor health status. If the SBR is prevalent in any region it mirrors the unavailability of obstetric services and low nutritional status of the women population. The SBR of the district was 16.5 in 2007 and it declined to 11.7 in 2014.

Veppur and Perambalur block recorded an SBR of 14.5 and 9.03 respectively in 2014 (Table 4.6). This reflects that the health status of the reproductive female population in the district is low.

An analysis of the 2008 Vital events survey shows that Virudunagar clocked in the highest SBR in Tamil Nadu with a value of 15.2. Perambalur district had an SBR of 13.5, above the State average of 11.5, showing a cause for concern and the need for action. In 2014, the SBR for Perambalur district shows 11.7.

TABLE 4.8 STILL BIRTH RATE

Sl.No	Block wise/District	2007	2008	2009	2010	2011	2014
1	Block						
	Perambalur	6.4	7.6	15	9.4	11.6	9.03
	Veppanthattai	20.7	16.2	17.7	15.5	7.6	9.73
	Alathur	13.3	13.9	16.2	8.2	8.3	13.7
	Veppur	24.1	22.7	16.6	17.8	14.2	14.5
2	**District**	16.5	15.0	15.9	13.7	10	11.7

Source-Health Department

Under-5 mortality rate is one of the indicators for measuring human development. It is a negative aspect of the health status of the population. If the under-5 mortality rate is higher, it will arrest the quality of labour supply in the labour market. The under-5 mortality rate for the district was 21 in the year 2012-2013. Among the blocks, Perambalur block registered the highest under-5 mortality rate of 25 in 2012-2013. In 2014, the Under-5 Mortality rate for the District was 17.

Immunization

Immunization against the six killer diseases of childhood like tuberculosis, polio (poliomyelitis), measles, tetanus, diphtheria and pertusis (whooping cough) is advocated for every child born in the country. All these six diseases are preventable through vaccination and these vaccines are provided to the children at different ages. In Perambalur district, as on 2011, 98 percent vaccination was achieved.

TABLE 4.9 IMMUNIZATION (BELOW 1 YEAR)

Sl. No	Block wise/District	Total Number of children below year	Total number of children immunized	% of children immunized
1	Perambalur	1559	1594	102
2	Veppanthattai	2591	2470	95
3	Alathur	1737	1773	102
4	Veppur	2651	2498	94
5	PBLR Urban	458	451	98
	District	8996	8786	98

Source-Health Department

Female Infanticide

A higher proportion of female infant deaths occur in the neo-natal period due to female infanticide. As per the FGDs held with the stakeholders, it is found that the district has had a considerable number of female infanticides. The district administration has to address this unhealthy practice through a combination of legal action, community mobilization and motivation. The male's mindset should change to view the birth of female child positively. The role of Panchayat Raj Institutions (PRIs), women leaders and SHG members is to be proactive.

Female foeticide is closely related to female infanticide. With emergence of hi-tech technology, the identification of the sex of foetus well in advance has now become possible. The practice of female foeticide exists in many parts of the district. FGDs held with the elected representatives, SHG members and other cross-section of the population clearly indicated that the unhealthy practices of female foeticide are prevalent in the district. This crime is committed with the connivance of the private health providers and other medical personnel. In this regard everyone should be sensitized to value all human beings equally irrespective of sex.

Nutritional Status

Nutrition level and Trend

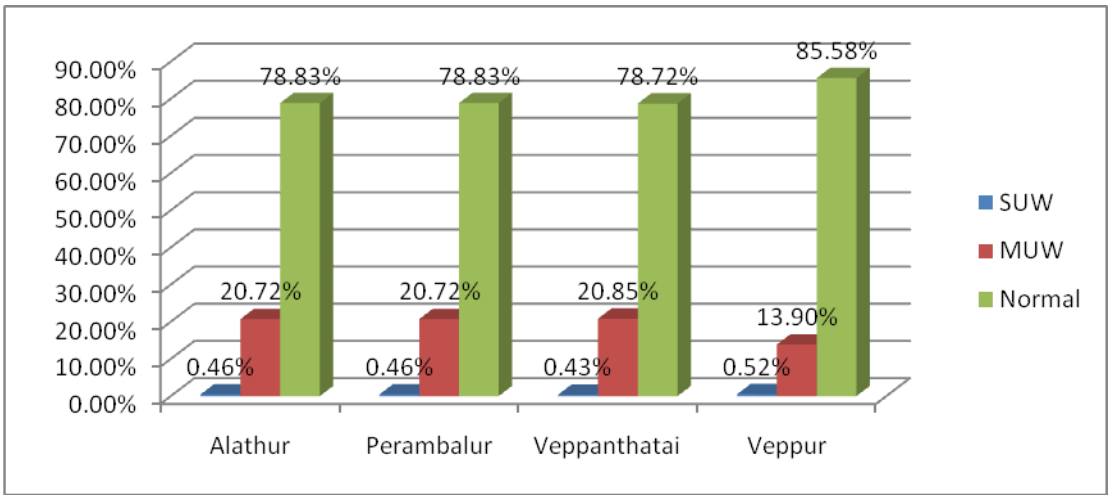
The nutritional status of the population, in particular of the youth population has a direct bearing on the outcome of the success of that particular population in terms of contributions to the labour market and on a larger scale to their communities. Recently, Perambalur district has showed urgency in this matter and has taken measures to improve the nutritional status of the youth (Box 4.2). First hand evidence suggests that, these measures although beneficial have not sustained itself in the long term.

Anthropometric measurements, such as weight and height, are always an outcome of both heredity and environment in which children grow. It is seen that differences in the socio-economic status affects the growth of children. Thus, when the population is more deprived (in terms of access to nutrients, infection loads, hygiene and even care and attention) greater is its adverse impact upon the height and weight outcomes.

In Perambalur district, Alathur and Perambalur blocks recorded 21.18% of underweight children (MUW+SUW), Veppanthattai (21.28%), Veppur (14.42%). There was a remarkable improvement in the nutritional status in 2014 when compared to the previous years although as mentioned before these measures have not been sustained and a fall in the

nutritional status of the children looks inevitable. The normal nutritional status was higher in Veppur (85.58%)Alathur and Perambalur (78.83%) blocks. Veppanthattai (78.72%) (Appendix Table 9.14) (Figure 4.4).

FIGURE 4.4 TREND IN NUTRITIONAL STATUS (0-5 YEARS)



Source-Health Department, Year 2013-2014

Provision of IFA Tablets

Iron Folic Acid (IFA) tablets are given as part of government schemes to decrease the presence and incidence of iron deficiency anemia (I-DA) with a focus on the women population. It is observed that IFA tablets have been given to 76% of the women, 33% of children and 42% of Adolescent girls in Perambalur district. The focus should turn towards adolescent girls and children as they are at the highest risk of I-DA and it bears a direct impact on their academic and learning abilities. Table 4.7 indicates that within Perambalur district, Alathur has recorded the highest percent (97%) in terms of Women taking IFA Tablets followed by Perambalur (81%) and Veppur (76%). Veppanthattai registered a low percent, 59%, in 2011.

TABLE 4.10 PROVISIONS OF IFA TABLETS

Sl.No	Block wise/District	% of women took IFA tablets	% of children took IFA tablets	% of Adolescent girls took IFA tablets
1	Block			
	Perambalur	81	31	87
	Veppanthattai	59	55	23
	Alathur	97	24	57
	Veppur	76	27	47
2	**District**	76	33	42

Source-Health Department, Year 2011

Data for children taking IFA tablets shows, Veppanthattai (55%) tops the list followed by Perambalur (31%), Veppur (27%) and Alathur (24%). Perambalur block registered 87% of Adolescent girls taking IFA tablets followed by Alathur (57%), Veppur (47%) and Veppanthattai (23%).

Box-4.2 NUTRITION PROGRAMMES OF GOVERNMENT

Noon Meal Program of the State Government:: Starting on 1 July 1982, Tamil Nadu saw the beginning of one of the largest phased expansions of mid- day feeding through the Noon Meal Program (NMP). This is a major hunger programme. For the first time, the State focused on the difficulties of reaching the pre-school age group (2+ to 5 years). Successive governments have continued to commit very significant portions of the State's budget to it. This has resulted in one of the most expensive network of centres being established and staffed. The programme has a clear 'food bias'. From 1997 it has also caught the imagination of the Government of India, which is now starting to support similar efforts in all States. Taking all pre-school as well as school centres together, there are more than 71,100 NMP centres feeding well over 7.7 million children and 0.54 million adults. Under the programme, a hot lunch of rice cooked with dhal, soyabean flour, vegetables, oil and condiments is provided to the children below six. Food is supplied for all days of the year for pre-schoolers. In Perambalur district, Out of 58080 children, 12237 are enrolled under this scheme through 125 centres in the district.

Supplementary Nutrition Program: This is a Unique program which was started in October 2013 by the Tamilnadu Government as a pilot project and is implemented in Perambalur district on an experimental basis. Based on the proposal submitted by the District Collector by looking into the fact that around 58000 children are found very anemic in the district, the Tamilnadu Government started this program. Biscuits and Kadalai Mittai are given to the children in the breaktime. Biscuits in the morning and KadalaiMittai in the evening. After 6 months time, it was found that there were lot of improvement in health of those anemic children. Now the Government is planning to extend this project to other districts in Tamilnadu .

Provision of Curry Leaves and Drumstick leaf powder in the Noon Meal Program was launched in November 13, 2003 in order to eliminate vitamin A deficiency and iron deficiency in the 0-6 years children.

Non –nutritional Factors and their Impact on Nutrition

Water Supply

Water supply has a direct bearing on nutrition. With a growing population, there is mounting pressure to provide sustained water supply on a long-term basis. Providing this facility is also very crucial for achieving the goal of "Health for all." The Government is assessing the availability and accessibility of drinking water and is giving specific attention for such schemes. The goal is set at supplying 40 litres per capita per day (LPCD) in rural areas. It is noticed that water is a source of infection for most of the communicable diseases.

TABLE 4.11 ACCESS TO DRINKING WATER

Percentage of HH Provided With Safe Drinking Water				
Sl. No	**Block wise/District**	**Total Number of Habitations**	**Number of Habitations provided with drinking water**	**% of HHs provided with safe Drinking water**
1	Perambalur	93	93	100%
2	Veppanthattai	175	175	100%
3	Alathur	148	148	100%
4	Veppur	153	153	100%

Source-DRDA, Year 2014

In this context, provision of safe drinking water and its maintenance assume much significance. The World Bank has assessed that 30 million life years are lost per annum due to water borne diseases. Acute Diarrhea Disease (ADD) is a major cause for adult mortality in Perambalur district. Therefore, even though the data shows a large percentage of households are provided with safe drinking water, their management has not been undertaken responsibly and the illiteracy of the rural communities with regard to the importance of safe water and its bearing on health has not helped.

As per the 2013-14 data in Table 4.5, all the 569 habitations in Perambalur district have been provided with safe drinking water.

Sanitation

There has been mounting pressure to provide sanitation facility on a sustained basis, most importantly because it is one of the prerequisites of a healthy society. Providing this facility is also very crucial for achieving the goal of "Health for all." Open defecation is a threat to the community as it has a direct impact on the health of the society. Open defecation, open sewers and a negative attitude towards modern sanitation have curbed the development of rural societies for a long time. In this context, drainage facilities and latrine facilities assume much significance.

The availability of toilets and bathroom is also one of the most important indicators for health and human development. As on 2014, the total number of households stood at 1,09,964 in the district. Only 36 percent of the total households had bathroom facilities in their houses, while the remaining 64 percent of the households did not have these facilities in their houses (Table 4.8). It suggests that the creation of awareness about importance of bathroom facilities is imperative.

TABLE 4.12 PROVISION OF TOILETS

Sl. No	Block wise/District	Total Number of HHs	Number of HHs with Toilet facilities	% of HHs provided with toilets
1.	Perambalur	23762	7024	30%
2.	Veppur	31040	9833	32%
3.	Veppanthattai	30401	12336	41%
4.	Alathur	24761	10738	43%
	District	109964	39931	36%

Source-DRDA, Year 2014

Rural sanitation influences human development. The goal is to cover at least 75 percent of rural population with access to sanitation facilities by the end of the 12th Five Year Plan. Toilet facilities were only in 48 percent of the households in the district according to the 2011 Census. The remaining 52 percent of the households had open defecation in the common places of the villages. These households create a lot of negative externalities. In order to prevent defecation in open areas, concerted effort is required to disseminate knowledge and create awareness among people on sanitation and its impact on their health and environment.

Special Programmes

AIDS Control

In the Perambalur district, the VCTC (Voluntary Counseling and Training Centre) was started in January 2002. In the year 2007, there were about 225 HIV positive cases. However, in 2014 the figure dropped to 116 HIV positive cases of which 66 were males and 50 were females. The prevention of parent-to-child transmission program was started in June 2003. So far, around 10,132 women were tested and 41 individuals were found positive. Twenty-two mothers and babies were given Nevirapine (NVP) injections to prevent transmission from parent to child. Ninety-two persons are taking Anti-retro Viral (ARV) treatment for HIV from the district hospital (Table 4.9)

TABLE 4.13 HIV POSITIVE CASES

Sl.No	Age-Group wise	Positive cases in 2007		Positive cases in 2013-14	
		Male	Female	Male	Female
1	0-14	6	4	0	1
2	15-19	3	1	2	2
3	20-24	4	10	8	9
4	25-29	14	25	0	0
5	30-39	40	32	33	27
6	40-49	42	25	13	6
7	50&above	14	5	10	5
	Total	123	102	**66**	**50**

Source-Health Department, Year 2013-2014

There is a network of +ve group functioning in this district. It consists of 494 persons living with HIV and AIDS (PLHA). It is called CD+ network. They engage themselves in livelihood development programmes and in counseling and also in helping people to get ARV treatment in a feasible manner. All the services are now integrated and functioning as ICTC – Integrated Counseling and Testing Centre (VCTC / PPTCT / Blood Safety / STD / HIV /TB / ART/ Nutrition). The ICTC is functioning in all Government hospital and is now extended to all Primary Health Centers.

HIV is one of the main problems facing the modern world. As such, it can be confidently said that the government, in this case, has made a commendable effort in controlling the AIDS affected population in terms of legislative measures to improve the quality of life.

Tuberculosis and Leprosy cases

Revised National Tuberculosis Control Programme (RNTCP) was implemented in Perambalur district from 06.02.1999 under the guidance and supervision of both the Central and State Governments, It is a World Bank Aided Project . Twenty-three designated Microscopy Centres were established. A Medical Officer, supported by a Senior Treatment Supervisor and a Senior Tuberculosis Laboratory Supervisor, mans each TB unit. All of them are trained in RNTCP by the Tuberculosis Research Centre, Chennai.

In Perambalur district, there were 249 positive TB cases in 2007 and the figure increased to 643 in 2014.

Leprosy cases are minimized in Perambalur district. The district recorded 40 Leprosy cases in 2007 and it had declined to 28 in 2014. (Table 4.14)

TABLE 4.14 TB AND LEPROSY CASES

Sl.No	Block wise/District	Positive TB cases		leprosy	
		2007	2014	2007	2014
1	Perambalur	81		5	10
2	Veppanthattai	69		13	6
3	Alathur	40		7	11
4	Veppur	59		15	1
	District	249	643	40	28

Source-Health Department, Year 2011

TB is a killer disease and requires swift treatment from the moment of onset. A common problem all over India is the management of treatment. The antibiotic treatment recommended for TB is a strict regimen and should be followed to the letter. This unfortunately, does not occur with the precision that is expected. The attitude of doctors in not following cases and the negligence of the patients in not following the treatment till completion has led to the surge of the TB epidemic and the introduction of a new threat in the form of Multi-Drug Resistant Tuberculosis.

National Leprosy Eradication Program (NLEP)

The National Leprosy Eradication Program (NLEP) was launched in 1955 in Tamil Nadu. At the time of inception, the Dapzone medicine was used for treatment, but from September 1990 onwards, Multi Drug Treatment (MDT) was introduced. There has been a remarkable improvement in the treatment and recovery of leprosy patients. This Program is being implemented through PHCs in rural areas, Government Hospitals and Municipality dispensaries.

At present, the number of patients is 29 in the district. The prevalence rate was brought down rapidly from 40 in 2007 to 29 in 2011. Leprosy will be totally eradicated in the district shortly.

Conclusion

The overall outlook of health in the district can be deemed unsatisfactory and the population can be called as unhealthy when compared to the state average of health. Perambalur district consistently ranks below average in health indicators (except for a few such as sex ratio), nutritional status and water/sanitation facilities in Tamil Nadu.

