



District Human Development Report - 2017

**Tiruvallur
District**

**State Planning Commission
Tamil Nadu**

TIRUVALLUR

DISTRICT HUMAN DEVELOPMENT REPORT 2017

**District Administration, Tiruvallur, and
State Planning Commission, Tamil Nadu
in association with Hand in Hand India**

CONTENTS

TitlePage No.	
Message by Member Secretary, State Planning Commission	i
Preface by District Collector	ii
Acknowledgements	iii
List of Boxes	v
List of Figures	vi
List of Tables	vi
List of Annex Tables	viii
Chapter 1 District Profile	1
Chapter 2 Status of Human Development	13
Chapter 3 Employment, Income and Poverty	23
Chapter 4 Demography, Health and Nutrition	37
Chapter 5 Literacy and Education	61
Chapter 6 Gender	81
Chapter 7 Social Security	91
Chapter 8 Infrastructure	101
Chapter 9 Summary and Way Forward	115
ANNEXURES	
Tables	131
Technical notes	160
Abbreviations	166
References	171

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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
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PREFACE

I acknowledge the efforts by the State Planning Commission and Hand in Hand India with the assistance from UNDP and the Government of Tamil Nadu towards the preparation of District Human Development Report and I am happy to be associated with this process. Present report portrays various facets of district's development highlighting joint initiatives by the State Government and district administration to achieve sustainable human development.

The report includes detailed discussions pertaining to key geographical, as well as sociocultural features of the district; the status of employment, poverty and economic growth; key health and nutritional parameters; literacy, status of school education and higher education and educational infrastructure; socioeconomic as well as political empowerment of women; social security for vulnerable population; and infrastructure options available to the people of the district etc.

The report provides a holistic picture of human development, bringing out the intra-district variations, enabling assessment of the status of human development in terms of four indices, namely, Human Development Index, Gender Inequality Index, Child Development Index and Multidimensional Poverty Index. Computation of these indices is based on 2011 census data as well as 2013-14 data collected from various departments of district administration. The indices have been constructed to enable a broad analysis at block levels, leading to concrete suggestions for changes in policy and programme focus.

The discussions on indices and respective features of development also underscore the challenges ahead and it is hoped that this exercise will help in evolving an appropriate development strategy that ensures effective and efficient use of available resources. The report captures exemplary efforts made by the Government to improve the delivery of public services for the people. Hence, I hope that this report would help provide an opportunity to gain in-depth and comprehensive understanding of issues as well as potential avenues for improving life in the district and would serve as a useful tool for adopting appropriate development strategies.

E. SUNDARAVALLI

Acknowledgements

The preparation of the Tiruvallur District Human Development Report was primarily initiated by the State Planning Commission (SPC), Government of Tamil Nadu, with the support received from the United Nations Development Programme. Considering that Hand in Hand India has been extensively working in the district for more than a decade, and is familiar with the people and practices there; the SPC entrusted the task of preparing this report to Hand in Hand. This has given us an opportunity to gain a deeper understanding of the socioeconomic realities in the district, which will inform our interventions there in the near future. Hand in Hand appreciates this opportunity.

Tamil Nadu State Planning Commission and Tiruvallur District Administration were our core partners during the entire process. Ms. Santha Sheela Nair, IAS (Retd), Vice Chairman, SPC, GoTN, reviewed the progress of this exercise periodically and provided direction. We would like to thank her for the valuable support. Contributions from other officials from the State Planning Commission deserve special mention here. Mr. M. Balaji, IAS, former Member Secretary, SPC, GoTN, who has commenced this exercise; Dr. Sugato Dutt, IAS, former Member Secretary i/c, SPC, GoTN who has provided all necessary administrative support and resources to accomplish the task; Mr. P. Selvarajan, Head of Division, Rural Development and District Planning; Ms. S. Namagiri, Senior District Planning Officer, Ms. Abhirami, Planning Officer; and Dr. G. N. Krupa, Planning Officer; conducted detailed reviews. Dr. M. Vijayabaskar, Associate Professor, Madras Institute of Development Studies, provided critical inputs during consultations; and Mr. Anil Meshram, IAS, Member Secretary, SPC, GoTN, who has been instrumental in taking this endeavor to its conclusion.

District Planning Office was the nodal agency for source of all data. To this end, the contributions from Ms. P. Mythili, the District Planning Officer; Ms. V. P. Nirmala, Statistical Inspector; and other Line Department Officials were crucial. The numerical data was substantiated with supporting information on ground realities by Panchayat Presidents and Administrators at block and district level. Ms. Nirmala coordinated collection of data and ensured validity of the data and information, accurate computation of the indices, and precision in narrative report. She has gone through the draft reports from margin to margin and suggested fitting changes. We immensely appreciate her dedication and diligence. Entire district administration was guided by Mr. K. Veera Raghava Rao, IAS, the former District Collector and

Ms. E.Sundaravalli, the present District Collector. We would like to also acknowledge with a deep sense of appreciation the information shared by the people of the district.

Dr. R. Rengrajan conducted a consultation with the Panchayat Presidents and officials from district administration, examined the 2011 census data, and interpreted it in the geo-political and socio-cultural context of the district and prepared the first draft of the report. Dr. Sujata, too, has contributed to the contents of the first draft. We are thankful to both of them for kickstarting the exercise with urgency and interest.

With 2011 as its base year, the report tracks changes in development trends through consecutive years. This has necessitated constant updating of the data from different sources at block and district levels and revisions in the calculation of indices. Subsequently, the narration has also gone through substantial revisions. Colleagues and partners provided exceptional support to that end.

Colleagues from Hand in Hand India's Child Labour Elimination Programme and Self Help Group Programme shared stories from the field. Mr Abdul Gaffoor provided coordination support. Ms. Princes Buela and Mr Prabakar Gnanakkan facilitated district level consultations for substantiating and validating the data. Mr R. Unnikrishnan lent his safe hands and eagle eyes to accurately calculate the indices for the first draft. Ms. Anitha Ranjan and Mr. A. Settu have ensured timely submission of draft copies and other communications on a number of occasions. Ms. Poorvaja Kumar provided editorial support. Present report is a result of extraordinary camaraderie and commitment amongst all of them.

The entire team received immensely valuable support from Dr. Kalpana Sankar, Chairman and Managing Trustee, Hand in Hand India, and Dr. N. Jeyaseelan, Group CEO, Hand in Hand India. Deliberations in the present document are indicative of trends in the dynamic realities in the district captured till the year 2013-14, and would need further enquiry and interpretation for evolving actionable strategies in the present times.