This Chapter reveals both the strengths and weaknesses of the health system in Perambalur district. The positive features are increasing Life Expectancy at Birth and declining Birth

Rate, Death Rate, IMR, and MMR. These figures, have a bearing on the health of the society but are not definitive and indicative of the actual health of the society.

The negative aspects outnumber the positive aspects by a fair distance. The three main areas in which Perambalur needs to make giant and swift strides are nutrition, water and sanitation and health education.

Although there have been good efforts in improving the nutrition of the population in recent times, these efforts need to sustained and fine-tuned. The importance of the nutritional status of the population cannot be overstated enough and as such requires direct intervention and large financial backing to set a benchmark. Perambalur can take inspiration from the pilot Supplementary Nutrition Programme, the first of its kind in India and can build on the success to achieve the goal of no malnutrition in the society. Secondly, the standards of water and sanitation need to improve drastically and as previous evidence all over the world has showed, the improvements in these areas will be coupled with an inevitable improvement in the quality of health and life of the district. The fact that close to fifty percent of the population does not have adequate sanitation facilities points to the sheer lack of government interest and intervention in an area which is deemed as one of the most crucial parts of modern society. The lack of safe drinking water in some areas is frankly unforgivable. The most basic amenity in the health of a community not being provided adequately requires urgent intervention. The availability of water, granted a major problem, should be dealt with immediately. The district government should be able to dedicate a large number of resources in realizing the basic right to provide safe, clean water in plentiful quantities.

Another area that should be improved in the health sector in the district is health education. There are a number of ways this can be achieved. One such example is to start health campaigns in schools to educate the youth about the importance of hygiene and safe sanitation practices. The measures taken to improve health education should have a focus on long-term benefits rather than short-term rewards and improvements.

The health of the population is the most valuable resource to any economy. The healthier the population, the greater its ability to contribute to the prosperity of society.

CHAPTER 5

LITERACY AND EDUCATION

Literacy and Education

Introduction

Education is a key part of strategies to improve individuals' well-being and societies' economic and social development. Education is also a key strategy for reducing poverty. Education's importance has been emphasized by a number of international conventions, including the Universal Declaration of Human Rights and the Programme of Action of the 1994 International Conference on Population and Development. Education contributes directly to the growth of national income by improving the productive capacities of the labor force.

Literacy is traditionally defined as the ability to read and write, with understanding, a short, simple statement about one's everyday life (UN, 2008). Conventional literacy statistics that divide the population into two groups based on this definition – one that is literate and one that is illiterate – are widely available and useful for the tracking of progress towards universal literacy.

Educated parents provide better nutrition and healthcare for themselves and their children. The education of the parents is also an important factor in reducing child labour. Education is important in other ways as well - such as improving self-esteem, enhancing social status, and gaining confidence while dealing with officials. Education, especially of mothers helps to enhance the autonomy women have in household decision-making; and it also has a strong positive influence on schooling outcomes, in particular for the girl child (Chandrasekhar and Mukhopadhyay 2006).

Among all the parameters of educational attainment, literacy is the most fundamental one as it paves the way for further learning and training in the formal sector. Further, written formal communication is impossible in a state of illiteracy, and hence illiteracy acts as a hindrance to good governance.

Literacy

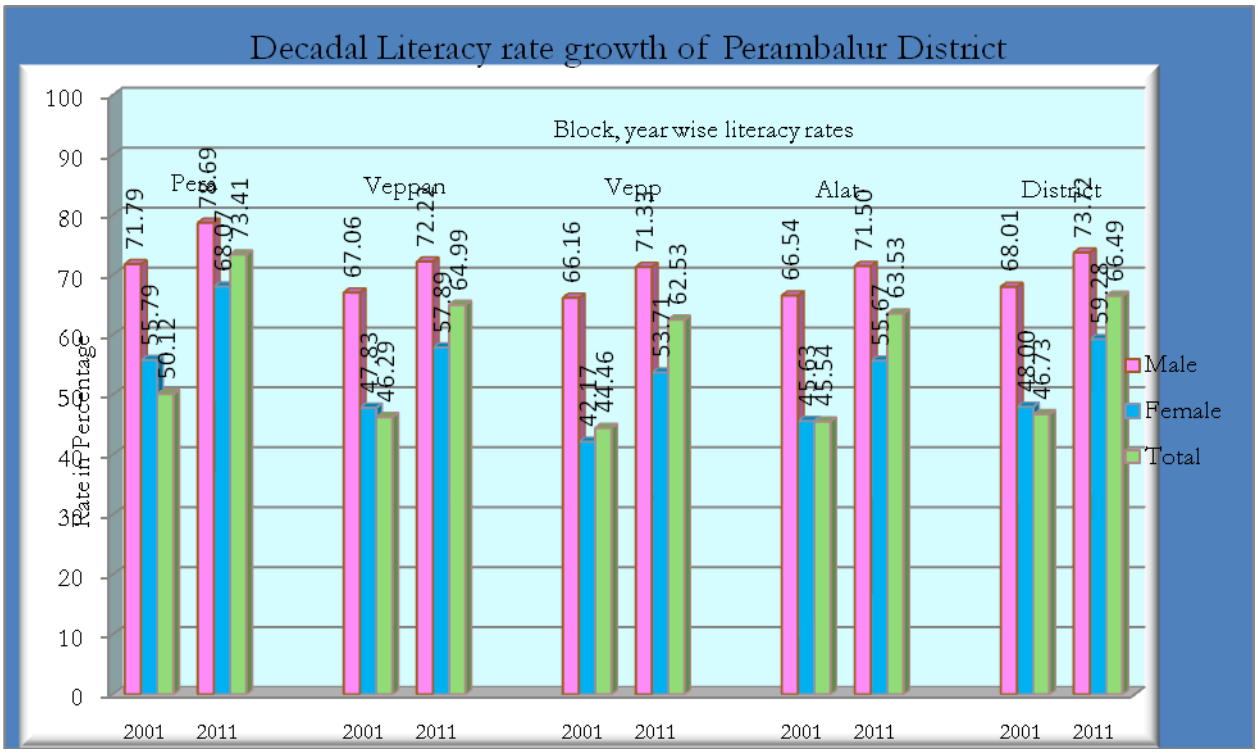
Literacy performance of District

Figure 5.1 reveals that the aggregate literacy rate for the district stood at 65.9 percent as against the State value of 80.33 percent in 2011. Even though, the female literacy rate in Perambalur district has shown improvement from 48 per cent in 2001 to 59.28 per cent in 2011, the

current level is well below the corresponding State female literacy level of 73.4. (Appendix Table 9.15)

The male-female literacy gap as of 2011 Census for Perambalur District is 14.44 points and for Veppur Block it is 17.62. So, despite the improvement in literacy rates, the gender gap is an over-arching problem. The problem of persistent gender discrimination against females is a systemic problem that is keeping the District as one of the very backward.

FIGURE 5.1 LITERACY RATE



Source: Tamil Nadu Census 2001 & 2011

School Enrollment

Achieving universal primary education and eliminating gender disparity at all levels of education are among the Millennium Development Goals (MDGs) laid down in the Millennium Declaration of the United Nations, the time line for which has been set for 2015. Universal Elementary education is not only a constitutional directive, but also a fundamental requirement for the well-being of the individuals.

The Tamil Nadu State Government has been committed to the task of providing universal education to all children between the age group of 6 – 14 years. This is seen from the student enrollment in the District for Elementary education which is as close as complete enrollment.

TABLE 5.1 GENDER WISE ENROLMENT IN PRIMARY EDUCATION

Block wise/District	Primary(Percentage)						
	Boys		Girls		Total		
	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2013-14
Perambalur	99.95	99.95	99.99	99.99	99.87	99.87	100.17
Veppanthattai	99.85	99.85	99.99	99.79	99.87	99.87	100.15
Veppur	99.86	99.85	99.89	99.89	99.87	99.87	100.13
Alathur	99.85	99.85	99.89	99.69	99.77	99.77	100.11
District	99.88	99.88	99.94	99.84	99.85	99.85	100.14

Source: Education Department, Perambalur

Enrolment in the middle schools needs to be given much attention since they are the gateway to high schools and higher secondary Education. Enrolment in middle schools is lower in places where there is poverty and people with low income. These are areas which also have child labourers and non-farm employment. At the district level, the percentage of enrolment remains at 100.14% when compared to 99.85 in 2011-2012. Viewed block wise, the enrolment was 100.15 percent in Veppanthattai, 100.13 in Veppur, 100.17 in Perambalur and 100.11 in Alathur (Table 5.1).

Completion Rate and Dropout Rate in Primary & Upper Primary Education

The effectiveness of the education is reflected by a higher retention rate. The dropout rate is therefore analyzed from the level of primary education to that of high secondary education. This analysis helps identify the factors impeding the continuity and the individual attainment of education.

A block-wise analysis of dropout students shows that it stood at 0.5 percent for boys in Veppur, 0.23 in Veppanthattai, 0.31 in Perambalur and 0.17 in Alathur in 2014 (Table 5.2).

TABLE 5.2 DROPOUT RATE OF PRIMARY SCHOOLS

S. No	Block /District	Primary Drop Out								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Perambalur	0.31	0.31	0.31	0.29	0.29	2.04	0.3	0.3	1.18
2	Veppanthattai	0.23	0.23	0.23	0.11	0.11	0.77	0.16	0.16	0.63
3	Veppur	0.5	0.5	0.5	0.16	0.16	1.13	0.33	0.33	1.3
4	Alathur	0.17	0.18	0.17	0.07	0.07	0.49	0.38	0.11	0.43
	District	0.3	0.31	0.3	0.16	0.16	1.11	0.29	0.23	0.89

The primary completion rate for the district in the year 2013-14 remains at 96.9% and for the upper primary the completion rate is at 99.2%. Lower completion rate in primary school would mean many children are leaving schooling without acquiring the most basic skills (Table 5.4).

TABLE 5.3 COMPLETION RATE IN PRIMARY SCHOOLS

S.No	Block /District	Primary Completion								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Perambalur	92.8	92.8	93.8	95.3	95.3	95.3	94.1	94.1	94.5
2	Veppanthattai	95.4	95.4	96.4	96.2	96.2	96.2	95.8	95.8	96.3
3	Veppur	96.7	96.7	97.7	98	98	98.0	97.4	97.4	97.8
4	Alathur	98.1	98.1	99.2	99.2	98.7	99.2	98.7	92.3	99.2
	District	95.8	95.8	96.8	97.2	97.1	97.1	96.5	94.9	96.9

Source: Education Department, Perambalur

The dropout rate in Middle Schools remained at 0.8 percent in 2013-2014. For the Boys it was 1.27 percent and for females it was 0.44 percent. It speaks well of the efforts towards retaining the children in schools. There is not much difference in the dropout rates across various blocks. The overall dropout in the district is almost consistent over the years. (Table 5.5)

TABLE 5.4 COMPLETION RATE IN UPPER PRIMARY SCHOOLS

S No	Block/ District wise	Completion								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	**Block**									
	Veppur	95.4	95.4	99.4	93.4	93.4	99.5	94.4	94.4	96.5
	Veppanthattai	94.2	94.2	98.9	95.9	95.9	98.4	95.1	95	97.1
	Perambalur	93	93	99.76	95.5	95.5	98.87	94.3	94.3	96.4
	Alathur	91.6	92.9	99.8	92.9	92.6	99.1	92.6	92.3	94.7
2	**District**	93.7	93.53	99.5	94.4	94.43	99	94.1	94.0	99.2

Source: Education Department, Perambalur

Perambalur district is economically backward and agriculture is the main source of livelihood. There are only a few industries in this district. Besides all this, the district has made firm strides of achievement in educational front. The District has taken persistent efforts to enroll and mainstream out of school children aged 6-14 years.

TABLE 5.5 DROP OUT RATE IN UPPER PRIMARY SCHOOLS

S No	Block/ District wise	Drop out								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	**Block**									
	Veppur	1.27	1.27	1.03	0.41	0.41	0.42	0.83	0.84	0.71
	Veppanthattai	1.09	1.09	0.88	0.36	0.36	0.37	0.65	0.73	0.56
	Perambalur	2.02	2.02	1.64	0.29	0.29	0.30	0.96	1.16	0.82
	Alathur	1.89	1.89	1.53	0.66	0.66	0.68	1.3	1.28	1.11
2	**District**	1.57	1.57	1.27	0.43	0.43	0.44	1	1	0.8

To achieve the objective of near universal enrolment, specific intervention programs were undertaken to cover the out of school children under AIE component.

Transition Rate from primary to upper primary and Upper primary to Secondary

Transition rate means the percentage of students advancing from one level of schooling to the next, for example, Primary to Upper Primary, Upper Primary to Secondary School and so on. When Transition Rate from Primary to Upper Primary Schools is considered, all the blocks of the district recorded almost 99% irrespective of sex during 2013-14. These trends are depicted in Table 5.6 and 5.7. Transition rate from primary to upper primary is recorded as 99.3 per cent. It is clear from the above table that transition rate from primary to upper primary is more impressive in Perambalur district. Further, there is no significant variation among the blocks regarding transition rate from primary to upper primary level.

TABLE 5.6 TRANSITION RATE FROM PRIMARY TO UPPER PRIMARY

Sl. No	Block wise/District	Primary to Upper Primary					
		Boys		Girls		Total	
		2011-12	2012-13	2011-12	2012-13	2011-12	2012-13
1	Veppur	99.66	99.7	99.74	99.2	99.7	99.45
2	Veppanthattai	99.17	99.2	98.72	99.2	98.94	99.2
3	Perambalur	100	100	99.15	99.15	99.58	99.69
4	Alathur	100	100	99.42	99.42	99.71	99.85
	TOTAL	99.71	99.73	99.26	99.24	99.48	99.6

Source: Education Department, Perambalur

Completion rate

The overall completion rate in the district has been consistent for the past few years. Perambalur District has still some way to go towards Universal access of secondary level education to all students in the age group of 15-16 years by 2015. Extra support for education of girls, rural children and other weaker sections of the society will bolster to attain this target.

TABLE 5.7 TRANSITION RATE FROM UPPER PRIMARY TO SECONDARY

Sl. No	Block wise/District	Upper Primary to Secondary					
		Boys		Girls		Total	
		2011-12	2012-13	2011-12	2012-13	2011-12	2012-13
1	Veppur	99.72	98.86	98.85	98.8	98.85	98.8
2	Veppanthattai	99.42	98.96	97.55	98.81	97.55	98.81
3	Perambalur	99.32	98.96	97.55	98.81	97.55	98.81
4	Alathur	99.32	99.66	100	99.5	100	99.5
	TOTAL	99.45	99.14	98.24	99.1	98.24	99.1

As per the NSS, 'current attendance' refers to whether a person is currently attending any educational institution or not. Enrolment is necessary for attending any educational institution, while the reverse is not true. In other words, while every person, who is attending an educational institution, is necessarily enrolled in that institution, it may so happen that a person, who is enrolled is not currently attending the institution'.

Surveys (for instance, PROBE 1999) have identified that even though children are enrolled in schools, they often do not attend school due to various socio-economic factors. Accordingly, the net attendance ratio (NAR) is considered as a measure of current attendance status.

So, even though GER & NER are very good, observation of NAR is necessary to assess better the results of Universal Education.

Access to Schools

TABLE 5.8 AVAILABILITY OF SCHOOL

Sl. No	Block wise/District	Number of habitations	Number of primary School	Number of upper primary /Middle school	Number of High schools	Number of Higher secondary school
1	**Block**					
	Perambalur	54	53	15	16	21
	Veppanthattai	90	57	19	12	20
	Veppur	92	70	16	18	16
	Alathur	78	48	27	16	9
2	**District**	314	228	77	62	66

Source: Education Department, Perambalur, Year 2012

It is the State government's policy that every habitation with a population of 300 and above should have a primary school within a distance of 1 km. This is very strictly followed. Out of 314 habitations in Perambalur district, there are 228 Primary schools, 77 Middle schools, 62 High Schools and 66 Higher Secondary Schools. Viewed block wise, Alathur shows less percentage 62% of access to Primary Schools i.e. out of 78 Habitations, Alathur block have only 48 Primary Schools. This is followed by Veppanthattai 63%, Veppur 76% and Perambalur being the highest of 98% access to Primary schools (Table 5.8)

In addition to the number of schools and rooms (which is low in Perambalur, where still 40% of schools have less than One room per Class for Upper Primary), the quality of the existing classrooms remains a major concern. Badly ventilated classrooms, leaking roofs, poor sanitation, and lack of materials were also significant barriers to effective learning in many schools. Lack of adequate sources of drinking water and poor sanitation facilities (particularly for girls) were the other major concerns for school infrastructure. Students with disabilities are mostly marginalized by the system and society and access friendly to them will make them inclusive.