MAYA NIRMALA
HAND IN HAND INDIA

List of Boxes

Box	Title	Page
1.1	Animal Husbandry and Fisheries.....	6
3.1	MGNREGA – Employment and Income	25
3.2	Gummidipoondi- Dwindling Livelihoods.....	28
3.3	Status of Child Labour in The District.....	29
3.4	Pallipet – Economic Activities and Challenges.....	34
4.1	Maternal and Child Care – A Public Healthcare Emergency.....	45
4.2	District Headquarters Hospital – Leading by Example.....	46
4.3	Human Resources in Public Health Care System – Some concerns.....	47
4.4	Utilization of Public Health Services	50
4.5	Government Nutrition Programmes	55
5.1	Incentives for Enrolment.....	64
5.2	Back to Where They Belong.....	65
5.3	Reading and Writing Skills Among Primary and Upper Primary Students.....	71
5.4	Initiatives for Quality Improvement in Education.....	73
5.5	Technology Initiative in School Education.....	76
5.6	Skill Gap Assessment	78
6.1	Towards Gender Budgeting in Tamil Nadu.....	84
6.2	Self Help Groups.....	86
6.3	Kuthuvillakku SHG The Lamp of Success.....	88
7.1	Marriage and Maternity Assistance Programme.....	98
8.1	Kuthambakkam – Setting Precedent.....	102
8.2	Chennai Metropolitan Development Authority Initiative.....	106
8.3	Gummidipoondi – Looking for Development.....	111
8.4	Narikuravas, the Urban Poor and Programmes for Development of Slums....	112

List of Figures

Figure	Title	
1.1	Crude Birth Rate.....	10
1.2	Infant Mortality Rate.....	10
1.3	Rate of Literacy.....	11
4.1A	Trends in CBR.....	39
4.1B	Trends in CDR	39
4.2	Infant Mortality Rate.....	43
4.3	Institutional Deliveries.....	48
4.4	Trends in Nutritional Status of Children between 0 to 6 years	52
4.5	Access to Drinking Water.....	56
5.1	Male and Female Literacy Rates.....	62
5.2	Arts, Science, Engineering and Polytechnic Colleges.....	77
6.1	Female Work Participation	85

List of Tables

Table	Title	Page
1.1	Basic Demographic Indicators.....	5
1.2	Gross District Domestic Product.....	8
1.3	Per Capita Income at Constant (2004-05) Prices.....	8
2.1	Top and Bottom Three Blocks in Human Development Index.....	14
2.2	Top and Bottom Three Blocks in Gender Development Index.....	16
2.3	Top and Bottom Three Blocks in Child Development Index.....	18
2.4	Top and Bottom Three Blocks in Multi-Dimensional Poverty Index.....	20
2.5	HDI, GII, CDI And MPI Indices at a Glance.....	21
3.1	Total Workers and Non-Workers	24
3.2	Work Participation Rate	26
3.3	Composition of Workers in Major Sectors	27
3.4	Registration and Placement	30

Table	Title	Page
3.5	Per Capita Income	31
3.6	Household Poverty	33
3.7	Family Card Holders.....	35
4.1	Demographic Profile.....	38
4.2	Sex atio.....	40
4.3	Child Sex Ratio.....	41
4.4	Life Expectancy at Birth.....	43
4.5	Maternal Mortality Rate.....	44
4.6	Still Birth Rate.....	49
4.7	Provision of IFA Tablets.....	54
4.8	Householdswith Access to Toilet.....	57
4.9	Incidence of HIV	58
4.10	Incidence of Tuberculosis	59
5.1	Gross Enrolment at Primary Education.....	63
5.2	Completion Rate and Dropout Rate in Primary Education.....	64
5.3	Gender Wise Enrolment at Upper Primary /Middle School Education.....	66
5.4	Completion Rate and Dropout Rate in Upper Primary Education.....	67
5.5	Transition Rate from Primary to Upper Primary & Upper Primary toSecondary	68
5.6	Availability of Schools.....	69
5.7	Pupil to Teacher Ratios in Primary and Upper Primary Schools.....	70
5.8	Gross Enrollment Rate in Secondary Education.....	72
5.9	Dropout Ratio in Secondary Education.....	73
5.10	Availability of Higher Secondary Schools.....	74
5.11	School Infrastructures	75
5.12	Hostels for the ADW and BC Students	76
6.1	Comparative Status of Women.....	82
6.2	Membership in State Assembly and Local Bodies.....	89
7.1	Demographic Profile of the Aged.....	93
7.2	Financial Security of the Aged.....	94
7.3	Assistance to Differently Abled.....	95

Table	Title	Page
7.4	Crimes Against Women.....	99
8.1	Block-wise Distribution of Total Road Length.....	104
8.2	Status of Electrification.....	105
8.3	BSNL Telecommunication Systems.....	107
8.4	Commercial and Cooperative Banks.....	108
8.5	Insurance Companies.....	109

List of Tables in the Annexure

Table	Title	Page
A 2.1	Human Development Index Data and Indices.....	131
A 2.2	Gender Inequality Index Data and Indices	134
A 2.3	Child Development Index Data and Indices.....	137
A 2.4	Multidimensional Poverty Index Data and Indices	139
A 1.1	Land Utilization Pattern.....	141
A 1.2	Sources of Water	141
A 1.3	Public Health and Medical Services in the District.....	141
A 1.4	Health Indicators State verses District.....	142
A 1.5	Infant Mortality Rate.....	142
A 1.6	Rate of Literacy.....	142
A 3.1	Total Workers and Non-Workers (In Percentage).....	143
A 3.2	Female Work Participation Rate.....	143
A 3.3	Households Provided Employment Under MGNREGA.....	144
A 3.4	Number of Households with Pucca Houses.....	144
A 3.5	Household Poverty.....	145
A 4.1	Trends in Crude Birth Rate and Crude Death Rate.....	145
A4.2	Percentage of Institutional Deliveries, 2013- 14.....	146
A 4.3	Ante Netal Coverage.....	146
A 4.4	Immunization Status.....	147

Table	Title	Page
A 4.5	Nutritional Status of Children Below 5 Years.....	147
A 4.6	Pregnant Women with Anemia.....	148
A 4.7	Percentage of Habitations Provided with Safe Drinking Water.....	148
A 4.8	PLHA (Registered in HIV Care) - Tiruvallur GH ART Centre May 2015.....	149
A 5.1	Percentage of Literacy.....	149
A 5.2	Children Never Enrolled in Schools.....	150
A 5.3	Higher Educations in The District	150
A 5.4	Tiruvallur District Skill Requirements, Availability and Gap- A Glance	151
A 6.1	Population 2011.....	151
A 6.2	Number of Workers 2011.....	151
A 6.3	Female Work Participation Rate 2011.....	151
A 6.4	Female Workers in Non – Agricultural Sector 2011.....	152
A 6.5	Self Help Groups- Access to credit Mahalir Thittam programme	152
A 6.6	Self Help Groups- Access to credit Mahalir Thittam programme	153
A 6.7	SHG Bank Linkage Programme - 2013-2014.....	153
A 7.1	Special Assistance Given to the Differently Abled.....	154
A7.2	Disabled Children Studying in Special Schools - 2012-13.....	156
A7.3	Children Studying in Special Schools (DDAWO) – 2012 -13.....	156
A 7.4	Disabled Children Studying in Regular Schools 2012 -13.....	157
A 7.5	Assistance to Differently Abled Under Vazhandhu Kattuvom Project.....	157
A 7.6	List of Schemes and Benefits for Transgender People in Tamil Nadu.....	158
A 8.1	Availability of LPG Connections.....	159
A 8.2	Block Wise Credit Plan - 2013 -14	159

CHAPTER 1
TIRUVALLUR DISTRICT- A PROFILE

Chapter 1

District Profile

Introduction

"Tiruvallur", or "Tiru, where do I sleep?" asked Lord Veera Raghavar to a saint, requesting for a place to rest for a night, as the folklore goes. More than 5000 years ago, the legend was immortalized in the form of a temple for the Lord. Tiruvallur and Kancheepuram districts, both diverted from the erstwhile Chengalpattu, are traditionally known for their temples, and their textiles. Handlooms in Tiruvallur district are holding their own ground till date, however, powerlooms and host of other industry giants now rule the roost. Tiruvallur, the fastest growing industrial district in Tamil Nadu, which in turn is the fastest urbanizing State in India; has consolidated its position as one of the top earning as well as top retail spending districts in India way back in 2007.¹The district attracts professionals and labourers from many other States including the adjoining State of Andhra Pradesh, harbouring a multilingual, pluralistic community sporting a cosmopolitan milieu coexisting with its traditional temple culture, giving it a unique layered identity.

Topography

Tiruvallur district is located in north-east Tamil Nadu and lies between 12°15' and 13°15' north latitude and 79°15' and 80°20' east longitude. The district is surrounded by Kancheepuram district in the south, Vellore district in the west, Bay of Bengal in the east and Andhra Pradesh in the north. The total geographical area of the district is 342,243 hectares or about 3,422 square kilometers. The coastal region is mostly flat while certain areas in Tiruttani and Pallipet taluks are undulated and even hilly. However, there are not many hills of any considerable height in this district. There are a few conical hills or ridges of small elevation, like the St. Thomas Mount. Most of the hills and hillocks are rocky and no verdant vegetation is seen in the slopes of these hills.

The area under forests, all of 19,736 sq. km., is only 5.8 % of the total geographical area of the district. Forest cover in Tiruvallur is quite scanty, in comparison with 17.41 % of forest cover in Tamil Nadu or 24 % forest cover in India. This presents a rather sorry state of forests in the district as the country aims at increasing its forest cover to 33 %. (Annex Table A1.1) Rocks

¹The Times of India Bangalore; date: Aug 24, 2006; section: times nation; page: 7

found close to the surface are in detached masses. Hence, the soil can't be termed as very fertile. The soil types predominantly found are red non-calcareous and coastal alluvial. Sandy soil mixed with soda or other alkalis is also found in the district. The soil found nearer to the seacoast is of the inferior erinaceous type, which is most suited for raising casuarina plants. No mineral of any importance is available in the district.

The average normal rainfall of the district is 1104 mm. Out of this about 50 % is received during north east monsoon period and about 40 % is received during south west monsoon period. The average temperature of the district is a maximum of 37.9°C and a minimum of 18.5°C. Like other parts of Tamil Nadu, hot climate prevails during the months of April and May and humid climate during the rest of the year except in December, January and February when it is slightly cold.

Tiruvallur district is part of the composite east flowing river basin and Arniyar, Kosathaliar and Coovam sub basins. Araniyar, Korattalayar, Cooum, Nagari and Nandhi are the important rivers. The drainage pattern, in general, is dendritic. All the rivers are seasonal and carry substantial flows during monsoon period. Korattalayar river water is supplied to Sholavaram and Red Hill tanks by constructing an Anicut at Vellore Tambarambakkam. After filling a number of tanks on its further course, the river empties into the Ennore creek a few kilometers north of Chennai. The Cooum River, flowing across the southern part of the district, has its origin in the surplus waters of the Cooum tank and also receives the surplus waters of a number of other tanks. It feeds the Chembarambakkam tank through a channel. It finally drains into the Bay of Bengal. Water sources in the district include canals, tanks and wells. (Annex Table A1.2)

History

'Tiruvallur', the original name of the district, signifies the sleeping position of the holy lord "Balaji", in the Veeraragava temple of Tiruvallur. People refer to the district by names such as Trivellore and Tiruvallur. The new moon day is very auspicious day both for the lord and for the people of the town.

Tiruvallur has a very eventful political history. A peek into the early history of this region shows that, in the far past, this region was under a chain of regimes commencing from the Pallavas during the 7th century ending with the Nawaz of Arcot during the early part of 19th century when it came under the British rule. In 1687, the Golconda rulers were defeated and the region came under the Moghul emperors of Delhi. The towns and villages of this region were the

battlegrounds of Carnatic wars. Battles have been fought in this region during the struggle for supremacy between the English and French. The town of Pulicat was the earliest Dutch possession in India founded in 1609, which was ceded to the British in 1825. With this, the region came under the British rule, which ended on the 15th of August 1947 with India becoming independent.

Post-independence too the district has undergone changes in terms of administrative divisions since its inception in 2005-06. The newly formed Tiruvallur revenue division included Tiruvallur, Tiruttani taluks and Uthukkottai and Pallipet sub-taluks separated from Chengalpattu district along with Ponneri and Gummidipoondi taluks of Saidapet revenue divisions. At present, this district comprises of nine taluks, namely Ambattur, Gummidipoondi, Ponneri, Uthukkottai, Tiruvallur, Poonamallee, Tiruttani, Pallipet, and Madhavaram. The district has been divided into four revenue divisions namely, Tiruvallur, Tiruttani, Ponneri and Ambattur. There are three taluks under Tiruvallur division, two taluks under Tiruttani division, two taluks under Ponneri division and two taluks under Ambattur division. There are 46 firkas and 820 revenue villages. Likewise there are 14 blocks, 5 Municipalities and 10 town panchayats that implement rural development activities.

Language

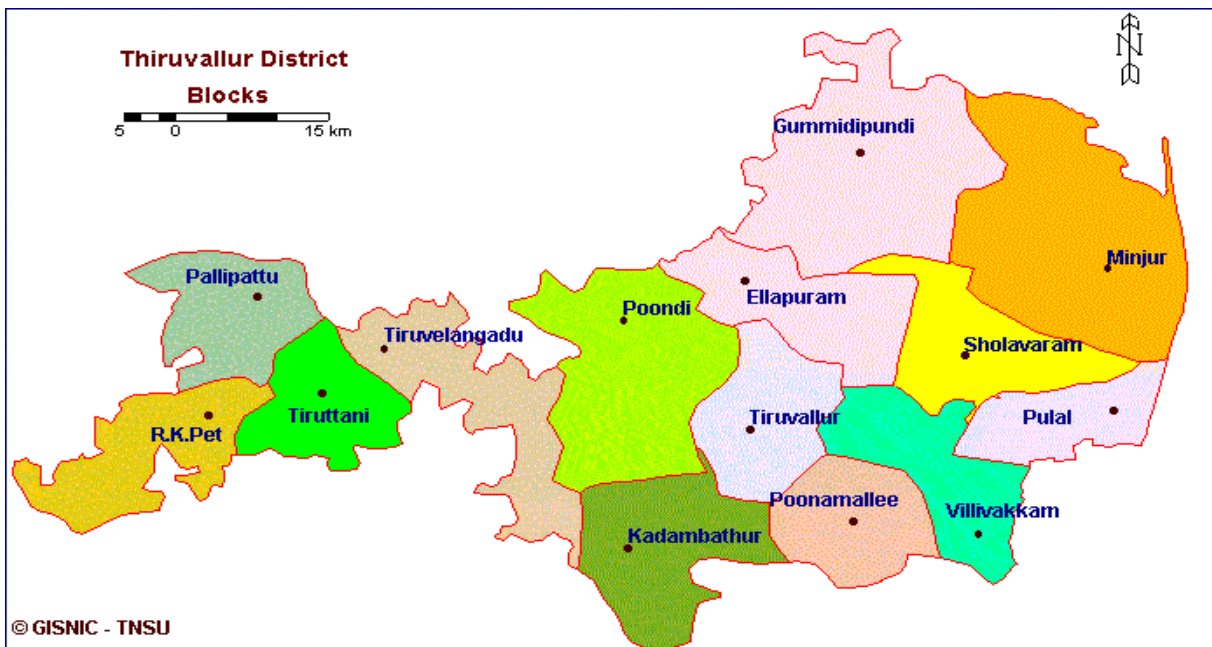
The official language spoken in the district is Tamil, which is one of the oldest languages of India. It has undergone several changes with significant contributions made by poets, scholars and rulers over several centuries. 'Tholkappiam', a work on the grammar of the Tamil language and the earliest extant work of Tamil literature, dating back to the 5th century BC, is a standing monument testifying to the antiquity of the Tamil language. Being a district bordering Andhra Pradesh, besides Tamil, Telugu is also spoken here. The other languages prominently spoken in the district include Hindi, Urdu and Malayalam. Being an industrial district a large proportion of migrant labourers come from Bengal and Orissa. People seeking employment in the corporate sector also come to this district from several other states including the north eastern states. People, who come from elsewhere and make the district their own home, also sow the seeds of their native language and culture.