A total of 100 High Schools and 58 Higher secondary schools are present in the district. Out of this, around 59% per cent of the schools are managed by the government or local bodies; remaining schools are private schools. Over the years, there has been increase in number of schools in the district, particularly among the private schools. Further private unaided schools are increasing over the years continuously.

Pupil-Teacher Ratio in Primary and Upper Primary

The pupil–teacher ratio for primary schools for the State as a whole is 38, which is better than the all-India average of 40. Table 5.9 shows that in Perambalur district, the Pupil – Teacher ratio in Primary Schools is 27 whereas in Upper Primary School it is 29. With reference to block-level variations, Alathur has 28 while Perambalur, Veppanthattai and Veppur blocks have 27 pupil-Teacher ratio in primary schools. In terms of Pupil-Teacher ratio in Upper Primary School, Veppanthattai has 33 followed by Veppur 32, Alathur 27 and Perambalur 22.

TABLE 5.9 PUPIL TEACHER RATIO

Sl. no	Block wise/District	Primary School		Upper Primary School	
		Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio
	Block				
1	Veppur	27	28.68	32	31.1
2	Veppanthattai	27	28.23	33	32.99
3	Perambalur	27	26.61	22	24.52
4	Alathur	28	28.76	27	26.74
	District	27.25	28.7	28.5	28.84

Source: Education Department, Perambalur, Year 2012

To a very large extent, what children learn from schools is what teachers teach them. The human resource development of a nation depends on the quality of its teachers. Along with long term vision, a sufficient supply of motivated teachers is crucial for the success of educational policies and reforms (UNESCO 2005). The distinction between a good school and a bad school is, to a very large extent, dependent on the commitment and initiative of the teachers.

Secondary Education

This part deals with the secondary education, enrolment, drop out etc., that is from 9th Standard to 12th Standard. (Table 5.10)

TABLE 5.10 ENROLMENT IN SECONDARY EDUCATION

Sl. No	Block wise/District	High School	Higher secondary
1	Perambalur	100	97.82
2	Veppanthattai	100	97.14
3	Veppur	100	98.17
4	Alathur	100	98.62
	TOTAL	100	93.97

Source: Education Department, Perambalur,

Access to Higher Secondary Schools

An intriguing feature of Tamil Nadu's educational system is that despite the incentives of free noon meals, free uniforms and free textbooks up to the eighth standard, the State has not been very successful in registering an impressive enrolment ratio in Class IX. With regard to Perambalur district, the enrolment in higher secondary schools has been consistent in the past few years.

Basic Infrastructure

The first step in increasing access to high and higher secondary schools is to provide sufficient schools, classrooms and teachers. In Tamil Nadu, there are higher secondary schools within a distance of 5 to 6 kms which is also an accepted norm. (Table 5.11)

TABLE 5.11 INFRASTRUCTURE

Sl. .No	Block wise/District/	Total No. Of schools	With 3 class rooms	more than 3 class rooms	Withouttoilet	With out girls toilet	With out electricity	With out drinking water	With out desk and chair
1	**Block**								
	Perambalur	34	12	22	0	0	0	0	0
	Veppanthattai	31	11	20	0	0	0	0	0
	Veppur	36	13	23	0	0	0	0	0
	Alathur	24	9	15	0	0	0	0	0
2	**District**	125	45	80	0	0	0	0	0

Source: Education Department, Perambalur, Year 2012

Hostel Facilities

The hostel facilities for students in schools need to be increased. Out of the total number of 58081 students in the district, only 2581 students are provided with hostel facilities. This accounts for only 4.4%. (Table 5.12)

TABLE 5.12 HOSTELS

Sl. No	Block wise/District	No. Schools	Total Number of Students	No. of students in hostels
1	**Block**			
	Perambalur	34	23064	865
	Veppanthattai	31	13272	630
	Veppur	36	11262	550
	Alathur	24	10483	536
2	**District**	125	58081	2581

Source: Education Department, Perambalur, Year 2012

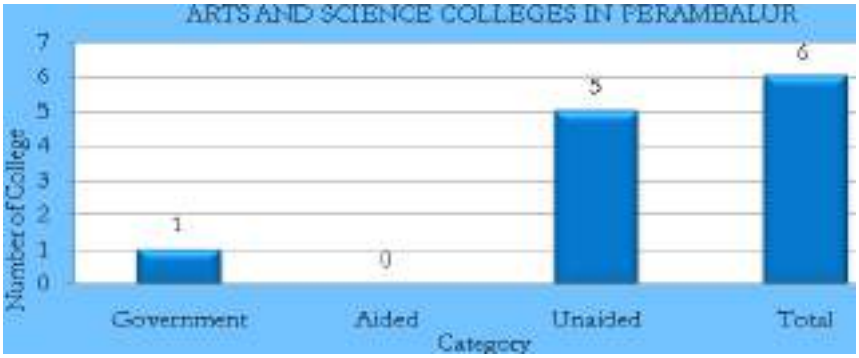
The phenomenal rise of private unaided institutions is of concern since enrolment in them is biased against girls and lower castes, leaving girls, SCs, STs to mostly in government schools. This rise in the share of private unaided schools in total attendance across all types of schools can partly be explained by rising levels of disposable income, but also by the fact that government schools lack infrastructure, and are characterized by significant teacher absenteeism and limited time-on-task by teachers even when they are present.

Higher Education

Arts and Science Colleges, Engineering Colleges in Perambalur District

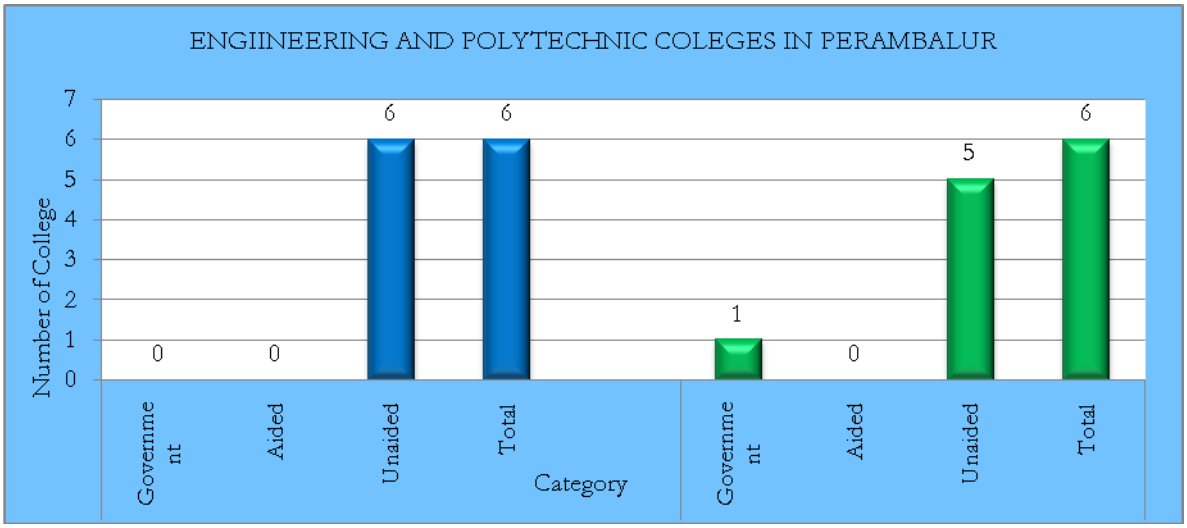
There has been a rapid expansion in colleges offering arts and science courses and also a sizeable spurt of engineering colleges in the district. (Appendix Table 16 and 17) The figure below illustrates the number. In particular education and technical training of the potential entrants into the work force will not only augment high productivity employment but also result in higher growth. Higher education and development of technical skills can set up a virtuous cycle in motion, whereby labor released from low-skill primary sector activities can be absorbed in the expanding secondary and tertiary sector where productivity is higher. Higher education and higher income levels would lead to a higher level of human development. (Figure 5.2 & 5.3)

FIGURE 5.2 ARTS & SCIENCE COLLEGES



Source: Education Department, Perambalur, Year 2012

FIGURE 5.3 NO. OF ENGINEERING COLLEGES



Source: Education Department, Perambalur, Year 2012

Conclusion

Perambalur compares well with the State's average performance with respect to access to universal education indicators. If gross enrolment ratio at primary and secondary level are more than 100%. The general literacy in Perambalur is 66.5, which is very low when the target rate of 90 percent in 2012. Actually, it is placed 26th among the 32 Districts. The gender gap in male female literacy, to have been reduced to 10 percent level at the end of the 12th plan, is still 14.44 points It is but a matter of fact that women's literacy is key to empowering women's participation in decision making in society and attainment of the MDG.

Evidences indicate that Perambalur is likely to meet the target of zero level drop-out rates at the elementary level. Both GER and NER have improved overtime in both primary and

Box 5.1—Technology Initiatives in School Education

Adoption of technology can be used as a technique in government schools to facilitate deeper real-world understanding and improve the quality of teaching. Encouraging the use of technological tools in classrooms may also nurture the spirit of inquisitiveness in students. Although Perambalur is largely an agricultural district, it has seen the implementation of some technological initiatives

- The establishment of 28 people facilitation centres under the e-governance scheme in Perambalur, Kunnam, Chettikulam, among others, have facilitated the issuance of community, income and nativity certificates to students of class 10 and 12 in the region. This move to simplify the process of obtaining the certificates has enabled the students to apply for scholarships and education loans for higher degrees without any difficulty.
- eVidyaloka, a non-profit organisation has partnered with local NGOs and community workers to set up an e-learning initiative that involves classes conducted by volunteers around the world through Skype. The initiative aims to bridge the gap between rural and urban students through an hour of Skype interactions every day after school. Videos, pictures and models are used to engage students. eVidyaloka has a presence in Payir Trust, Thenur and Vidyashram, Perambalur

middle levels. Teacher-pupil ratios have also improved significantly in both primary and middle stages. At high school level, the drop-out rate has reduced only marginally. This is still a major concern for the District. The major challenge before secondary education is that of meeting the surge in demand due to success of SSA.

There are still great challenges remaining, especially girls are still excluded from education, and many more are enrolled in school but learning too little. In Perambalur, access to the secondary and higher education that helps create a skilled and knowledgeable labor force continues to be limited.

Going forward, there needs to be an increased emphasis on the education of female adult and children. It is a basic right that needs to recognized and provided to them. The benefits of female education for gender equality and empowerment are broadly:

- Children — especially daughters — of educated mothers are more likely to be enrolled in school and to have higher levels of educational attainment.
- Educated women are more politically active and better informed about their legal rights and how to exercise them.
- Gender sensitivity is a key aspect of the quality of education. Educational systems should be sensitive to the specific needs of girls and women.

The current trend of more and more privatization in high and higher education, allows the distinct possibility of education systems split into two tiers, with high-quality private

education available only to the wealthy minority and low-quality public education the sole option for most citizens. Such a trend would turn education into a "means of perpetuating social stratification and poverty" rather than a means of increasing Social equality.

CHAPTER 6

GENDER

Gender

Introduction

Inclusive development cannot be attained unless women participate equally in the development process. Developing countries like India face huge gender inequalities, which have a direct bearing on their human development. For instance, in a patriarchal set-up where gender discrimination is rampant, a female child is ignored when it comes to health, nutrition or education. Females have little control over their lives and suffer a great deal from intra-household discrimination.

The debate on women and development had already begun to take shape in the decades of 1970s and 1980s (UN decade for women 1975-85). The issue came at the center stage in the international arena in 1995 because of United Nation's Fourth International Conference of Women at Beijing as well as United Nations Social Summit Conference at Copenhagen in March 1995. The central message of the UNDP Human Development Report 1995 was 'Human Development If not Engendered is Endangered". Accordingly UNDP suggested construction of gender related development index (GDI) and gender empowerment measure (GEM).

Gender inequality also remains a pervasive problem, and some of the structural changes taking place has an adverse effect on women'. Gender discrimination leads to an inter-generational transfer of ill-being from women to children, especially for the female child starting from choice of child and child care. Systematic gender discrimination over the life-cycle has a number of effects.

In the low socio-economic strata of the population like Perambalur District, anemia is rampant among women in the reproductive age group, children, which in turn reduces the capacity to learn and work. Effects of anemia, deepen gender disparity in educational attainment, implying greater discontinuation among females at higher levels of education. This has adversely affected qualitatively better employment opportunities for females, thereby limiting economic and social development.

Status of Women

The status of women is examined in the absolute sense by looking at where women stand in terms of health, education, income and social indicators. (Table 6.1)

TABLE 6.1 COMPARATIVE STATUS OF WOMEN

Sl. No		District
1	Female Population	283066
2	Percentage in Total population	50.1
3	Sex-ratio	1000:1003
4	Female literacy rate	65.9
5	School enrollment	77856
6	MMR	81.17
7	% of women worker in agriculture sector	48.43
8	% of women in non-agri. Sector	12.6

Sources: refer Appendix

Looking at the status of the women in Perambalur District, it is true that the very basic indicators at the average level such as sex-ratio, life expectancy and literacy of younger generation shows an improvement both for males and females. However a number of other glaring and hidden inequities influence the quality of life.

To analyse the status of women and the extent of gender discrimination in Perambalur district, construction of gender related indices will be too complicated with too narrow perceptions of the actual problem. 'Ultimately the impact of development on gender must be measured in terms of changes in life options for women'. Not only material aspects of women's life determine life options for women but also by the whole context of women's existence – economic, political and social aspects. Considering the broad indicators of gender discrimination in Perambalur district – some of which are objective indicators and some are subjective, this discussion reflects status of women.

Objective indicators are those, which can be directly measured. For example, economic indicators like work force participation rate, ownership of economic resources by women, social indicator like sex ratio, educational indicators like literacy rate, enrolment ratio, health indicators like infant mortality rate, fertility rate etc. are measurable either in percentage or as 'number of women per thousand men'. For these indicators we have to depend on secondary data. On the other hand, subjective indicators cannot be directly measured and their status are to be realized from qualitative standpoint with the help of case studies, focus group discussion (FGD) personal interviews and participatory rural appraisal (PRA) For example, to analyse the extent of

women's political and social empowerment, we have to conduct subjective studies in different blocks and municipality areas regarding women's participation in community based committees, their inheritance on parental property, their status of control over family income and family resources. Though women by and large are subjected to similar social discrimination and suffer from similar health problems across the country, subjective studies are essential to understand the impact of certain specific factors like caste, community, migration, scarcity of water, poor infrastructure etc. on gender issues.

Access and Control over Resources

Assets: There have been no mention of any women holding the ownership of land. In case if it is so, that women should be parent of the only child. Again no gender-disaggregated statistics are available in this regard. Women's share in the redistributed land has to be analysed by gathering information on the percent of Single women having Patta as a proportion of percent of total Patta.

The fact that women engage less in paid work and have less access to formal education than men further constrains their ability to access credit. They also do not have valuable independent assets to make them credit worthy. Other constraining factors are distance from banks, gender bias of bankers, working time of banks and the lack of resources to meet formalities.

Gender relations are the key to understanding the inequalities between men and women. These inequalities are expressed in many ways – explicit and implicit. The explicit measures are well known and are revealed in statistics depicting differences in the sex ratio, child infanticide, literacy rates, health and nutrition indicators, wage differentials and ownership of land and property. The implicit measures are embedded in power and culture. These intra-household inequalities result in unequal distribution of power, unequal control over resources and decision-making; dependence rather than self-reliance; and unfair, unequal distribution of work, drudgery, and even food. For governments and concerned citizens seeking to redress these inequalities, gender disaggregated data and indices are tools that can be used to identify gender inequalities, determine the issues that must be addressed, take steps to redress the inequalities, provide feedback on the effectiveness of actions and re-priorities allocation of resources.

Women's diet, in general, is reported to be inferior compared to male members in the family. They suffer from protein deficiency and malnutrition. A considerably large number of women in Perambalur district suffer from anemia. Although the data for exact average age of marriage for women in Perambalur district is not available, field knowledge puts this around 18.

Under the existing system of early marriage and dowry, women have less education, less command over household resources and properties and minimum decision-making power within the family. Women in Perambalur are worst affected by bottlenecks in rural infrastructure:Marriage and Maternity Assistance Programme insufficient water sources, poor health services network, lack of proper sanitation, lack of awareness and poor access to the existing Government schemes for women's welfare worsen their situation. Women in most of the village have to bear the responsibility of firewood collection, either from a nearby forest or from a distant one at least 2 KMs per trip. Working women bear the double work load: household work as well as work outside. Male members do not share household work in general. Cases of domestic violence related with the system of dowry and alcoholic habit of husbands are not very difficult to be found.

BOX 6.1 STATUS OF GENDER INEQUALITY INDEX IN THE DISTRICT

The Gender Development Index (GDI) is the specific indicator of the estimation of gender rights. There is little to infer from the GII as the highest value of 0.03 for Perambalur block and the lowest of 0.67 for Veppur creates a false notion of a highly gender sensitized population demonstrating a very high parity between women and men in educational attainment, labour and representation in local governance. The existing formulae for GII does not bring out the extent of discrimination and exploitation of women as the measure of GII does not account for Adolescent fertility rate and true correlation of labour market participation vs. labour empowerment. The gender gap in literacy rate in Veppur Block is as high as 17.6%, while Alathur and Veppanthattai are around 15%. Perambalur block has significantly reduced the gender gap in literacy to 10 percentage points thus by achieving the 12th Plan targets.

Likewise, disparity among Female and Male worker participation rate, more adversely seen among the Non-Agricultural sector in all 4 blocks, with Perambalur block showing the maximum imbalance in both Agri and Non Agri sector, is a major concern for gender empowerment. The wage rates are also highly discriminatory and biased in all 4 blocks. The reason for these could be women's greater burden of unpaid work and gender division of work as per cultural norms.

Gender inequality is especially tragic not only because it excludes women from basic social opportunities, but also because it gravely imperils the life prospects of future generations. Gender equality is both a core concern and an essential part of human development. All too often, women are discriminated against in health, education and the labourmarket, which restricts their freedoms. Equity and social justice, valuable in their own right, are important for expanding capabilities.1 Progress in human development is difficult to sustain in the face of growing or persistent inequity. Inequity in specific capabilities—for example, proxiedpolitical/local governance representation also impedes progress in humandevelopment, specifically the freedom of women to express and take decisive changes impacting women and child welfare - though the effects maybe less pronounced.

Employment

Perambalur is a predominantly rural economy, with poor standard of living, where women have to work mostly in agricultural fields as agricultural labourers in order to supplement family income. Women's engagement in the tertiary sector is minimum and in the secondary sector, they participate only in traditional and less-remunerative activities. In Perambalur district, men

continue to outnumber women in government and quasi-government positions. The gender details of men and women who contested and elected to the local bodies are presented Block wise in Box 6.2. A total of 1232 people (both men and women) contested in the elections to the local bodies of which 757 (61%) are men and 475 (39%) are women.

The next important issue for women is wage discrimination in casual labour employment as well as regular employment. National sample surveys also provide some insights in to the situation. As per the survey results, gender gap in earnings exists. The gender gap is highest among the illiterates. The gap declines as the education level improves up to higher secondary and diploma and a certificate course. For graduates and above, the gender gap again widens. The reason could be occasional withdrawal of women from the labour force for child bearing and child rearing and re-entering the labour force with a break. But what is interesting to note is that the gender gap in earning for regular wage and salaried workers is the lowest for the diploma and certificate holders both in rural and urban areas. Literacy rate differential alone is not a holistic indicator of the gender gap especially if what is measured is not functional literacy.

BOX 6.2 SELF HELP GROUPS

The importance of self-help group for empowering women gained focus of attention in 1987 with the expansion of 'Development of women and children in rural Areas' (DWCRA), as a sub-scheme of IRDP. The main objective of the scheme was to help and promote self-employment among rural women below poverty line by providing training in vocations through formation of groups of 15-20 women. Along with the promotion of economic and social self-reliance of women, there would also be provision for care of the children of the working women by providing an improved environment care and food. In Tamil Nadu, the scheme is more or less successful to enable BPL women to cross the poverty line. This has encouraged formation of self-help groups on an expanded scale covering different other categories of rural women in addition to BPL category. Initiation in this line has been taken by individuals, groups, NGOs and also by government machineries. In the year 2000-2001, Tamil Nadu

Trends in Political Participation

'Political Participation and Decision-making Power

The largest representation by women for the elections was to Village Panchayat Ward Members. Out of the total of 1232, the women representation was 475 (39%).

In Urban areas, for the election to Municipalities and Town Panchayats, Poolambadi Town panchayat witnessed the large number of women contestants. Out of 16 Members who contested, 11 were female thus constituting 68% of participation.

Reservation of seats for women in Panchayat Bodies in Perambalur was 39.44 percent in 2001. Beyond this participation, women's involvement in different community based

organization in Perambalur appears to be nominal. Even when they participate as members of Village Panchayat, beneficiary committees, etc. in most of the cases their participation is passive and ineffective. In fact, Women's political empowerment is unsatisfactory due to their lack of financial autonomy, traditional outlook of the family and society towards women's right and efficiency, burden of household work and low level of education in general.

TABLE 6.2 MEMBERSHIP IN ASSEMBLY AND LOCAL BODIES

Sl. No	Membership of women in State Assembly and local Body	Male		Female	
1	Block	Number of Male	% of male participation	Number of Female	% of female participation
1	Perambalur	136	62%	82	38%
2	Veppur	205	61%	131	39%
3	Alathur	224	63%	134	37%
4	Veppanthattai	192	60%	128	40%
	District	757	61%	475	39%

Source: DRDA, Perambalur, 2011

Conclusion

Any favorable change in women's status must be initiated from the family, the basic social unit. In many instances the damage women suffer in the family takes a particular form: the women is treated not as an end in herself, but as an adjunct or instrument of the needs of others, as a mere reproducer, cook, cleaner, sexual outlet, caretaker, rather than as a source of energy and worth in her own right. It is this attitude towards women, which must be changed to start the process of gender mainstreaming.

Change in this attitude will enable women to have better access to education and to develop their own knowledge base, which in turn will help to develop self-esteem among women, so that they themselves, with their very existence, can foster changes within the family. However, women live under patriarchial conditions and it would not be possible for them alone to change things with their own culture and education. Men always hold higher positions of power and decision making within the family, in economic, political spheres. This necessitates men's commitment to the process of women's empowerment.

This, however, may not be automatic and spontaneous. It requires involvement from outside. Male awareness regarding the importance of gender mainstreaming should be generated in the short run through different awareness programmes of government agencies and NGOs. In the long run, the virtue of respect for women may be cultivated from the very beginning through the formal education system. In fact, the role of men in stopping gender-based violence and gender inequality has become an important aspect in the international and national movements to end violence against women. It has been realized that it is crucial to involve men in establishment of gender equality and in combating violence against women. If social campaigns can effectively change men's perception towards women, Helping 'wives' in domestic activities by 'husbands' will not be any more ridiculed as an inferior job for men.

At the macro level, women should be provided with all the necessary infrastructural facilities: (i) improvement in water supply system (ii) improved sanitation and increased coverage of electricity (in interior villages) and (iii) access to better and easily available cooking fuel (iv) removing transport bottlenecks and increasing the access to health services by rural women. Introduction of micro level training programmes for adoption of non-traditional activities by SHGs will help women to engage in more remunerative work and will improve their economic empowerment.

CHAPTER 7

SOCIAL SECURITY

Social Security

Introduction

All peoples throughout all of human history have faced the uncertainties brought on by unemployment, illness, disability, death and old age. In the realm of economics, these inevitable facets of life are said to be threats to one's economic security.

The term "Social Security" is defined as support to individuals to live a life with reasonable standard of living and to ensure that they experience this standard of living without any hindrance whatsoever. The main focus of the social security program is to assure improvement in the quality of life. There are various measures that have a role in defining social security. Measures such as growth oriented measures, anti-poverty measures and protective measures mainly focus at the old age people, destitute women, destitute widows, differently abled, etc.

In the context of Tamil Nadu, Social security is provided through promotional and protective measures. Direct benefits in the form of pension, retirement benefits to the Government employees. Industrial workers are eligible for provident fund, gratuity, insurance (medical) and other benefits. Government also provides assistance to older citizens through pensions and similarly women are covered through various schemes.

The Social Security measures that are followed in Tamil Nadu are

- Pension Benefits
- Social Security to the organized and unorganized sector
- Assistance to poor women
- Pension for vulnerable groups

Pensions are provided to 5 categories of people – Old Age People, Deserted wives, Destitute widows, Differently abled people, Destitute agricultural labourers. People who have no support from family members and people who have no support to live are eligible to come under this scheme.

Demographic profile of the Aged

Considering the longevity of life, the population at the age of 60 or above is considered as ageing in India. The role of the government as a welfare state to protect the ageing population is very important. The higher longevity of life does not ensure the healthy life especially of ageing population. Other things remaining the same, higher the growth of ageing population, higher would be the load on government in terms of providing social security to them.

TABLE 7.1 DEMOGRAPHIC PROFILE OF THE AGED

Sl. No	Block wise/District	Total Population	Population aged above 60	
			Male	Female
1.	Perambalur	162356	8763	7350
2.	Veppanthattai	148743	9712	8192
3.	Kunnam	148138	13679	13804
4.	Alathur	105986	7864	7048
	District	565223	40018	36394

In Perambalur district, the total population of the aged in 2011 was 76,412 out of which 40018 were male and 36394 were female and thus constituting 13.51%.This has increased from 9.1% of the population in 2001.

There are many factors that have contributed to the increase in old age people becoming dependent on OAP. The part of population in 60+ age has increased due to overall increase in population and longer life expectancy. Secondly, urbanization has meant migration of adult men and women to the urban areas in search of employment, leaving the elderly back home in rural area. The increase in nuclear families has meant, elderly are left behind without the traditional family support. The situation is further compounded in case of families who have no movable or immovable assets and who completely depend on the daily wage for their livelihood.

The coverage of the various Pension schemes in both Veppur and Veppanthattai are lower than other 2 blocks. These 2 blocks also have lower access to road facilities which correlates to the lower coverage. The Block administration should sensitize the village administration in better enumeration with an empathetic attitude to socially disadvantaged sections of the society.

TABLE 7.2 FINANCIAL ASSISTANCE TO OLD AGED PEOPLE

Sl. No	Scheme	2001		2014	
		Coverage	% to the total population in the district	Coverage	% to the total population in the district
1	Old Age Pension (IGNOAP + FSSOAP)	7655	1.55%	29109	5.15%
2	Pension for Differently Abled Persons (DAP)	575	0.12%	3946	0.60%
3	Pension for Destitute Widows (DWP	3647	0.74%	8361	1.47%
4	Pension for Destitute Wives	691	o.14%	953	0.17%
5	Old Age Pension for Landless Agricultural Labourers	368	0.07%	1767	0.31%
6	Other Categories			2571	0.45%

Source: DRDA, Perambalur

Differently Abled Persons

The total number of people receiving pension under this scheme through Revenue department in Perambalur district increased from 575 in 2001 to 3946 in 2014 an increase of coverage from 0.12% to 0.60% respectively. The total number of people receiving pension under the scheme of maintenance grant to differently abled persons through differently abled welfare office in Perambalur district increased from 575 in 2011 to 3946 in 2014.

Destitute Widows Pension

Widows who have not remarried are eligible under this category even if they have legal heirs. An amount of Rs.400/- is given under this scheme. The number of beneficiaries under this scheme as on 31.3.2011 in Perambalur district has increased from 3647 in 2001 to 8361 in 2014 of the total population of this district.

Destitute Deserted Wives Pension

The scheme of Old Age Pension has been extended to benefit deserted wives/destitute women who are not less than 30 years of age and who are deserted by their husbands for a period of not less than five years/obtained legal separation certificate from competent court of law. Deserted wives having legal heirs who have completed 18 years of age are also eligible for pension under this scheme. An amount of Rs.1000/- is given under this scheme.

The entire expense is borne by the State Government. As per census 2011, in Perambalur district the Deserted wives population was 953.

Destitute Agricultural Labourers Pension

The total number of persons receiving pension under this scheme in Perambalur district increased from 368 in 2001 to 1767 in 2014 an increase of coverage from 0.07% in 2001 to 0.31% in 2014 . This is to be noted that the agricultural wages earned by the aged are not adequate for their living and in some cases the beneficiaries under coverage may not do any work and hence are completely dependent on DALP.

Social Security to the bereaved families

To support families who have lost a primary bread winner due to an accident or sudden death, the Tamil Nadu Government has Family Distress Relief Scheme (FDRS), Accident Relief Scheme(ARS) which are operated in all districts. The amount of assistance to FDRS is Rs.10000/- and the amount of assistance for ARS ranges from 5000 to 15000.

Health Care and Health Security

The increase of the elderly population also invokes our special attention towards extra care and health security that has to be provided to them. There are possibilities for the aged people to be easily affected by various diseases such as Heart problems, arthritis, osteoporosis, diabetes etc. There are also age specific diseases such as dementia which affects the elderly people.

With regard to the morbidity pattern among the elderly population, a study from the ICMR indicates that 88% have visual problems and many suffer from neurological difficulties and some from psychiatric problems.

Aged people who are helpless and who have no place to go need utmost care and affection for their survival. There are committed NGOs who run the Old Age Homes and rehabilitation Centres for the welfare of the elderly population. In Perambalur district there is one Home for the Aged run by St.John Sangam Trust assisted by the Grant from the state Government and 40 elderly people are taken care by this Home. There is another NGO named Periyar Kudil running a Home for the Aged in Padalur where 25 elderly people are taken care of with the assistance from the Government of India.

There is also one Day Care Centre for the Aged run by Thanthai Roever Centre for the Aged at Elambalur. This Centre takes care of 30 elderly people. The main aim of these centres is to provide food, shelter, Health Care Protection and rehabilitation of the aged.

With the increase of ageing population, a long term policy has to be charted out in terms of providing health care. A special Team of Doctors including those taking care of PHCs in the villages need to be given intensive exposure in geriatric care in order that the aged can be provided appropriate care. Additionally, Institutional care has to be supplemented by social security.

Marriage and maternity Assistance Provided to women

BOX-7.1 MARRIAGE AND MATERNITY ASSISTANCE PROGRAMME

Marriage Assistance is provided to the girls who are living below poverty line and they should be of 18 or more years of age. There are five marriage assistance schemes in Tamil Nadu. One of the major schemes is for girls below the poverty line. The scheme attempts to reduce the financial burden on the girl's family, while simultaneously enforcing the legal age of marriage for girls (18 years) and promoting female literacy/schooling. In Perambalur district, marriage assistance is provided under various schemes.

MARRIAGE AND MATERNITY ASSISTANCE PROVIDED TO WOMEN

Sl. No.	*Category*	*No. of women assisted in 2012-13*
1	Marriage Assistance	1567
2	Maternity Assistance	5485

Moovalur Ramamirtham Ammaiyar Memorial Marriage Assistance has been implemented from 1989 onwards by the Tamilnadu Government as per G.O.M.S.No.515 S.W.D dated 31.05.1989. Rs.20,000/- is provided to one girl in a family. E.V.R. Maniyammaiyar Memorial Widow Daughter's Marriage Assistance is implemented from 1982 by the Tamilnadu Government to help for the marriage assistance of Widow's daughters. A cash package of Rs.20,000/- is given through this scheme. In Perambalur district, Marriage and maternity assistance were provided to 7052 beneficiaries in 2012-2013..

Maternity assistance is a cash package given to pregnant working women in order to enhance their health by taking nutritional food during and after pregnancy.

CASE STUDIES 7.1 SUCCESS STORY: PREVENTION OF CHILD MARRIAGE

While the child marriage count is steady across the State, it is dipping in Perambalur, thanks to the efforts of the District Administartion. Through focused and coordinated efforts between the various departments involved in child rights issues, has helped to curb the scourge in this industrially backward and predominantly rural district.

In the past three years, since 2011, officials stopped as many as 300 child marriages and rehabilitated potential victims. Of the rescued girls, a majority of them were school students, including a few below 15 years of age.

Also, 29 girls, who were rescued from under-age marriages, have been successful in the 2013-14 Boards. Of them 17 cleared Class XII and the rest SSLC with good marks. The girls who opted for higher studies were identified by the district administration.

The District Collector has also formed a special cell called 'Agazhi' (Moat) to safeguard all the women in the district. Each school, particularly girls' school, was given mobile numbers of all officials starting from the Village Administrative Officer right up to the Collector, and the Childline number 1098, to inform them about child marriages.