Art, Architecture and Culture

The Gudiyum cave the first of its kind in India, discovered by geologist Sir Robert Bruce Foote exists near Poondi in Tiruvallur taluk of Tiruvallur district, and reaching there means taking some adventurous

paths into the silent forests, which can actually turn out to be a nice expedition for trekkers and nature lovers. Historically being an agrarian region, most of the district is therefore rural in nature. However, the district also adjoins areas of the highly urbanized Chennai city. The major religion here is Hinduism, though the district also has population following Christianity and Islam. It has many temples dedicated to various legends down the history. The temples add to the rich heritage and the culture of this district and there are many festivals unique to this region. Important festivals include Tiruttani Adi-Kiruthikai Peruvizha, Periyapalayam Adi-Peruvizha celebration 10 days, Tiruvallur Sri Veeraraghavar Temple Amavasya celebration (every month), and Mahalaya Amavasya day.

District Map



Basic Demographic Indicators

Population in the district has increased by about 10 lakh, during the period from 2001 to 2011 at the growth rate of 35.33 %, with similar increase in density (40.33 %). Rate of urbanization in the district is very swift and haphazard. Population in the district is concentrated in the urban areas. The urban population is 65.1 % (2011), which is a considerable increase from 54.45 % in 2001. On a positive note, sex ratio has increased from 971 in 2001 to 987 in 2011. Signs of slowing down of the population growth are visible in the decreased percentage of under-six population from 12.0 % to 10.88 %. (Table 1.1) The district also has a large proportion of elderly (8.44 %, see Table 7.1) and an increased dependency ratio.

TABLE 1.1 BASIC DEMOGRAPHIC INDICATORS

Sl. No	Indicators	2001	2011
1	Population No.	27,54,756	37,28,104
2	Decennial growth (%)	23.06	35.33
3	Density of population per sq. km.	776	1098
4	Urban population (%)	54.45	65.1
5	Sex ratio (Females per 1000 males)	971	987
6	Percentage of 0-6 year old	12.0	10.88

Source: Census documents 2001 & 2011

ECONOMY

Being a fast industrializing and fast urbanizing district, Tiruvallur district's current economy is predominantly industrial. The district has many prominent industries like Madras Refineries, Madras Fertilizers, Manali Petro Chemicals, Madras Rubber Factory (MRF), Ashok Leyland, TI Cycles, Britannia India Ltd, Parry India Ltd and Hindustan Motors. It also boasts of the Ennore Thermal Power Station and the Avadi Tank Factory. The district has 16 Industrial Estates, all in operation, of which 11 were developed by the Government and 5 by private organisations. While industry sector is a major contributor to the economy, agriculture has contributed just 3.04 % of the Gross District Domestic Product (GDDP) in the year 2011-12 (Table 1.2). Agriculture, engages about 21.4 % of the total work force as cultivators and farm hands, which is, however, lower in comparison to the State, where agriculture is the biggest employer.(Table 3.3) The sector wise contribution to economy is discussed below.

Agriculture

Agriculture provides food security, employment and income to the households. Any changes in this sector would have implications on the food and nutritional security. Major crops grown in the district are rice, cumbu, ragi, green gram, black gram, sugarcane and groundnut. Apart from this, certain horticultural crops like mango, guava and vegetables have also been cultivated successfully. Net area sown in the district during 2012-13 was 104899 hectares which is 30.65 % of the district's total geographical area. (Annex Table A1.1) The increased demand for land for construction due to its close proximity to Chennai metropolitan city and industrial growth in Tiruvallur district has created a pressure on the land use. The reduction in net area sown is attributed to conversion of cultivable land into non-cultivable land for real estate business, as it is an attractive business venture with assured high profits.

Water is an important determinant factor for both intensive and extensive cultivation of land. Apart from seasonal rivers like Kosathaliar, Aravar, Nandi, Kallar, Cooum and Buckingham Canal, there are no perennial rivers in the district. Medium and minor irrigation schemes are implemented in the State for augmenting the irrigation for agriculture through various sources. The district has a number of canals, tanks, tube wells, open wells and springs that cater to the agricultural lands. (Annex Table A1.2). The difficulty in increasing irrigation propensity and the need for enhancing cropping intensity without the required increase in net sown area has added pressure on the agricultural sector. In view of food security, it is essential to sustain the existing performance of the primary sector and ensure that a positive growth trend in other sectors does not affect the primary sector growth.

BOX 1.1 Animal Husbandry and Fisheries

Animal husbandry is a subsidiary occupation in Tiruvallur district due to the presence of number of small and marginal farmers. Presently, there are four Government programmes in operation viz. Backyard Poultry Farm Scheme, Buffalo Rearing Scheme, Special Animal Husbandry Programme and Special Campaign to Protect Animals. There are five Veterinary Hospitals, 24 Veterinary Dispensaries, 77 sub-centers and 14 mobile veterinary units catering to the needs of the farming community. The total coastal area of the district is about 49,803 hectares and has a coastline of 80 kilometers for marine fisheries. Prawn and shrimp culture is famous along the coastline of Gummidipoondi and Minjur. The total fish production is to the tune of 11,372 tones.²

A report on 'Costal Fisheries and Poverty' suggests that landlessness is most common among fishing communities indicating an almost complete dependence on fisheries for a livelihood and bulk of the fishermen lived below the poverty line.³Coromandel Coast being severely affected by coastal erosion, most of the coastal communities lives on the narrow strip of land between the sea and privately-owned agricultural land, eking out a living mainly through fishing and related occupations like boat building and drying and preserving fish. The severe pressure put on them by the erosion of their habitat has now forced many fisher folk to relocate into forest areas inland giving up their traditional livelihood for casual and exploitative daily wages. This has the potential to depress the labour market for unskilled labour in the project area.⁴Efforts to understand poverty issues in the fisheries sector must take into account the specificities of the sector. While the evolving understanding of the multi-dimensional nature of poverty is welcome, measurement of poverty in all its complexity remains a methodological challenge in fisheries.⁵

²Tiruvallur district website(<http://www.tiruvallur.tn.nic.in/profile.htm>)

³Report on Coastal Fisheries And Poverty: The Case Of India; For International Fund For Agricultural Development (IFAD)October 2003International Collective in Support of Fish workers

⁴Socioeconomic Study of 31 Villages in Gummidipoondi & Uthukkottai Taluks, Tiruvallur District, Tamil Nadu, Forrad 2010-11

⁵Report on Coastal Fisheries And Poverty: The Case Of India; For International Fund for Agricultural Development (IFAD)October 2003International Collective in Support Of Fish workers

Industry and Other Sectors

The massive industrial development in the district has a fair share of micro and small industries, engaged in manufacturing various products like leather, textiles and chemicals. Some of the economic activities undertaken by the rural artisans involve manufacturing of jute, coconut shell products, and palm leaf based products, paper cups, leather and Rexene works. Tiruvallur district has a sizeable proportion of people engaged in the handloom sector. Small and medium size industries too engage a large proportion of workers. The growth in the secondary and tertiary sectors, i.e. the industry and service sector in the district has been faster than the State. This trend is accelerated by good infrastructure reinforcing district economy. Certain blocks in the district have specialized in certain specific industries as listed below:

Major types of industries and their existing bases:

- Textile products / handloom - Pallipet and R.K. Pet blocks
- Bricks industries - Poonamallee and Villivakkam blocks
- Electrical & Electronics products - Kakkalur in Tiruvallur block
- Engineering & Allied industries - Gummidipoondi & Villivakkam block

The progressive industrial trend in the district also points to the scope for further development, particularly in the exportable items such as auto components, engineering products, leather, garments, rubber products, cycle, electronic goods, marine products, cosmetics and textiles. There is also lot of potential for the development of vertical and horizontal linkages in the vendorisation or ancillarisation of the industries related to auto components, fabrication and job work for garment units.