The Administartion has also been organising several review meetings with the executive officers of temples, proprietors of marriage halls, village administrative officers, village health nurses, and anganwadi workers.

Source: District Social Welfare Board, Perambalur

Crime against Women

Violence Against Women has been one of the major concerns at the world level. In India, though many democratic structures are being implemented, the percentage of violence is increasing at all forms. (Table 7.3)

TABLE 7.3 CRIME AGAINST WOMEN

Sl. No	Category	Number of cases (2012)
1	Rape	14
2	Dowry death	2
3	Dowry prohibition act	20
4	Molestation	77
5	Women harassment	78
6	Eye teasing	6
7	Kidnapping and abduction	20
8	Cruelty husband	16
9	Others	13
	District	**246**

Women in Tamil Nadu face various forms of violence- Female infanticide, female feticide, rape, wife battering, eve-teasing, molestation, pornography and trafficking in women, child-

marriage, forced marriage, dowry-related harassment etc., And these harassments happen in various settings like family, work place, schools and colleges, temples, roads, hospitals and even prisons. Unfortunately the majority of these happens within the context of family, and labeled as private issue in Tamil Nadu. In most cases Women in the rural areas too do not report such cases to safeguard the values and respect of the family. Therefore we cannot completely rely on the official records for understanding violence against women.

There are several causes of violence against women - alcoholism, dowry, interpersonal disputes between couples, with in-laws etc. Use of traditions and customs to enforce stereotypes of female inferiority have only helped perpetuate these aggressions. There are also some external threats like portrayal of women as sex objects which plays a crucial role of inducing violence. As a result of these, the women folk suffer both physical and mental agony and this in turn affects the children also very badly.

As per crime rate in Perambalur district in 10.10% as against the Tamil Nadu average of 9.6% in 2011. The incident of rape cases increased from 3 cases in 2001 to 14 cases in 2012. Out of 246 number of crimes against women in 2012, the cases of molestation and women harassment alone constitutes 63%.

Several institutional structures exist to address violence against women particularly, All Women police stations, Free legal aid Institutions, CounselingCentres and above all the State Commission for Women. Besides there are also many Non-Governmental Organizations that work for the improvement and development of the women folk at large. The NGOs strive towards curtailing the atrocitiesand different forms of torture being enforced to them and also have initiated several gender awareness, legal literacy programs with the support of the State Commission for Women to the Police Personnel, Teachers, and independently to different workforce in various Institutions mainly focusing on human rights perspective. Several legal reforms suggested by the State Commission for women need to be implemented in the area of divorce, re-marriage and domestic violence.

CARE OF DIFFERENTLY ABLED

The district has registered a rare achievement in the care of differently abled, with "zero home-based differently abled child" in the district. All the 467 differently abled children in the age group of 0 to 18 suffering from multiple disabilities have been attached to the 10 day care centres run under the Sarva Shiksha Abhiyan (SSA).

It was the initiative taken by the district administration with the active participation of the SSA, Pudu Vaazhvu Thittam and the department of differently abled welfare that saw the new horizon in the form of creation of adequate day care centres.

Till a couple of years ago, the district accounted for only four day care centres – one in each block. District Collector Darez Ahamed, a qualified doctor, realising the importance of adequate facilities for the rehabilitation of youth with disabilities, got six more day care centres under the SSA. He allocated Rs. 3.35 lakh for each centre from the Collector's discretionary funds for improving the infrastructure, besides procuring physiotherapy-related equipment and teaching learning material.

The differently abled children identified at the special screening camps were enrolled and attached to these day care centres and this enabled them get the benefits extended by the government.

In the absence of adequate day care centres, many children with disabilities remained indoors for years and the rehabilitation initiative of the government did not reach them because of the distance involved, absence of adequate trained hands, and so on.

The Collector's initiative has brought relief to the parents of these hapless children, who undergo special education programme in the centres. Special teachers and physiotherapists had been attached to them. Till recently, one physiotherapist was in charge of two centres, but now each centre accounted for a physiotherapist. The parents could not bring their children to the centres for want of transport facilities. Now, autorickshaws have been hired for bringing these children to the day care centres every day and Rs.12,000 is earmarked for each centre for a month – Rs. 4,300 under SSA and Rs. 7,700 under PuduVaazhvuThittam. The children's performance is monitored by special teachers and their physical and behavioural patterns are monitored regularly.

Conclusion

"Reducing vulnerability is a key ingredient in any agenda for improving human development," the Nobel laureate Joseph Stiglitz said, in a text written specifically for the 2014 HDR report. There are structural vulnerabilities – those that have been persistent and continue to worsen over time as a result of discrimination and institutional inadequacies, and that affect groups of individuals such as the poor, women, migrants, people with disabilities, indigenous peoples and the elderly.

For a district like Perambalur, successive droughts requires more than short-term responses. There is a need for universal provision of basic social services, universal old-age and disability pensions systems, a basic system of benefits for child care, universal access to basic health care, social assistance, and maximum achievement levels of employment guarantee programs in order to increase resilience, refuting the idea that this is only available to the rich.

Geriatric training: The Doctors and paramedical staff from Government hospitals and PHC's need to be provided specialized training in geriatric care The staff should be able attend to both the physical and mental ailment of the elderly people.

Counseling centre: A centralized counseling centre need to be established in the Taluk Headquarters which offers them medical services and good counseling to help seniors manage both their physical and mental challenges.

The Government along with the NGOs need to work for viable alternative for keeping the elderly people at Old Age Homes more brisk and energetic. Supply of food and shelter alone will not be the solution but need to go beyond and find out what could keep them physically, mentally and socially active. Senior counselors in this aspect could be consulted to initiate this process.

Access to be simplified and the duration for receiving the OAP need to be quicker and faster.

Nutrition programs for seniors: The health needs of senior citizens are different from the needs of general population. A focused nutrition program that focuses on old age related issues like osteoporosis, arthritis, dementia etc., needs to be initiated.

Care taker support:The young and adult in the families need to be given intensive awareness trainings and some brainstorming sessions on taking care of the elderly people in their family

Differently abled day care: Special day care centers for the differently abled is important since their needs are different. It also requires staff with a different set of skills to support them.

More data - Efforts need to be made to go into deeper analytical study of elderly population, to provide enough insights to ascertain the feasibility of various healthcare programs which include home care and institutional care.

CHAPTER 8

INFRASTRUCTURE

Infrastructure

Introduction

Economic development and prosperity of an economy depends on the availability of infrastructural facilities. Infrastructure has the power to increase the productive capacity of the factors of production. The structure of an economy can be changed only by the infrastructure. The infrastructure facilitates all the sectors of the economy to speed up their growth rate. It lubricates and strengthens the engine of economic development.

An economy's infrastructure is more conveniently divided into two parts Physical Infrastructure and Social Infrastructure. Physical Infrastructure is directly concerned with the needs of such production sectors as agriculture, industry and trade. The physical infrastructure, include such services such as power, irrigation, transport telecommunication. On the other hand, social infrastructure comprising education, health and medical care, nutrition, housing and water supply which is instrumental in contributing to substantial improvements in human development, which in turn, initiate and accelerate economic development.

Infrastructure promotes development by diversifying production, expanding trade, coping with population growth, reducing poverty or improving environment conditions. Good infrastructure raises productivity and lower production costs, but it has to expand enough to accommodate growth.

Transport and communications infrastructure is important in terms of providing access to basic health services and thereby improving conditions of health and life, particularly of women and girl children. Basic infrastructure such as electrification plays a similar role, apart from changing the quality of life in general. It is now well known that basic road connectivity to a school, minimum facilities like separate toilets for boys and girls in school buildings are crucial determinants for the enrolment and attendance of girl children, and so on

For Perambalur district, which is primarily rural (<15% is urban) and with one of the lowest per capita incomes in the State, development of infrastructure becomes all the more important. Better infrastructure can become the key to successfully delivering many of the schemes linked to better human development.

Roads

Perambalur town is well connected by Road. Perambalur is the major junction where NH-45 (Chennai-Trichy) and NH-226 meet. Perambalur has the outer ring road which connects NH-45, NH-226 runs from Perambalur to Manamadurai covering a distance of 212 Kilometres and SH-157 runs between Attur and Perambalur.

Tamil Nadu is considered to have good road network and this is reflected in the fact that the district has a total length of 1294.655 Kms in 2011 as against 669.915 Kms in 2001. However in terms of road density Perambalur having 73.75 Kms per 100 Sq.Kms. does fall short of State average of 153Kms per 100 SqKms.

Out of the total distance of 1084.67, the district has a total of surfaced roads of 630.47 Kms, a coverage of 58% and still the unsurfaced length of the roads comes to 42%. These statistics point to the fact that there is a significant scope for improving the quality of roads, particularly the rural roads.

The road network is the one that gives connectivity to all habitations and modes of other complementary transport system. Good roads are necessary for the movement of modern traffic. Without efficient network of roads, other planned development activities cannot produce expected results. The road network considerably decides the economic development, population distribution, shape of cities and towns, environmental quality, energy consumption, access to social infrastructure and above all the quality of life. The roads, therefore, should not be seen as mere connecting links or means of communication only. There is a need for greater connectivity and network to be built to the rural areas, which will spur greater reach of various programs whether educational, healthcare or employment.

TABLE 8.1 DISTRIBUTION OF TOTAL ROAD LENGTH

Sl. NO	Block wise/District	Mud	WBM	BT	CC	Saralai Road	Total
1.	Perambalur	52.89	29.6	94.32	0.93	61.6	239.34
2.	Veppanthattai	22.15	77.84	144.47	7.42	83.85	335.73
3.	Veppur	111.5	35.5	84.68	15.12	-	246.8
4.	Alathur	41.2	56.1	103.2	17.4	44.9	262.8
	District	227.74	199.04	426.67	40.87	190.35	1084.67

Source: DRDA, Perambalur, Year 2012

Transport Facilities

Perambalur has two Bus Stands. Old bus stand handles the intra-town transport which includes buses and three wheelers. New bus stand handles State Express Transport (SETC) and Inter-District Transport (TNSTC) buses.

The number of registered vehicles in Perambalur district are 82238 including both commercial and Non-commercial and across different types of vehicles.

Railways

Perambalur has only few kms of railway line and this district has no railway stations. Indian Railways has plans to link the city of Perambalur with other major stations in Tamil Nadu.

Airport

The nearest Airport is in Tiruchirappalli which is 60 Kms away from Perambalur.

Electricity

Tamil Nadu Electricity Board has been bifurcated into 3 sections for the sake of speedy governance. TANGEDCO (For generation and distribution of power) and TANTRANSCO (transmission of Power). 86% of the populations are given electricity connections. 152 Revenue villages, 314 Hamlets and 6 Towns are covered. The population covered is 4,85,388. The total number of street lights in Perambalur district is 15312 as on 2011 (Table 8.2).

TABLE 8.2 STATUS OF ELECTRIFICATION

Sl..No	Block wise/District	Revenue Village	Hamlets	Towns	Population Covered	No. of street lights
	Block					
1.	Perambalur	27	54	3	123778	3345
2.	Veppanthattai	39	90	2	136401	3309
3.	Veppur	47	92	1	128624	3551
4.	Alathur	39	78		96585	5107
	District	152	314	6	485388	15312

Source: DRDA, Perambalur, Year 2012

As can be seen from the statistics given in (Table No. 8.2) the electrification has been high within the district. The bigger challenges in the district have been availability of regular electricity. Lack of predictable power supply poses a challenge in supporting agriculture and attracting new business entities.

Communication System

There are 11835 Post offices in Tamil Nadu out of which 132 are in Perambalur district. The number is pertaining to Post Offices involved in postal work alone. Apart from the Postal Department, there are 8 major private courier services in Perambalur district. India's telecommunication network is the second largest in the world based on the number of users. India also has the 3rd largest internet user base in the world. There are 27 Telephone exchange Offices and 599 Public Call Offices. Centres in Perambalur district. There are 15747 landline connections in Perambalur district (Table 8.3)

TABLE 8.3 TELECOMMUNICATION SYSTEM

Sl. No	Block wise/District	No. of Tele-exchange	No. of PCO	No. of land line
1.	Perambalur	4	281	6823
2.	Veppanthattai	9	179	4972
3.	Veppur	7	68	2715
4.	Alathur	7	71	1237
	District	27	599	15747

Source: BSNL, Year 2012

While there is not much data available on mobile internet connectivity, internet penetration and infrastructure supporting this communication system would, in future, have a sizeable impact on the various development indicators.

Financial Institutions

There are 53 cooperative societies in Perambalur and 80 commercial Banks in the District. These include Government Banks, Private Banks, Cooperative Banks etc.

TABLE 8.4 COMMERCIAL AND COOPERATIVE BANKS

Sl. No	Block wise/District	No. of banks/ co-operative societies
1	District	
	a) Number of branches of lead bank	11
	b) Other Commercial Banks	28
	c) Primary Land Development Bank	1
	d) District Central Co-operative Banks	7
	e) Primary Agricultural Co-operative Credit Society	51
	f) Housing Co-operative Societies	2
	g) Employees Co-operative Societies	6
	h) Weavers Co-operative Society	1
	i) Industrial Co-operative Society	1
	j) Khadi& Village Industries Society	--
	k) Industrial Co-operative Societies	1
	l) Primary Co-operative Stores	1
	m) Milk Cooperatives	71

Source: DRDA, Perambalur, Year 2012

Insurance

There is one branch of LIC – Life Insurance Corporation of India and 1,34,779 policies are issued through Institution.

TABLE 8.5 INSURANCE COMPANIES

Sl. No	Name of the companies	No. of branches	Polices Issued
1	LIC Of India	1	134779

Irrigation

Perambalur's agriculture is largely rain-fed agriculture. In such a situation, the importance of the network of Tanks and Wells takes prominence and strengthening this infrastructure would have a direct impact of the irrigation and cropping intensity.

Sl. No	Particulars	Number	Sl. No	Particulars	Number
1.	Canals	1	3.	Wells	
2.	Tanks			Open wells	34826
	< 40 ha	51		Bore wells	131
	=>40	201		Dug cum bore wells	1296
				Tube wells	46
				Filter point tube wells	2356

Source: Department of Agriculture, Year 2012

Conclusion

The lack of access to basic infrastructure services undermines the inclusive development. Lack of access to basic infrastructure services itself can be defined as "infrastructure poverty" because without such access, it is extremely difficult to fulfill basic human needs. Admittedly there is a question of affordability and capability of utilizing the services; however, having increased access to infrastructure services, such as energy, water, and transportation, directly benefits individuals and households, communities, and companies.

For example, rural infrastructure increase the household and individual welfare by improving farm and nonfarm productivity, thus raising the level of income and consumption, reducing private costs, and saving time. Such effects clearly lead to an improved level of human development. Access to infrastructure not only provides direct benefits by reducing the prices of manufacturing goods but it also indirectly generates new opportunities, such as employment generation, market expansion, and integration. A significant positive impact of infrastructure on health and education is also firmly established. Interestingly, rural infrastructure improves the education and health of women and girls more significantly than it does of males. Similarly, communities can benefit through increased interactions with group members and also through its increased size, which helps to increase the level of satisfaction, one of the psychological factors of human development. Apart from generating employment and boosting efficiency, infrastructure helps social inclusion through increased social mobility and preserves environment through the efficient use of natural resources.

IAMWARM

Improved performance in Agriculture and related fields is the key to unlock the tremendous potential of the rural areas of Tamil Nadu. In this direction, the Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management (TN IAMWARM) is a unique World Bank funded project implemented with the prime motive of maximizing the productivity of water leading to improved farm incomes and products. Under this project, 63 selected sub basins are to be covered in a period of six years (2007-2013) with Water Resources Organization (WRO), PWD, Govt. of Tamil Nadu as the Nodal Agency. Tamil Nadu Agricultural University (TNAU), one among the line departments implementing TN-IAMWARM Project, mainly concentrate on the transfer of water saving and improved production technologies of major crops of the respective sub basins. The programme will be implemented in IV phases as follows:

I Phase – 9 sub basins commencing 2007
II Phase – 16 sub basins commencing 2008
III Phase - 25 sub basins commencing 2010
IV Phase – 4 sub basins commencing 2011

Based on the major crops of each sub basin, activities were formulated in convergence with line departments as project mode and mission mode. System of Rice Intensification (SRI) and Precision Farming (PF) were the major components demonstrated in all the sub basins in the context of water saving and increased productivity. Introduction of pulses in irrigated condition and rice fallow situation was also in demonstrated largely in the sub basin. Improved Production Technologies (IPT) were also introduced in less water consuming crops like maize, sunflower, cotton and groundnut. E-Velanmai is one of the new participatory ICT tool was also introduced on pilot basis.