R. K. Pet and Pallipet blocks have large number of handloom and power looms. It is often seen that the income levels of those in the textile sector – handlooms or power looms have not increased commensurate with the growth in that sector. If the handloom industry has thus far survived competition from the power looms, it is largely because of its own resilience. Now, with demand for traditional handloom products fast declining owing to changing consumer preferences, poor marketing facilities, dearth of knowledge on skills and technical expertise to adapt to changing demand and lack of infrastructure to upgrade the looms; the handloom sector is in shambles. If lakhs of weavers' families are to be saved from their desperate situation, the

industry, the second largest employer in Tamil Nadu after agriculture, needs to be re-oriented with sound Government support.⁶

TABLE 1.2 SECTOR WISE GROSS DISTRICT DOMESTIC PRODUCTS AT CONSTANT (2004-05) PRICES(IN LAKH RUPEES)

Sl. No	Year	District				State			
		Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total
1	2007-08	77237	677035	1077186	1831458	3150807	9151736	18213138	30515681
2	2008-09	75987	646208	1241225	1963420	3079411	8962975	20136950	32179336
3	2009-10	75108	906125	1365795	2347028	3279727	10857492	21525966	35663185
4	2010-11	78824	957170	1567644	2603638	3516987	12542302	24282284	40341573
5	2011-12	85369	955741	1762784	2803894	3872767	13039248	26411788	43323803

Source: Deputy Director of Economics & Statistics, Tiruvallur

Agriculture sector has always been comparatively smaller in the district and is further shrinking in terms of GDDP. While the share of primary sector during 2011-12 is comparatively low in the GDDP (3.04 %) as well as the Gross State Domestic Product (GSDP) (8.9 %), a decreasing trend in the comparative share is seen when compared to 2007-08 both in the district (4.2 %) as well as in the State (10.3 %). The growth of primary sector is much lower in the district in comparison to the State (District 10.5 %, State 22.9 %) in the reference period 2007-08 to 2011-12. However, both the district and the State have seen the secondary sector grow by 41.2 % and 42.5 %, respectively, in the same reference period. This has resulted in a marginal increase in the district's share in the State's GSDP from 6.0 % to 6.47 % in the reference period. Tertiary sector has seen faster growth in the district, in comparison with growth of tertiary sector in the State (District 63.6 %, State 45.0 %). (Table 1.2)

Income

Per Capita Income (PCI) decides not only one's purchasing power and capability to access the goods and services, but also has implications pertaining to access to better livelihood opportunities. Even a short term improvement in the income can speed up long term reduction in poverty levels. District PCI at constant prices has been consistently higher than State PCI

TABLE 1.3 PER CAPITA INCOME IN RUPEES AT CONSTANT (2004-05) PRICES

	2007-08	2008-09	2009-10	2010-11	2011-12
Tiruvallur District	58464	61588	72366	78930	83594
Tamil Nadu	46293	48473	53359	59967	63996

Source: Department of Economics & Statistics,

⁶Weavers in distress, *Frontline*, Volume 19 - Issue 17, August 17 - 30, 2002

PCI in the district indicates a marginally higher percentage increase (43.0 %) as compared to the increase of PCI in the State (38.2 %) during the reference years 2007-08 and 2011-12. The growth in PCI could be attributed to growth in industry and service sector, movement of labour, and proximity to Chennai metropolis.

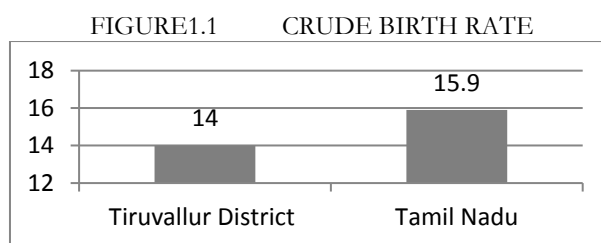
SOCIAL SECTOR

Any advancement in the economic arena will not reach its optimal potential unless it is reinforced by well-being of the people. Access to public healthcare services and universal primary education are closely related to four key Millennium Development Goals (MDGs), namely, universal primary education, reduced child mortality, improved maternal health and combating HIV/AIDS, malaria, and other diseases. The district fares better than the State in many of the parameters pertaining to health and education. However, inter block variations in terms of access, infrastructure, and quality of services cause concern.

Health

The district has 14 hospitals, 44 PHCs, 303 Health Sub Centres, and host of private medical facilities such as 53 Nursing Homes, 42 Maternity & Child Welfare Clinics, 405 Allopathic Hospital/Clinics, 3 Ayurvedic Hospitals/Clinic, and 64 Homeopathy Clinics. Besides the network of public and private health facilities, the district has the advantage of being located close to Chennai metropolitan city and access to its 24 hours high tech medical facilities. (Annex Table A1.3) By way of participating the State's innovative and pioneering public healthcare initiatives, such as Comprehensive Emergency Obstetric and New Borne Care (CEmONC), Cardio Vascular Disease Control Programme (CVD), Non Communicable Disease Control Programme (NCD) and Cervical Cancer Screening Programme (CCS) and proactive health care delivery through the public facilities, the district has achieved impressive health outcomes for its population, which are comparable with the State performance.

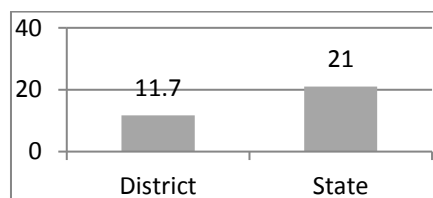
The birth rate is an issue of concern and policy for national governments. The anti-natalist policies help lowering of the birthrates by way of enhancing access to contraception, an increase in the status and education of women, a reduction in the value of children's work, an increase in parental investment in the education of children and other social changes.



Source: Deputy Director of Public Health, 2013-14

CBR however is a proxy indicator, which does not account for movement of migrant people who often do not have adequate documents, cannot or do not access health services, and remain invisible. Considering that Tiruvallur district has a large share of migrant population in organized as well as unorganized sectors, stricter labour laws, and social and financial inclusion of the migrant population will go a long way in giving an authentic population data besides, protecting the rights of the migrants. District IMR is much lower at 11.7 deaths for each 1000 live births as compared to the State IMR. (FIGURE. 1.2)

FIGURE 1.2 INFANT MORTALITY RATE (TABLE A1.6)

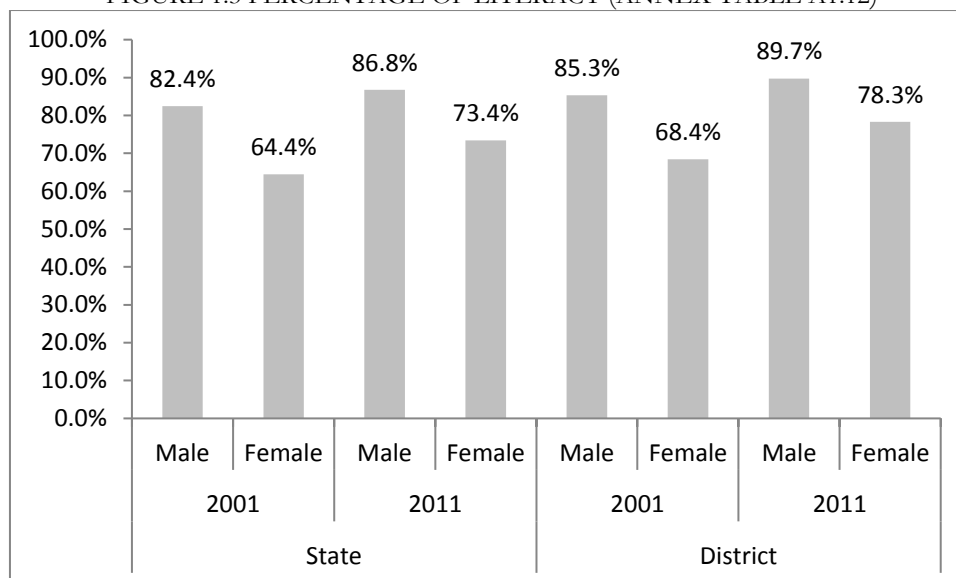


Source: Directorate of Public Health, 2013-14

Literacy and Education

The school education system in Tamil Nadu is characterized by high literacy rates, enrolment and completion rates and impressive facilities for higher education. Most significantly, education system has been made accessible to marginalized groups and women. Higher enrolment rates in primary and upper primary classes are an important indicator for educational empowerment of the people. The literacy rate is 84 % in 2011 in the district. There was an increase in literacy rate by 7 % in between 2001 and 2011. There has been a positive change in both male and female literacy rates, with a 4.4 % increase in literacy among men and approximately 10 % increase among the women during the same period. The higher level in female literacy is encouraging from the gender perspective.

FIGURE 1.3 PERCENTAGE OF LITERACY (ANNEX TABLE A1.12)



Source: Census 2001, 2011

The male-female literacy rate differential has reduced from 12 % to 10 % in a decade but needs to be lowered further. Levels of education and literacy are relatively higher in comparison with the State performance (FIGURE 1.3). School gross enrolment rate; which is the first step in getting the children to the school; in both primary and upper primary classes, is encouraging at 102.70 and 102.40 respectively, in the year 2013-14. (Table 5.1, Table 5.3) Completion rates are also at an acceptable level. Over the years, through various studies, quality issues in the school education have surfaced, indicating that enrollment is not a good enough indicator for education. Lack of quality of education impacts the transition to higher education and access to job appropriate skilling potential of the students.

Tiruvallur district being adjacent to Chennai, there is a remarkable number of educational institutions within the district that are accessible to the district population. A number of engineering and medical colleges, Post Graduate Research Institute in Animal Sciences in Kattupakkam, etc., provide opportunities of higher education not just to the youth in the district but also to those from Kancheepuram and Chennai. What would really enhance the educational environment in the district is facility for trade related skill training, focusing mainly on small enterprises that have reached a stagnation point. Secondly, people from interior villages have comparatively limited access to educational institutions. There is a need for improvement in infrastructure in terms of road and transport, for better access to the schools as well as higher educational institutes.

Conclusion

Tiruvallur district has a combination of traditional temples and handlooms on the one hand, and rapid industrial development on the other hand. Agriculture and family based trades are fast diminishing with the all-encompassing industrial economy and service sector which are major contributors to the faster economic growth in the district. Considering that Tiruvallur district traditionally had a rural economy, it currently has only 5.8 % forest coverage which is extremely low compared to both Tamil Nadu and India; and the discussions with the Panchayat level stakeholders suggest that land under agriculture is also steadily reducing in size. With increasing landlessness and proportion of unskilled labour on the one hand, and superlative industrial development on the other hand; the district has witnessed excessive inter block as well as inter district labour movement and distress migration. Skill gap among youth needs to be addressed and family based businesses, such as handlooms need to be supported with access to credit, technology and markets. Despite, the uneven economic development across blocks, the district has fared well in the health and education sectors. On many fronts the district has performed better than or on par with the rest of the State. Universal availability of facilities and outreach of quality services to all is what the district administration needs to ensure.

CHAPTER 2
STATUS OF HUMAN DEVELOPMENT

Chapter 2

Status of Human Development in Tiruvallur District

Introduction

The Human Development Index (HDI) is a composite statistics of life expectancy, education, and income indices used to rank countries into four tiers of human development. It was created by MahbubHaque, an economist from Pakistan, and Indian economist Amartya Sen in 1990 and was published by the United Nations Development Programme (UNDP). In the 2010 Human Development Report (HDR), a further Inequality-adjusted Human Development Index (IHDI) was introduced. While the simple HDI remains useful, it was stated that “the IHDI is the actual level of human development (accounting for inequality)” and “the HDI can be viewed as an index of ‘potential’ human development (or the maximum IHDI that could be achieved if there were no inequality)”.

The UNDP Report 2010 on HDI continues to adopt the same basic three indicators of education, health and standard of living for the calculation of HDI. Simultaneously, an effort was also made to arrive at Gender Inequality Index (GII) as per the State Planning Commission (SPC) guidelines.

Following four measurements-Human Development Index (HDI), Gender Inequality Index (GII), Child Development Index (CDI) and Multi Poverty Index (MPI) were calculated for the present District Human Development Report (DHDR). All computations have been done at two stages. The first computation would help in understanding the relative positions of blocks under different sectoral indices while the second set of computation would relate to the position of composit block-wise indices in the district. The index values range from 0 to 1.000 and the value for a block shows the distance it falls short of reaching the highest value of 1.000 in case of positive indicators(HDI and CDI). In case of negative indicators (GII and MPI) index values closer to 0.000 are considered more desirable.

Human Development Index

As many as 11 indicators were considered for arriving at the block-wise HDI covering key aspects of human development, i.e. health, education and standard of living, as given below.

Dimension	Indicators considered for measuring HDI
Living Standards	Percentage of HHs having access to cooking fuel
	Percentage of HHs having access to toilets
	Percentage of HHs 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 Rate
	Under Five Mortality Rate
Education	Literacy Rate
	Gross Enrolment Rate Primary Schools
	Gross Enrolment Rate secondary Schools

The Tamil Nadu Human Development Report, 2003, indicates that Tamil Nadu's HDI (2001) was 0.657 as compared to 0.571 for India as a whole with the global HDI ranks were 116 and 132 respectively. Tamil Nadu is also well placed in the South Asian context.

Sectoral indices for the blocks with respect to standard of living range between 0.281 in Tiruvalangadu, and 0.871 in Puzhal. In case of health indices, Tiruvalangadu(0.13) is again at the bottom and Poonamallee (0.955) at the top position. Despite overall impressive performance in the health sector, six of the fourteen blocks, viz., Gummidipoondi, Minjur, Poondi, Sholavaram, Tiruttani and Tiruvalangadu have the index value less than 0.500, whereas, in the education sector, the index values for all blocks are quite high ranging from 0.588 in Poondi to 0.985 in Villivakkam. The overall HDI index reveals a wide variation with Poonamallee (0.911) at the highest and Tiruvalangadu (0.295) at the lowest rank with the inter-block variation between HDI of the first and last ranked blocks is a substantial 0.616. It is also to be noted that three out of the 14 blocks have HDI lower than 0.500. The best performing three blocks and the least performing three blocks are presented in Table 2.1.