The broader objective of the Project is to achieve sustainable economic growth as well as poverty alleviation through maximizing productivity of water.

The IAMWARM project will support the investment in (1)Improving irrigation service delivery including adoption of modern water-saving irrigation technologies and agricultural practices (2) Agricultural intensification and diversification (3) Enhancing market access and agri-business opportunities, and (4) Strengthening institutions dealing with water resources management.

Working towards large scale adoption of specific technologies such as SRI in paddy and improved production technologies in oilseeds, pulses and cotton.

- Large scale adoption of Drip fertigation / Precision farming and Sprinkler irrigation technologies in field crops, commercial crops and horticultural crops
- Popularization of crop diversification options in the crops like maize, fruits and vegetables in the sub basin commands.
- Popularization of labor saving implements in rice, groundnut, cotton and maize to reduce cost of production
- Testing and large scale adoption of technologies developed on-station to farm conditions
- Promotion of Seed Village Concept (SVC) to produce and supply quality seed and seedlings for diversified agricultural practices.
- Seed Village Concept will be supported to produce and supply quality seed and seedlings for diversified agricultural practices.
- Provide information on Price Forecasting and Market Intelligence to Water Users Association to develop more market access.
- Provide necessary trainings through various centres / research stations of Tamil Nadu Agricultural University to the farmers and other stakeholders for capacity building.

In Perambalur, Chinnaur sub-basin has been identified under IAMWARM – Phase II. 33 tanks and nine anaicuts were taken up for renovation in Perambalur district at a cost of Rs.5.36 crore under the IAMWARM project. The project in Perambalur district benefits a total ayacut of 3,006 hectares and about 48,000 metres length of tank bund are to be strengthened and about 43,700 metres length of supply channels are being repaired. Nine sluices are to be reconstructed and 16 weirs repaired.

Lastly, increased infrastructure services directly benefit business enterprises through expanded market opportunities, reduced cost of production, and increased production quality and volume of goods and services. Literature suggests that rural community-based infrastructure, such as rural roads, rural small-scale electrification, and water supply and irrigation projects, significantly benefit small- and medium-scale enterprises by increasing land and labor productivity, improving the community's health and education levels, enhancing banking and communication services.

Though the district has some distance of NH and SHs, there are some interior places in the 2 blocks of Veppur and Veppanthattai where there are many villages still not having proper road facilities.

Similarly special thrust should be given to the Indian Railways to connect Perambalur district with the rest of the country.

CHAPTER 9

SUMMARY AND WAY FORWARD

Summary and Way forward

Status of Human Development

Human development index (HDI) embodies Amartya Sens "capabilities" approach to understand human well-being, emphasizing the importance of ends (standard of living) over means (like income per capita). The three important ends of development are access to health, education, and goods. HDI has shifted the focus from economic "utility" theory to the human capabilities approach. The value of HDI is usually measured on a scale of 0 – 1, with higher development in places where the value of HDI is nearer to unity.

The analysis of human development in Perambalur presents a unique problem in that it was recently carved out in 2007 from the combined Perambalur district which had Ariyalur. As a result, the present Perambalur district is the smallest district of Tamil Nadu with only four blocks. The unavailability of compatible and reliable data, and the backwardness of a major portion of the district are obstacles to an accurate analysis of inter-block variations. Given the situation, HDI inter-block variations have been evaluated considering the district as a single region.

The HDI of the four blocks are as follows

Perambalur block	– 0.73
Veppanathatai	– 0.65
Alathur	– 0.44
Veppur	– 0.51

The low human development values of the latter three blocks gives a realistic picture of the region, while the unusually high HDI of Perambalur block certainly does not reflect the true nature of development in the region.

Gender Inequality Index

Gender inequality is a major concern for gender empowerment. It excludes women from basic social opportunities and gravely imperils the life prospects of future generations. Women are discriminated against in health, education and labour markets. Perambalur district shows a high disparity among male and female worker participation rate in both agricultural and non-agricultural sectors, more adversely in the latter.

The gender gap in literacy rate in Veppur block is as high as 17.6%, while it is 15% in the other rural blocks. The only block to have achieved the 12th Plan target of 10 percentage points is Perambalur block.

Standard of living

Although half the population of Veppanthattai, Alathur and Veppur blocks have pucca houses, thanks to the efforts of Tamil Nadu government's rural housing schemes, about 85% of the population in the three blocks do not have access to toilets. Even in the sole urban block, Perambalur, 55% of the population do not have access to toilets. People must be encouraged to utilize the government's rural sanitation schemes to build toilets in their houses.

The penetration of electricity connections is only about 80% in Veppur. The rural electrification scheme must be accelerated.

More than 95% of the populations have access to safe drinking water. Nearly half the population do not have pucca houses, Further, access to cooking fuel is a cause for concern. About 70% of the population in the rural blocks do not have access to cooking fuel, resulting in the use of firewood as a source of energy. Given the fact that women are responsible for cooking, the use of firewood may lead to chronic lung diseases and cancer among women.

Health and Education

The Eleventh Plan targets of infant mortality rate (IMR) for Tamil Nadu have been surpassed in Perambalur block, while the other blocks are well on track to achieve them. However, the maternal mortality ratio (MMR) is alarmingly higher than the state MMR of 68 in Veppanthattai (172.20) and Veppur (216.70). Ensuring safe motherhood is one of the challenges faced by the district administration, specifically in these two blocks.

Literacy is a crucial component of HDI, often linked with other indicators like IMR and MMR. While the State target for literacy is 90%, Perambalur block lags behind with 73.41%, while the other blocks are considerably worse with only about 65% literacy. However, the successful implementation of SSA and RMSA, and other initiatives are commendable.

Employment, Income and Poverty

Employment

The per capita income of Perambalur (Rs. 24256) being much lower than the TN average (Rs.63996) in 2012 reinforces the importance of policies to ensure employment. Mines, industries and quarries have sprouted in recent years because of development agendas of the government.

The analysis of employment opportunities and income levels of Perambalur due to the economic growth activities and agricultural activities are constrained by the lack of adequate data, but efforts have been made to obtain a sense of the scenario prevalent in the district.

The percentage of total workers of Perambalur block is smaller than the other blocks. This may be attributed to a significant part of the population being engaged in training their soft skills or pursuing higher education, or to a lack of opportunities. Further, the MGNREGA has least covered Perambalur block compared to the other blocks, which may also be an explanation for the fall in the main workers' numbers.

The distribution of workers according to the type of work clearly illustrates that agriculture related activities are the main source of employment (66.29% of total workers). Perambalur is traditionally an agrarian district. The contribution of agriculture to the GDDP is 32.24%. 37% of total land is under cultivation, highlighting the large extent of agricultural activity in the district. The number of cultivators has fallen by more than 10%, while the number of agricultural labourers has risen by more than 35%. This can possibly be explained by the significant migration from two blocks, Veppanthattai and Veppur, as well as the acquisition of land for SEZ.

Unemployment in the rural context refers to long-term unemployment. Registrations in the District Unemployment Exchange show that between 2007 and 2011, only 1,569 out of 1,11,325 obtained employment. The figures available with the government may not be representative of the true unemployment situation – it is not clear whether all registered persons are necessarily unemployed. However, it is evident that educated employment seems to be on the rise, given that 70% of the unemployed have tenth standard qualifications at least. Proper wage employment programs and other developmental programs could be introduced to meet the problems of the educated unemployed.

Income

Per capita income measures the wealth that is ultimately only the means to something else for all humans, such as the products and services that income can buy, and the social standing it might create. Although there has been an increase in PCI, from 17,922 in 2011 to 24256 in 2012, it is a much lower growth rate compared to the State with its growth rate of 62%. The placement of only 1.40% of the unemployed registered with the district employment exchange could probably be responsible for the low PCI growth rate. A marked development in the field of agriculture, the profession of 66.29% of the people, would make a significant impact in the rise of PCI in the district.

Demography, Health and Nutrition

The decadal (2001 – 2011) growth rate of population is 14.50%. According to the 2011 census, the district's population was 5,65,223, 17.19% of whom lived in urban areas and 82.81% lived in rural areas. In the decade 2001 – 2011, the population density has risen from 282 persons per square kilometer, to 323/ sq. km.

Crude birth rate (CBR) is the number of births per thousand people. Similarly, crude death rate (CDR) is the number of deaths per thousand people. The CBR of the district has declined from 15.8 to 14.7. The district CDR has also declined from 5.7 to 1.52.

An analysis of the 2008 vital events survey gives an indication of the relationship between CBR and CDR with the development of the district. Perambalur, one of the least developed districts of Tamil Nadu, has a CBR of 16.4 per 1000 people and Kanyakumari, one of the most developed districts of Tamil Nadu, has a CBR of 13.3, the lowest in the state. This need for large families stems from the fallacious concept of "larger the family, more the earning power of the family". This concept is widely used around the world in developing and underdeveloped nations without realizing that a big family only leads to a higher percentage of uneducated and unskilled labour.

Sex ratio

Although the sex ratio figures for the district (990 females for every 1000 males) and the various blocks – 1017, 1003 and 1012 in Veppanthattai, Veppur and Alathur blocks respectively - are healthy indicators of sex ratio, focus group discussions (FGDs) with stakeholders indicate there are sporadic incidences of female infanticide in the district. The attitude of men towards women and female infanticides are matters that must be addressed to improve the present scenario.

Further, the child sex ratio reveals the true scenario of gender imbalance within the district – The child sex ratio is 946. While Alathur has the highest child sex ratio of 1026, Perambalur and Veppanthattai have much lower child sex ratios (919 and 914 respectively). The child sex ratio of Veppur is an alarming 829. The declining sex ratio may be attributed to a number of factors – missing women through undercounting, lower status of women contributing to their being considered disposable, higher mortality of female babies during childhood because of negligence or inadequate nutrition, female infanticide and recent technological developments that aid sex-selective abortions.

Infant mortality rate

IMR is a reliable indicator of socio-economic conditions prevalent in a region. Improvements in MMR and institutional deliveries have a direct bearing in reducing infant mortality rate. A low IMR is correlated with the good health status of a community, but it is not the only indicator of health status.

In 2007, the IMR was 20.4 and it has steadily risen in the succeeding years – 23.8 in 2008, 22.5 in 2009, 22.8 in 2010. In 2011, the IMR dropped drastically to 17.08 in 2014. Major causes of infant deaths are birth asphyxia (17.7%), low birth weight (14.6%), acute respiratory infection (13%). Adequate ante-natal and postnatal care must be initiated for blocks with a high incidence of IMR. Additionally, improvement in female literacy will produce a synergistic impact.

In comparison with the state, Perambalur district, with an IMR of 23.8, ranks above the state average of 21.2.

Maternal mortality ratio

In-depth analysis of the causes of maternal deaths in Tamil Nadu reveals that a large number of cases are preventable. Socio-economic and cultural factors and also malnutrition play a crucial role in maternal deaths, among other well identifiable direct and indirect obstetric causes. The gap in transport and communication facilities, especially in rural areas, hinders the delivery of health facilities. Another impediment to effective health delivery system is the lack of quality in essential and emergency obstetric services. One of the major reasons for maternal deaths is hemorrhage, a problem that can be easily solved by the creation of 24-hour blood bank services in all main primary health centres (PHCs). Providing transport facilities would also reduce maternal mortality. With an MMR of 81.17 in 2013-2014, Perambalur ranks above the state average of 68.

Institutional deliveries reduce the incidence of IMR and MMR. In addition, institutional deliveries provide opportunities for government interventions such as census taking, immunization etc. According to the provided data, the district has made rapid strides of progress in increasing the number of institutional deliveries, accounting for 62 percent of all deliveries. This is a commendable change towards improving human health and development.

Still births occur principally due to malnutrition of the expectant mother and their lack of health education leading to a poor health status. If still births are prevalent in a region, it highlights the unavailability of obstetric services and low nutritional status of women in the region. The still birth rate (SBR) of the district was 16.5 in 2007 and declined to 11.7 in 2014. Veppur and Perambalur blocks show a SBR of 14.5 and 9.03 respectively in 2014. In comparison with the state average of 11.7, Perambalur's SBR is a cause for concern and needs to be addressed.

Immunization against six killer diseases of childhood, tuberculosis and polio among them, is advocated for every child. Vaccines are provided to children at various ages. As of 2014, Perambalur district had achieved 98 percent vaccination, a commendable feat.

Nutritional status

Nutritional status of the population, particularly the youth, has a direct bearing on the outcome of the success of that population in terms of contributions to the labour market and their communities. It is seen that differences in the socio-economic status affects the growth of children. A population that is more deprived (in terms of access to nutrients, hygiene etc.) has a more adverse impact in its height and weight outcomes. Perambalur district has recently shown urgency in addressing the matter and taken measures to improve the nutritional status of the youth. Although these measures have been highly beneficial, they have not sustained themselves in the long term.

Depending on the classification system used for defining the various degrees of malnutrition, the actual percentage of children classified as normal and mild, moderate and severe malnutrition vary. However, irrespective of classification, the conclusion is that around half of the children in the 1 – 5 years age group in India are underweight. Perambalur blocks recorded 21.18, Alathur 21.18, Veppanthattai 21.28, Veppur 14.42 of underweight children. Although there was a remarkable improvement in nutritional status in 2014 but the measures have not been sustained and a fall is inevitable.

As part of government schemes, iron folic acid (IFA) tablets have been given out to reduce the incidence of iron deficiency anemia with a focus on the women population. IFA tablets

have been given to 76% of women, 33% of children and 42% of adolescent girls in the district. The focus should turn towards adolescent girls and children as they are at the highest risk of anemia and it bears a direct impact on their academic and learning abilities. Among the blocks, Alathur recorded the highest percentage of women consuming IFA tablets (97%) while Veppanthattai registered the lowest (59%).

Supplementary nutrition scheme is a unique program launched as a pilot project by the Tamil Nadu government in Perambalur district as a program to combat anemia observed in 58,000 children in the district. As part of the program, biscuits and kadalaimittai are given to children in the break time. After the success of the pilot program, the government plans to extend the project to other districts in the state.

Various other schemes such as the noon meal program, provision of curry leaves and drumstick leaf powder, as well as the public distribution system offer support to people in terms of nutrition.

Non-nutritional factors and their impact on nutrition

Water supply has a direct bearing on nutrition. A growing population needs sustained water supply on a long-term basis. The government has assessed the availability and accessibility of drinking water and set a goal of supplying 40 litres per capita per day in rural areas. Water is a major source of infection for most of the communicable diseases. The World Bank estimates that 30 million life years are lost per annum due to water-borne diseases, acute diarrhea disease (ADD) being a major cause. According to the 2011 census, 97% of habitations in the district have been provided with safe drinking water.

Sanitation is a prerequisite of a healthy society. Providing this facility is crucial for achieving the goal of "health for all". Open defecation, open sewers and a negative attitude towards modern sanitation have curbed the development of rural societies for a long time. The introduction of drainage and latrine facilities assumes much significance.

The availability of toilets and bathroom is also one of the most important indicators of health and human development. Of the 1,42,092 households in the district, only 48 percent had toilet facilities. The remaining section of the population, 52% of the households, practice open defecation in the common areas of the villages, creating negative externalities. To prevent such practices, concerted effort is required to disseminate knowledge and create awareness among people on sanitation and its impact on their health and environment.

HIV is one of the important problems affecting the modern world. In Perambalur district, the voluntary counseling and training centre was established in January 2002. In 2007, 225 HIV positive cases were registered, and in 2011, there were 155 positive cases. There is a network of positive group functioning in the district. Called the CD+ network, it consists of 494 persons living with HIV and AIDS. They engage themselves in livelihood development programmes and counseling. The government has made a commendable effort in controlling the AIDS-affected population in terms of legislative measures to improve their quality of life.

Tuberculosis is a killer disease that requires swift treatment from the moment of onset. Revised National Tuberculosis Control Programme (RNTCP) was implemented in Perambalur district in 1999 under the guidance of the State and central governments. 249 positive TB cases were recorded in 2007, and 228 cases in 2011. Perambalur block has the highest number of positive TB cases (76) while Alathur block has the lowest number (38).

Health recommendations

The overall health outlook of the district can be deemed unhealthy in comparison with the rest of the State. The negative aspects and health indicators outweigh the positive aspects by a fair amount. Nutrition, water, sanitation and health education are some areas in which Perambalur needs to make giant strides.