TABLE 2.1 TOP AND BOTTOM THREE BLOCKS IN HDI

Top three blocks			Bottom three blocks		
Block	HDI value	Ranking	Block	HDI value	Ranking
Poonamallee	0.911	1	Tiruvalangadu	0.295	14
Puzhal	0.874	2	Gummidipoondi	0.422	13
Villivakkam	0.834	3	Poondi	0.438	12

Eleven of the 14 blocks have HDI value higher than 0.500. Higher HDI in the top ranking three blocks in the district, namely, Villivakkam, Poonamallee and Puzhal, is attributed to presence of pucca houses, cooking fuel, toilet facilities, and electricity. Further good performances in the health indicators such as low MMR and IMR have strengthened the HDI in these blocks. The education sector with relatively high level of literacy rates and enrollment rates in schools

have had its share in enhancing the HDI in the district. The top three blocks do have the advantage of being located close to the Chennai metropolitan area having the benefit of good physical infrastructure and facilities.

In the case of bottom three blocks, namely, Gummidipoondi, Poondi and Tiruvalangadu record relatively lower performance viz., large number of non-agricultural workers and unavailability of pucca houses, toilets and drinking water facility for many. In Gummidipoondi, the density of population is very high and the coverage of civic amenities is much lower. Tiruvalangadu is a uniformly low ranking block in all three parameters. It has the highest death rate in the district. Tiruvalangadu block has one of the lowest Child Sex Ratio (CSR) (899), and highest IMR (20.2) in the district. Despite overall sex ratio in Tiruvalangadu having marginally increased between 2001 and 2011, CSR has decreased from 949 to 899, indicating not just poor birth outcomes but also regressive social practices such as female foeticide and female infanticide. Focus on health interventions in the blocks where health indices are very low could improve their overall HDI ranking. Areas could be identified where minimal State intervention has the potential to yield maximum progress in terms of HDI as a strategy, besides planning focused interventions in blocks that are backward in more than one way.

Gender Inequality Index

GII measures the potential loss in human development owing to the persistent inequality between female and male achievements, and as such is a negative indicator. The index purports to express among other things access to reproductive health services on the one hand the disparity between women's work participation in formal and informal sectors and its visibility as well as value in the traditional patriarchal societies. While modern societies embrace new ways to empower women and liberate them from undesirable unfair practices, new and subtle, as well as, crude forms of gender based oppression emerge. Governments, civil societies and other non-government organizations constantly pursue methods to reduce the gender divide in order to encourage equitable development of women in all sectors, and to increase protective covers around them. Reproductive health, empowerment and labour market are considered for measuring GII. The indicators considered for each of these dimensions are given below.

Dimensions	Indicators considered for measuring GII
Reproductive Health	Maternal Mortality Rate (MMR)
	Share of Institutional Deliveries (ID)
	Share of Ante-natal coverage
Empowerment	Share of female and male elected representatives in PRIs and ULBs (PR_F and PR_M)
	Share of female and male children in the age group 0-6 years ($CHILD_F$, $CHILD_M$)
	Share of female and male literacy (LIT_F , LIT_M)
Labour market	Share of female and male Work Participation Rate (WPR_F , WPR_M)
	Share of female and male workers in the nonagricultural sector (NAG_F , NAG_M)
	Female and male Agricultural wage rate ($WAGE_F$, $WAGE_M$)

TABLE 2.2 TOP AND BOTTOM THREE BLOCKS IN GII

Top three blocks			Bottom three blocks		
Block	GII value	Ranking	Block	GII value	Ranking
Tiruvallur	0.016	1	Tiruttani	0.117	14
Pallipet	0.028	2	Tiruvalangadu	0.110	13
Poonamallee	0.029	3	Gummidipoondi	0.087	12

Inter-block GII values range from 0.117 in Tiruttani with the worst level of inequality to 0.016 in Tiruvallur with a mild level of gender inequality. Human development takes place through various physical and measurable indicators pertaining to living standards, health and education benefiting both men and women. Uniformity in access to amenities and availability of gender specific services are responsible for high GII ranking whereas better education, enhanced income and higher standard of living for the family. However sociologically, it does not translate into equitable empowerment of women. It is well known that families' upward movement on the income ladder leads to women withdrawing from the workforce resulting in lower GII ranking. Issues pertaining to gender inequality need to be understood in terms complex, tangible and intangibles aspects of human development.

In apparently developed blocks of Tiruvallur district, such as Puzhal, Poonamallee, and Villivakkam, female work participation is very low, whereas, in some of the backward blocks with high proportion of BPL families such as RK Pet, Pallipet women work participation is comparatively higher with lots of women working both as farm hands as well as on Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) sites. Pallipet which has highest proportion of BPL families has one of the top ranking GII values. This is despite there being low access to essential services and highest number of domiciliary deliveries recorded during 2011. Sex ratio in Pallipet too is good at 998 and has improved even among SC population from 998 in 2001 to 1022 in 2011. (Table 4.2)

Sociocultural milieu plays a key role in shaping the status of women in a society. Dowry and male child preference in the families results in lower CSR and lower Sex Ratio at Birth (SRB). Cultural practices where women fast for their husbands' well-being and unequal distribution of food among men and women, boys and girls in the family contribute to the unrelenting presence of nutritional inequality. CSR has lowered in 11 of the 14 blocks, also lowering the district average from 957 to 946 during 2001 and 2011. (Table 4.3) Regressive social practices that have resulted in such appalling statistics hinder realization of women's rights and withhold their participation in the political sphere. Conversely, women's empowerment is known to have a favorable impact on the well-being of their respective families.

Incidence of domiciliary deliveries prevail in nine of the 14 blocks, high ranking HDI blocks such as Poonamallee, Sholavaram, Puzhal and Villivakkam blocks among them. This not just indicates difficulty in accessing healthcare services and shortfall in outreach by the frontline functionaries but also inadequate sensitization among families, particularly male members, about importance of institutional deliveries. This is also indicative of poor decision making power women enjoy about crucial matters that have potential risks to their own lives as well as to birth outcomes. Participation of women in governance, access to credit and educational performance in the district is overall good, which helps keeping the GII afloat. However, in some of the backward blocks like Pallipet, Ramakrishnarajupeta (R K Pet), Gummidipoondi, Tiruvalangadu and Tiruttani, more activities to mobilize and empower women need to take place to improve the GII there.

Child Development Index

CDI was developed by the non-governmental organization Save the Children UK 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. The indicators for calculating CDI; chosen because they are easily available, commonly understood, and clearly indicative of child well-being; are provided below.