Although there have been good efforts in recent times in improving the nutrition provided to the population, such efforts need to be sustained and refined. The nutritional status of the population is a critical matter and improving it requires direct intervention and large financial outlays to set a benchmark. The water and sanitation standards need to be improved drastically and improvements in these areas will lead to an improvement in the quality of health and life in the district.

A healthy population is every economy's most valuable resource. Other measures that can be taken up by the government include enhancing the rural literacy rate, elimination of vector-borne diseases such as malaria and water-borne diseases like ADD, hepatitis, jaundice and tuberculosis, creating awareness about HIV and AIDS, establishment of periodical camps under the "Varummun Kappom Thittam" to create public awareness.

Literacy and Education

Education is a key strategy to improve individuals' well-being and societies' economic and social development. Education is also a key strategy for reducing poverty. Literacy is traditionally defined as the ability to read and write, with understanding, a short, simple sentence about one's everyday life. Literacy has several advantages – Educated parents provide better nutrition and healthcare for themselves and their children. The education of parents is also an important factor in reducing child labour. Education also improves self-esteem, enhances social status and leads to confidence in dealing with officials. Literacy is a fundamental necessity as it paves the way for further learning and training in the formal sector.

The aggregate literacy rate of the district stood at 66.5 percent as against the State's value of 80.33 percent in 2011. Literacy has a role to play in gender development. - While the female literacy rate in the district has shown improvement, rising from 48 to 59.28 percent in the decade 2001 – 2011, it is still well below the State female literacy level of 73.4. The male-female literacy gap for the district is 14.44 points. Despite improvements in literacy rates, the problem of gender discrimination against females is a systemic problem.

Achieving universal primary education and eliminating gender disparity at all levels of education are among the Millennium Development Goals (MDG) of the United Nations. The State government has been committed to the task of providing universal education to all children in the age group 6 – 14 years, as seen in the student enrolment in the district, which is nearing complete enrolment.

Effectiveness of education is reflected by a higher retention rate. The completion rate in Alathur block has decreased significantly to 96.9, as of the 2013 – 14 year. The reasons for the decrease must be ascertained because there are many implications to such trends. The dropout rate in middle schools has remained at 1 percent in 2013 and 2014, males and females accounting for 1.57% and 0.43% percent respectively.

Enrolment in middle schools is lower in places where there are people with low incomes. Such places often have child labourers and non-farm employment. Enrolment in middle schools needs to be given attention since they are the gateway to high schools and higher secondary education. While the district level percentage of enrolment remained the same at 94.09% in 2011 – 2012, Alathur block registered the lowest percentage (92.59%)

The educational achievements of Perambalur district must be acknowledged – Despite being an economically backward and primarily agricultural district with few industries, the district has made great strides in the educational front – The district has made persistent effort to

enroll mainstream out-of-school children aged 6 – 14 years. Specific intervention programs were undertaken to achieve the objective of near-universal enrolment.

While the overall completion rate in the district has remained consistent over the past few years, the district still has some way to go towards achieving universal access of secondary level education in the age group of 15 – 16 years by 2015. Providing extra support for education of girls, rural children and students belonging to SC/ST, minority and other weaker sections of society would help attain the target. Some surveys have identified that even though children are enrolled in schools, they often do not attend due to various socio-economic factors. Accordingly, the net attendance ratio (NAR) is necessary to understand the true picture.

The government's policy states that every habitation with a population of 300 and above should have a primary school within a distance of 1 kilometre. While this is strictly followed for the 314 habitations in the district, viewed block-wise, it appears that Alathur has the lowest percentage (62%) of access to primary schools while Perambalur has the highest (98%). Further, the number of schools and rooms (with 40% of all schools have less than one room per class for upper primary) and the quality of the existing classrooms remain a major concern. Schools must also be more inclusive towards students with disabilities, who are presently marginalized by the system.

The pupil-teacher ratio for primary schools in the state as a whole is 38, while it is 27 and 29 for primary and upper primary schools in Perambalur district, much better than the national average of 40. To a very large extent, what children learn in schools is what teachers teach them, and the nation depends on the quality of its teachers. The problem of teacher absenteeism aggravates the situation and must be addressed sternly.

Enrolment at higher secondary schools in Perambalur district have been consistent in the past few years. The first step in increasing access to high and higher secondary schools is to provide sufficient schools, classrooms and teachers.

Of the total 100 high schools and 58 higher secondary schools in the district, 59% of the schools are managed by the government or its local bodies, while the rest are private schools. An increase in the number of private schools has been observed. This phenomenal rise of private unaided institutions is of concern since enrolment in such schools is biased against girls and lower castes, leaving them to government schools. The rise of private schools can be attributed to rising levels of disposable income and the perceived teacher absenteeism and lack of infrastructure in government schools.

Higher education in the district has seen a rapid increase in the number of colleges offering arts and science courses, as well as a rise in the number of engineering colleges. Education and technical training of the potential entrants into the workforce will not only augment high productivity employment but also result in higher growth. Higher education and higher income levels would lead to a higher level of human development.

Perambalur compares well with the state's average performance with respect to access to universal education indicators. General literacy in Perambalur is 66.5, much lower than the target of 90 percent. The gender gap in literacy is 14.44 points, even though women's literacy is key to empowering women's participation in decision making and improving families' well-being.

Perambalur is likely to meet the target of zero level drop-out rate at the elementary level, while the drop-out rate at the high school is quite high and has only reduced marginally. This should be a major concern for the district. Other great challenges in the education sector are the exclusion of girls from education, and the lack of preparation of students for 21st century job markets because they are learning too little. Access to secondary and higher education continues to be limited, and even if that is not the case, the quality of education provided is often low.

There needs to be an increased emphasis on the education of female adults and children. This would lead to various improvements to general human development – family health would improve, more women would participate in the labour force and contribute to household and national income, more women would participate politically, and educational systems would be more gender sensitive.

The current trend of privatization in higher education could possibly fracture the education system into two tiers – high quality private education meant for a wealthy minority, and low-quality public education for most citizens, thus making education a means of stratification and poverty. The quality of education at government schools must be improved to check the rise of private schools.

Gender

Inclusive development cannot be attained unless women participate equally in the development process. Developing countries like India face huge gender inequalities that have a direct bearing on their human development. Gender inequality remains a pervasive problem within the patriarchal set-up of Indian society, where a female child is ignored when it comes to health, nutrition or education. In the low socio-economic strata of the population of Perambalur district,

anemia is rampant among women in the reproductive age group, and children, which greatly reduces their capacity to learn and work.

The status of women can be determined by considering various health, education, income and social indicators.

Work participation rate of women may not necessarily indicate the welfare of women because while women from poor households work, those from economically well-off households may choose not to work. This is evident from the urban-rural work participation ratios. In Perambalur, the female work participation ratio in the agricultural sector is 48.43% while it is 12.6% in administrative and managerial sectors.

Adult literacy as an indicator of gender gap is very important. Literacy rates improve the quality of life of women, and makes them aware of opportunities, rights and freedoms.

Anemia in pregnant women, which is close to 35% in Perambalur district, leads to adverse pregnancy outcomes such as increased risk of complications and severely impairs the physical and mental development of the child.

A superficial consideration of Perambalur district's data on the status of women might show healthy basic indicators like sex ratio, life expectancy and literacy of younger generation, but a number of other glaring and hidden inequities influence quality of life, some of which are subjective indicators. The ultimate measure of the impact of development on gender is the changes in life options for women.

Perambalur is a predominantly rural economy in which women have to work mostly in agricultural fields as labourers to supplement family income. Men continue to outnumber women in government and quasi-government positions. Of the 1332 people who contested elections of local bodies, 757 (61%) were men and 475 (39%) were women. The largest representation of women in elections was in the Village Panchayat Ward Members election. Of the total of 1032, female representation was 404 (39%). Reservation of seats for women in panchayat bodies in Perambalur was 39.44 percent in 2001.

The importance of self-help groups for empowering women gained focus in 1987 with the expansion of the scheme 'Development of women and children in rural areas'. The scheme promotes self-employment among rural women by providing vocational training, and economic and social self-reliance of women. In Tamil Nadu, the scheme has been more or less successful in enabling BPL women to cross the poverty line. In Perambalur district, there are 629 self-help groups of which 559 SHGs have credit linkage and a credit amount of 283.78 lakhs has been availed.

Pudhu Vaazhvu Project, an empowerment and poverty alleviation project implemented by the government of Tamil Nadu with World Bank assistance, covers 2509 village panchayats in 70 backward blocks in 16 districts. The project is under implementation in three blocks of Perambalur district since 2011, and 29,000 households have been targeted through the scheme, which aims to help village communities identify their own needs, design and plan interventions and implement and monitor them. Due to the efforts of the project officials, a garment factory that provides jobs to 150 women has been set up in the district in the private sector.

Any favourable change in women's status must be initiated from the family, the basic social unit. Change in the attitude towards women would enable them to have better access to education and develop self-esteem. The traditional culture of patriarchy means that men always hold higher positions of power, and so it necessitates the commitment of men to the process of women empowerment. Male awareness regarding the importance of gender mainstreaming should be generated through different awareness programmes of government agencies and NGOs. In the long run, respect towards women can be cultivated through the formal education system.

Women should be provided infrastructure facilities such as improvement in the water supply system, increased electricity coverage in interior villages, access to better and easily available cooking fuel and easing access to health services for rural women. Introduction of micro-level training programmes for adoption of non-traditional activities by SHGs will help women engage in remunerative work and enable their economic empowerment.

Social Security

Social security is defined as support to individuals to live and experience a life with reasonable standard of living without any hindrances whatsoever. The main focus of the social security program is to ensure improvement in the quality of life. In Tamil Nadu, social security is provided through promotional and protective measures, such as pension benefits, assistance to poor women and pension for vulnerable groups. The five categories of people who receive pensions are aged people, deserted wives, destitute widows, differently abled people and destitute agricultural labourers.

Old Age Pensions

The demographic profile of the aged in Perambalur district indicates that the population of the aged in 2011 was 76,412, of which 40,018 were men and 36,394 were women. This represents a 13.51% of the total population, an increase from the 9.1% figure seen in 2001. Many factors have contributed to the rise in aged people depending on the old age pension (OAP) scheme.

Life expectancy has risen over the years, which for the District was 72.6 years for Women and 69.1 for Men, while urbanization has led to the migration of young men and women to urban areas for employment, leaving the elderly in rural areas. This rise in nuclear families has left the elderly without the traditional family support. The situation is compounded in families that have no assets and are fully dependent on daily wages for their livelihood.

5.15% of the total population in the district is covered by the old age pension scheme. The coverage of various pension schemes in Veppur and Veppanthattai blocks are lower than other blocks. The lower access to road facilities in the blocks correlates with the lower coverage under pension schemes. The block administration must sensitize the village administrations to enumerate better with an empathetic attitude towards the social disadvantaged sections of society.

The number of differently-abled persons receiving pension increased from 575 in 2001 to 3394 in 2011. The destitute widows pensions provides Rs. 400 to widows who have not remarried.

Destitute deserted wives pension provides Rs. 400 to women under thirty years of age deserted by their husbands for over five years. As of 2011, there were 953 beneficiaries of the scheme in the district.

Increase in the elderly population necessitates special attention towards extra care and health security. Aged people may be more susceptible to various diseases like heart problems, arthritis and osteoporosis, other than age specific diseases like dementia. A study from ICMR indicates that 88% have eyesight problems. Aged people who are helpless and who have no place to go need utmost care and affection for their survival. In Perambalur district, there is a home for the aged run by St. John Sangam Trust, assisted by a grant from the State government. Another NGO named Periyar Kudil runs a home for the aged. Thanthai Roever Centre has a day care centre for the aged in Elambalur.

A long-term policy has to be charted out in terms of providing health care. A special team of doctors including those taking care of PHCs need to be given intensive exposure in geriatric care to provide appropriate care for the aged.

While the child marriage count is steady across the state, it is dipping in Perambalur due to the efforts of the district administration. In the three years since 2001, officials have stopped as many as 300 child marriages and ensured their continued education. The District Collector has formed a special cell called 'Agazhi' to safeguard all women in the district. Each school has been

provided with contact of the village administrative officer right up to the Collector, and the child helpline number 1098.

Violence against women has been a major concern at the world level. Women in Tamil Nadu face various forms of violence like female infanticide, female foeticide, rape, domestic abuse, and these forms of violence happen in various settings like family, workplace, school, roads and hospitals. Women in rural areas do not report incidents to safeguard the values and respect of the family. Therefore, we cannot completely rely on official records to understand violence against women.

According to the crime rate in Perambalur district, incidents of rape have increased from 3 in 2001 to 14 in 2012. Of the 246 crimes against women documented in 2012, molestation and female harassment constitute 63%. Several institutions, such as women police stations, free legal aid institutions, counseling centres, and above all, the State Commission for Women (SCW), exist to address violence against women. There are several NGOs striving to curtail atrocities and different forms of torture through gender awareness and legal literacy programs with the support of the SCW. The legal reforms suggested by the latter must be implemented in the area of divorce, remarriage and domestic violence.

Other social welfare schemes

Mahatma Gandhi National Rural Employment Guarantee (MGNREGA) Scheme was introduced in 2005 and extended to Perambalur in 2008. The scheme guarantees hundred days of employment in a financial year to any rural household whose adult members are willing to do unskilled manual work. The focus of the scheme is to enhance the sustainable livelihood of the people by developing economic and social infrastructure. In the year 2012 – 2013, a total of 1,08,383 people have availed employment though the scheme, with a cumulative budget of Rs. 48,920 crores.

Doctors of government hospitals and PHCs must be provided specialized training in geriatric care, and they must be able to attend physical and mental ailments of elderly people. The establishment of a counselingcentre in the Taluk headquarters could provide medical services and counseling to help senior citizens manage their physical and mental challenges.

Senior counsellors could be consulted to find out what would keep them physically, mentally and socially active. A focused nutrition program for age related issues like osteoporosis, arthritis and dementia needs to be initiated.

The district has registered a rare achievement in the care of the differently abled by ensuring that there are no home-based differently abled children in the district. All 467 differently abled children in the age group 0 -8 have been attached to the ten day care centres run by Sarva

Shiksha Abhiyan (SSA). The commendable initiative taken by the district administration with the active participation of SSA, Pudu Vaazhvu Thittam and the department of differently abled welfare led to this achievement. However, special day care centres for the differently abled is important since their needs are different. Such day care centres would require staff with a different set of skills to support them.

Infrastructure

Economic development and prosperity of an economy depends on the availability of infrastructural facilities. Infrastructure enables all sectors of the economy to speed up their growth rates. Transport and communications infrastructure is important in terms of providing access to basic health services and improving life and health conditions. For Perambalur district, which is primarily rural (with under 15% of the population in urban areas) and with one of the lowest per capita incomes in the state, development of infrastructure becomes all the more important. Better infrastructure is the key for successful delivery of many of the schemes linked to better human development.

Transport facilities

Perambalur district is well connected by road. Perambalur is the major junction where NH-45 (Chennai-Trichy) and NH-226 meet. NH-226 runs from Perambalur to Manamadurai, covering a distance of 212 kilometres. SH-157 runs between Attur and Perambalur. However, in terms of road density, Perambalur's 73.75 kms per 100 square kilometres falls short of the State average of 153 km per 100 sq. km.

Out of the total distance of 1084.67 km, 42% of the roads are unsurfaced. These statistics point to the fact that there is significant scope for improving the quality of roads, particularly rural roads. Further, there are some interior places in Veppur and Veppanthattai blocks where many villages that still do not have road facilities.

Perambalur has two bus stands – the old bus stand, that handles intra-town transport and the new bus stand that handles State Express Transport Corporation (SETC) and inter-district transport buses.

Perambalur has a few kilometres of railway line, and the district has no railway stations. Indian Railways plans to link the town of Perambalur with other major stations in Tamil

Nadu. A special thrust must be given to the Indian Railways to connect Perambalur district with the rest of the country.

Communication

There are 11,835 post offices in Tamil Nadu, out of which 132 are in Perambalur district. This number pertains to post offices involved in postal work alone. Apart from the postal department, there are eight major private courier services in the district. There are 27 telephone exchange offices and 599 public call centres within the district. While there is no data available on mobile internet connectivity, internet penetration and supporting infrastructure, it is clear that internet will have a sizeable impact on various development indicators in the future.

Irrigation

Perambalur's agriculture is largely rain-fed agriculture. In such a situation, the importance of a network of tanks and wells takes prominence and strengthening this infrastructure would have a direct impact on irrigation and cropping intensity. Improved performance in agriculture and related fields is the key to unlock the tremendous potential of the rural areas.

Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management (TN IAMWARM) is a unique World Bank funded project that aims to maximize productivity of water to improve farm incomes and products. Under this project, 63 selected sub basins are to be covered in a period of six years (2007-2013). In Perambalur, the Chinnaur sub-basin has been identified under IAMWARM – Phase II. 33 tanks and nine anicuts were taken up for renovation in Perambalur district at a cost of Rs. 5.36 crore. This project benefits a total ayacut of 3,006 hectares in Perambalur district.

ANNEXURES

Appendix Tables

TABLE 9.1: BLOCK-WISE HDI INDICATORS IN PERAMBALUR DISTRICT

S.No	Block	Standard of Living					Health			Education		
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
	Source	Census	DRDA	DRDA	Census	DRDA	Health Department			Education Department		
	Year	2011	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14
1	Alathur	34.55	43.00	100.00	96.88	51.90	21.80	187.00	2.50	63.53	100.11	98.62
2	Perambalur	78.00	30.00	100.00	90.96	46.38	13.80	53.10	2.13	73.41	100.17	97.82
3	Veppanthatai	30.53	41.00	100.00	95.59	57.29	19.50	84.60	1.70	64.99	100.15	97.14
4	Veppur	29.58	32.00	100.00	79.68	49.22	13.20	0.00	2.60	62.53	100.13	98.17

TABLE 9.2: BLOCK-WISE HUMAN DEVELOPMENT INDEX IN PERAMBALUR DISTRICT

Standard of Living Indices					Health Indices			Education Indices			Standard of Living Index	Health Index	Education Index	Overall Index	Rank
Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary					
0.15	1.00	1.00	1.00	0.65	0.20	0.09	0.31	0.42	0.99	1.00	0.63	0.18	0.75	0.44	4
1.00	0.19	1.00	0.76	0.30	0.94	0.74	0.63	1.00	1.00	0.93	0.53	0.76	0.98	0.73	1
0.08	0.88	1.00	0.95	1.00	0.42	0.59	1.00	0.51	1.00	0.87	0.58	0.63	0.76	0.65	2
0.06	0.31	1.00	0.32	0.48	1.00	1.00	0.22	0.36	1.00	0.96	0.31	0.61	0.70	0.51	3

Gender Inequality Index

TABLE 9.3: BLOCK-WISE GII INDICATORS IN PERAMBALUR DISTRICT

S.No	Block	Health			Empowerment						Labour					
		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
	Source	Health Department			Census				RD&PR Department		Census				DOES	
	Year	2013-14	2013-14	2013-14	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2013-14	2013-14
1	Alathur	187.00	100.00	100.00	55.70	71.50	50.65	49.30	37.30	62.70	48.40	51.60	10.19	22.78	191.00	191.00
2	Perambalur	53.10	100.00	100.00	68.10	78.70	47.90	52.10	38.50	61.50	41.60	58.40	28.82	50.94	191.00	191.00
3	Veppanthatai	84.60	100.00	93.00	57.90	72.20	47.70	52.30	41.40	58.60	47.20	52.80	10.92	27.27	191.00	191.00
4	Veppur	0.00	100.00	70.00	53.70	71.30	45.30	54.70	39.80	60.20	46.20	53.80	10.15	22.69	191.00	191.00

TABLE 9.4: BLOCK-WISE GII INDEX IN PERAMBALUR DISTRICT

0.00	0.12	0.19	0.05	MMR	Health Index
1.00	1.00	1.00	1.00	Share of Institutional Deliveries	
0.70	0.93	1.00	1.00	Share of Ante Natal Coverage	
0.54	0.58	0.68	0.56	Female Literacy	Empowerment Index
0.71	0.72	0.79	0.72	Male Literacy	
0.45	0.48	0.48	0.51	Share of female Children (0-6) years	
0.55	0.52	0.52	0.49	Share of male Children (0-6) years	
0.40	0.41	0.39	0.37	Share of Female Elected Representativies in RLBs and ULBs	
0.60	0.59	0.62	0.63	Share of Male Elected Representativies in RLBs and ULBs	
0.46	0.47	0.42	0.48	Female Worker Participation Rate	Labour Index
0.54	0.53	0.58	0.52	Male Worker Participation Rate	
0.10	0.11	0.29	0.10	Female Worker Participation Rate in Non-Agri Sector	
0.23	0.27	0.51	0.23	Male Worker Participation Rate in Non-Agri Sector	
1.00	1.00	1.00	1.00	Female Agri. Wage rate	
1.00	1.00	1.00	1.00	Male Agri. Wage rate	
0.00	0.48	0.57	0.38		Female Health Index
1.00	1.00	1.00	1.00		Male Health Index
0.46	0.49	0.51	0.47		Female Emp Index
0.66	0.65	0.70	0.67		Male Emp Index
0.68	0.69	0.64	0.70		Female LF Index
0.73	0.73	0.76	0.72		Male LF Index
0.11	0.54	0.57	0.50		GF
0.78	0.78	0.81	0.78		GM
0.19	0.64	0.67	0.61		GFM
0.50	0.74	0.79	0.69		Health Bar
0.56	0.57	0.60	0.57		Emp Bar
0.71	0.71	0.70	0.71		LF Bar
0.58	0.67	0.69	0.65		GFM Bar
0.67	0.04	0.03	0.07		GII
4	2	1	3		Rank

TABLE 9.5 BLOCK WISE MULTI DIMENSION POVERTY INDICATORS IN PERAMBALUR DISTRICT

S.No	Block	Health			Education		Standard Of Living				
		IMR	HOBR	Malnourished	Drop Out Primary	Drop Out Secondary	LPG	Toilet	DW	PH	EB
	Source	Health Department		ICDS	SSA	RMSA	Census	DRDA			Census
	Year	2013-14	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2011
1	Alathur	21.80	12.70	24.12	0.43	1.11	34.55	43.00	100.00	51.90	96.88
2	Perambalur	13.80	9.50	21.17	1.18	0.82	78.00	30.00	100.00	46.38	90.96
3	Veppanthatai	19.50	10.40	21.27	0.63	0.56	30.53	41.00	100.00	57.29	95.59
4	Veppur	13.20	16.50	14.42	1.30	0.71	29.58	32.00	100.00	49.22	79.68

TABLE 9.6 BLOCK WISE MULTI DIMENSION POVERTY INDEX IN PERAMBALUR DISTRICT

Index Value											Rank
Health			Education		Standard Of Living					Overall	
IMR	HOBR	Malnourished	Drop Out Primary	Drop Out Secondary	LPG	Toilet	DW	PH	EB		
0.00	0.54	0.00	1.00	0.00	0.90	0.00	1.00	0.49	0.00	0.39	1
0.93	1.00	0.30	0.14	0.53	0.00	1.00	1.00	1.00	0.34	0.62	3
0.27	0.87	0.29	0.77	1.00	0.98	0.15	1.00	0.00	0.07	0.54	2
1.00	0.00	1.00	0.00	0.73	1.00	0.85	1.00	0.74	1.00	0.73	4

TABLE 9.7 BLOCK WISE CHILD DEVELOPMENT INDICATORS IN PERAMBALUR DISTRICT

		Data Value							
		Health			Education				
S.No	Block	U5MR	Juvenile Sex Ratio	Malnourishment	Primary GER	Secondary GER	Children Never Enrolled	Transition Rate P->UP	Transition UP->S
	Source	Health	DOES	ICDS	Education Department				
	Year	2013-14	2011	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14
1	Alathur	2.50	898.74	24.12	100.11	98.62	0.00	99.59	99.63
2	Perambalur	2.13	919.19	21.17	100.17	97.82	0.00	99.43	98.93
3	Veppanthatai	1.70	913.58	21.27	100.15	97.14	0.00	98.58	99.23
4	Veppur	2.60	917.00	14.42	100.13	98.17	0.00	99.74	98.91

TABLE 9.8 BLOCK WISE CHILD DEVELOPMENT INDEX IN PERAMBALUR DISTRICT

Index Value									
Health			Education					Overall	Rank
U5MR	Juvenile Sex Ratio	Malnourishment	Primary GER	Secondary GER	Children Never Enrolled	Transition Rate P->UP	Transition UP->S		
0.11	1.00	0.00	1.00	1.00	1.00	0.87	1.00	0.75	1
0.52	0.00	0.30	1.00	0.46	1.00	0.73	0.03	0.51	3
1.00	0.27	0.29	1.00	0.00	1.00	0.00	0.44	0.50	4
0.00	0.11	1.00	1.00	0.70	1.00	1.00	0.00	0.60	2

TABLE 9.9 CRUDE BIRTH RATE TREND

	2009	2010	2011
Perambalur	15.5	15.8	14.7
Tamil Nadu	16.3	15.9	15.9

TABLE 9.10 TRENDS IN CRUDE BIRTH RATE

Block	2010	2011
Alathur	15.8	14.5
Perambalur	14.4	13.6
Veppanthattai	16.1	15.3
Veppur	17.3	15.9
District	15.8	14.7

TABLE 9.11 INFANT MORTALITY RATE TREND

District/State	2007	2008	2009	2010	2011	2014
Perambalur	20.4	24.9	22.5	22.8	19.7	17.8
Tamil Nadu	35	31	28	24	22	21

TABLE 9.12 INFANT MORTALITY RATE

Name	2010	2011	2014
District	22.8	19.7	17.08
Alathur	24.7	19	21.80
Perambalur	18.2	23.9	13.80
Veppanthattai	26.6	20.4	19.50
Veppur	22.2	20.2	13.20

TABLE 9.13 PERCENTAGE OF INSTITUTIONAL DELIVERY

District/Block	Private Hospital	GH	Primary Health centre	Sub health center	Home
District	35.71%	42.28%	21.96%	0%	0.06%
Alathur	31.94%	42.97%	25.09%	0%	0.00%
Perambalur	34.25%	50.81%	14.80%	0%	0.15%
Veppanthattai	34.38%	41,69%	23.90%	0%	0.04%
Veppur	42.25%	33.66%	24.05%	0%	0.04%

TABLE 9.14 TREND IN NUTRITIONAL STATUS (0-5 YEARS)

Sl.No	Block	Normal children	SUW	MUW
1	Alathur	78.83	0.46	20.72
2	Perambalur	78.83	0.46	20.72
3	Veppanthattai	78.72	0.43	20.85
4	Veppur	85.58	0.52	13.90

TABLE 9.15 LITERACY RATE

Sl. No		**2001**			**2011**		
		Male	Female	Total	Male	Female	Total
1	Perambalur	71.79	55.79	50.12	78.69	68.07	73.41
2	Veppanthattai	67.06	47.83	46.29	72.22	57.89	64.99
3	Veppur	66.16	42.17	44.46	71.33	53.71	62.53
4	Alathur	66.54	45.63	45.54	71.50	55.67	63.53
	District	68.01	48.00	46.73	73.72	59.28	66.49

TABLE 9.16 ARTS & SCIENCE COLLEGES

Sl.No	District	Government	Aided	Unaided	Total
1.	Perambalur	1	0	5	6

TABLE 9.17 NUMBER OF ENGINEERING COLLEGES

Sl.No.	District	Engineering				Polytechnic			
		Government	Aided	Unaided	Total	Government	Aided	Unaided	Total
1.	Perambalur	0	0	6	6	1	0	5	6

Technical Notes

Construction of Indices

Introduction

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

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

Indicators for HDI

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

Indicators for measuring HDI

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

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

Method of Estimating HDI

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

1. All computations would be done at two stages. The first computation would help in understanding the relative positions of different blocks within the district. The second set of computation would relate to the position of a block with reference to other blocks As a first step, a minimum and maximum value has to be set for each of the above 11 indicators to transform them into indices lying between zero and one. For this purpose, the observed minimum

and maximum figures for each of the indicators will be taken. Since the Geometric Mean has to be calculated, in the case of a positive indicator, the minimum value would be taken as 10 per cent less than the observed minimum value in the block similarly, in the case of a negative indicator, the maximum value would be taken as 10 per cent more than the observed maximum value.

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

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

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

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

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

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

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

4. To compute HDI, aggregate the three sectoral indices using geometric mean with the following formula.
HDI= $(SI_l \times SI_h \times SI_e)^{(1/3)}$; where SI_l is the sectoral index for living standard, SI_h is the sectoral index for health and SI_e is the sectoral index for education.

Construction of Gender Inequality Index (GII)

Introduction

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

Indicators considered for measuring GII

Dimensions	Indicators
Health	Maternal Mortality Rate (MMR)
	Share of Institutional deliveries (ID)
	Ante-natal coverage
Empowerment	Share of female and male elected representatives in Urban and Rural Local Bodies (PR_F and PR_M)
	Share of female and male literacy (LIT_F, LIT_M)
	Share of Female and Male Children (0-6) years
Labour market	Share of female and male Work

	Participation Rate (WPR_F, WPR_M)
	Share of female and male workers in the non agricultural sector (NAG_F, NAG_M)
	Female and male Agricultural wage rate ($WAGE_F$, $WAGE_M$)

Method

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

For females

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

For Males

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

2. Aggregating across gender group using a Harmonic mean.

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

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

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

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

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

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

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

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

Construction of Child Development Index (CDI)

Introduction

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

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

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

Indicators for Child Development

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

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

Computation of Child Development Index

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

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

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

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

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

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

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

Multidimensional Poverty Index
Indicators

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

Computation of Multidimensional Poverty Index

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

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

      Eg.: calculations will be based on highest values being assigned highest ranking
    - The index value (in the case of a negative indicator) can be calculated by using the formula –

      Index Value = (Max. Value – Actual Value) / (Max.Value – Min.Value)
- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block
- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

ABBREVIATIONS

ADD	Acute Diarrhea Disease
AIDS	Acquired Immuno Deficiency Syndrome
ARV	Anti-retro Viral
AWW	Anganwadi Workers
BPL	Below Poverty Line
CBR	Crude Birth Rate
CDI	Child Development Index
CDD	Community Driven Development
CDR	Crude Death Rate
DALP	Destitute Agricultural Labourers Pension
DANIDA	Danish International Development Assistance
DHDR	District Human Development Report
DWCRA	Development of women and children in rural Areas
DWP	Destitute Widows Pension
FDRS	Family Distress Relief Scheme
FGDs	Focus Group Discussions
GDI	Gender Development Index
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
GER	Gross Enrolment Ratio
GH	Government Hospital
GII	Gender Inequality Index
HD	Human Development
HDI	Human Development Index
HDR	Human Development Report
HH	House Holds

HIV	Human Immuno-Deficiency Virus
HPI	Human Poverty Index
HSC	Health Sub Centres
ICTC	Integrated Counseling and Testing Centre
IFA	Iron Folic Acid
IGNOAP	Indira Gandhi National Old Age Pension
IMR	Infant Mortality Rate
IRDP	Integrated Rural Development Program
MMR	Maternal Mortality Rate
LBW	Low Birth Weight
LEB	Life Expectancy at Birth
MDGs	Millennium Development Goals
MDT	Multi Drug Treatment
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MPI	Multidimensional Poverty Index
NAR	Net Admission Rate
NER	Net Enrollment Rate
NDP	National Domestic Product
NGO	Non-Governmental Organization
NH	National Highways
NLEP	National Leprosy Eradication Program
OBC	Other Backward Castes
OAP	Old Age Pension
PCI	Per Capita Income
PHC	Primary Health Centre
PHP	Physically Handicapped Pension
PRA	Participatory Rural Appraisal

RMSA	Rashtriya Madhya SikshaAbhiyam
RNTCP	Revised National Tuberculosis Control Programme
SBR	Still Birth Rate
SC/ST	Scheduled Castes / Scheduled Tribes
SETC	State Express Transport Corporation
SEZ	Special Economic Zone
SGSY	SwarnaJayanti Gram SwarozgarYojana
SH	State Highways
SHG	Self Help Group
SSA	SarvaShikshaAbhiyan
STD	Sexually Transmitted Diseases
TANGEDCO	TamilNadu Generating Power & Distributing Corporation
TANTRANSCO	TamilNadu Transmission of Power Corporation
TB	Tuberculosis
TN IAMWARM	Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management
TNSDHR	TamilNadu State Human Development Report
TNSTC	TamilNadu State Transport Corporation
UNDP	United Nations Development Program
UNESCO	United Nations Educational Social and Cultural Organisation
U5MR	Under 5 Mortality Rate
VCTC	Voluntary Counselling and Training Centre
VHN	Village Health Nurses

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