Dimensions	Indicators considered for measuring CDI
Health	Under 5 Mortality Rate
	Child Sex Ratio(0-6)
	Malnourishment among Children(0-6)
Education	Enrollment in Primary
	Enrollment in Secondary
	Children never enrolled
	Transition from Primary to Upper Primary
	Transition from Upper Primary to Secondary

Inter-block variations in the health related indicators are higher than variations in indicators pertaining to education. Under-five mortality (U5MR), CSR and malnourishment indices vary from 0.000 to 1.000 among the blocks suggesting that the health and welfare services available for children and pregnant mothers do not have universal and uniform outreach among the target population. Blocks such as Poonamallee, Puzhal and Villivakkam, with a high ranking in HDI, and good infrastructure and amenities, have a poor showing in terms of U5MR. Blocks of Ellapuram, Kadambathur, Poondi and again Puzhal have greater proportion of malnourished children. Extremely low CSR in Kadambathur (922), Pallipet (926), Puzhal (934) and Tiruttani (936) has led to a decline of CSR in the district from 957 in 2011 to 946 in 2011. Tiruvallur is not among the high risk districts marked for female infanticide. However, the current trends are sending out alerts for urgent action before situation reaches an alarming proportion.

TABLE 2.3 TOP AND BOTTOM THREE BLOCKS IN CDI

Top three blocks			Bottom three blocks		
Block	CDI value	Ranking	Block	CDI value	Ranking
Villivakkam	0.798	1	R.K.Pet	0.440	14
Poonamallee	0.768	2	Sholavaram	0.537	13
Pallipet	0.712	3	Puzhal	0.549	12

The education sector has seen lower inter-block variations except for children never enrolled. Villivakkam, Puzhal, Poonamallee and Tiruvallur blocks have cause for concern in this regard. Despite comparatively better education related indices, poor health indices, particularly poor nutritional levels do have a negative impact on academic achievements and quality of learning, which is not measured for this HDR. Improved school sanitation all over the district is one of the major contributors for overall satisfactory educational indices. It is essential to ensure that the inter-block variations in the CDI is addressed at the earliest as children are the most vulnerable members of the population and deficit in their development has the potential to disrupt course of development in remote future.

Multi-Dimensional Poverty Index

Poverty means deprivation that includes lack of money and economic assets, as well as, lack of access to public facilities, services and rights. Ill-being caused by such deprivation includes poor health and nutrition; lack of adequate sanitation, clean water and housing conditions; social exclusion, low literacy, poor quality learning, violence, loneliness, fear about future, lack of recreation, low opportunities for political participation and much more. All these cannot be attributed to economic poverty exclusively, nevertheless contribute to its perpetuation. Thus poor

living and poverty is accumulated in a family, in a community, or in a geography, over elongated periods of time. The tribulations of poverty per se, do not recognize political boundaries, religion, caste or creed. However, assorted social segments that consolidate into firm socio-political entities acquire 'economic class' tags in the course of history. To overcome the discriminative and hegemonic socio-economic equations thus arising, to break the vicious circle of poverty begetting poverty, and to establish a social and economic democracy through a welfare state, under which all citizens can live a good life is 'the' aim of directive principles of Indian constitution.

Since, the economic poverty cannot account for the extent of deprivation, the solutions for addressing the concerns surrounding them also cannot be only economic. Presence of acute malnutrition among under five children in the country, for example, can not be wished away because, India, that was a developing country a few decades ago, has evolved into an emerging economy during past years. It calls for multidimensional measures informed by a range of indicators that capture the complexity of poverty.

The Multidimensional Poverty Index (MPI) was developed in 2010 by Oxford Poverty and Human Development Initiative and the UNDP that uses different factors to determine poverty beyond income-based lists. It has now replaced the previous Human Poverty Index. The MPI is an index of acute multidimensional poverty. It shows the number of people who face multidimensional poverty and the number of deprivations with which poor households typically contend. Although deeply constrained by data limitations, MPI reveals a different pattern of poverty than income poverty, as it illuminates a different set of deprivations. MPI assesses the nature and intensity of poverty across the aspects of health, education, and living standards. The MPI can be used as an analytical tool to identify poorest of the poor, show aspects in which they are deprived and help to reveal the interconnections among deprivations. It can also reveal poverty patterns within countries by province or social group, and track changes over time.

Measuring of multidimensional poverty is a challenge. A person is identified as facing multidimensional poverty if and only if he or she is deprived in terms of some combination of indicators whose weighted sum exceeds one third of all deprivations. The MPI combines two key pieces of information to measure acute poverty – the incidence of poverty or the proportion of people (within a given population) who experience multiple deprivations, and the intensity of their deprivation, the average proportion of (weighted) deprivations they experience. Indicators considered for MPI are given below.

Dimensions	Indicators considered for measuring MPI
Health	Infant Mortality Rate
	Higher Order Birth
	Share of Malnourished Children
Education	Drop out in Primary
	Drop out in secondary
Living Standards	Percentage of Household having Access to Cooking fuel
	Percentage of Households having access to toilets
	Percentage of households having Access to safe drinking water
	Percentage of households having access to electricity
	Percentage of households having access to Pucca house

TABLE 2.4 TOP AND BOTTOM THREE BLOCKS IN MPI

Top three blocks			Bottom three blocks		
Block	MPI value	Ranking	Block	MPI	Ranking
Puzhal	0.216	1	Gummidipoondi	0.760	14
Poonamallee	0.308	2	R.K.Pet	0.692	13
Villivakkam	0.339	3	Tiruvalangadu	0.660	12

The blocks of Puzhal, Poonamallee, and Villivakkam show lower presence of multiple deprivations in education, health and living standards unlike the blocks of R. K. Pet, Gummidipoondi and Tiruvalangadu which have lowest MPI ranking among the blocks, as indicated in the Table 2.4. It is not a coincidence that all the top ranking blocks have urban areas where as all the low ranking blocks are completely rural.

Rural areas have greater share of the poor. These areas also face low access to infrastructure, facilities and services including healthcare services, cooking fuel and household sanitation. A large number of cultivators in these Pallipet, R K Pet and Tiruvalangadu are turning non-cultivators, in search of alternative livelihoods. The SHG movement and micro-credit activities which have resulted in some astonishing performances by women entrepreneurs elsewhere, have not taken root in these blocks. Considering that the State's poverty reduction initiatives are in place in these blocks since 2005 the proportion of poverty in these blocks is still some of the highest in the district.

It is, however, a matter of great satisfaction that government and non government poverty eradication programmes never stop at economic solutions for the poor but address, host of other vulnerabilities they face. Sensible microfinance initiatives invariably adopt credit plus models. Convergence of programmes that focus on development of infrastructure and facilities, provision of health, educational and environmental services with financial and non-financial services such as mobilization, awareness generation, trade related skill training, economic

inclusion and empowerment have helped realize full potential of these well meaning poverty reduction programmes.

Conclusion

TABLE 2.5 HDI, GII, CDI AND MPI INDICES AT A GLANCE

Sl. No	Name of the blocks	HDI		GII		CDI		MPI	
		Index Value	Rank	Index Value	Rank	Index Value	Rank	Index Value	Rank
1	Ellapuram	0.525	9	0.040	6	0.662	6	0.486	5
2	Gummidipoondi	0.422	13	0.087	12	0.590	10	0.760	14
3	Kadambathur	0.569	8	0.030	4	0.606	8	0.512	7
4	Minjur	0.603	6	0.039	5	0.685	4	0.572	11
5	Pallipet	0.599	7	0.028	2	0.712	3	0.522	8
6	Poonamallee	0.911	1	0.029	3	0.768	2	0.308	2
7	Poondi	0.438	12	0.058	10	0.593	9	0.556	10
8	Puzhal	0.874	2	0.053	9	0.549	12	0.216	1
9	R.K.Pet	0.508	10	0.047	7	0.440	14	0.692	13
10	Sholavaram	0.606	5	0.051	8	0.537	13	0.531	9
11	Tiruttani	0.501	11	0.117	14	0.635	7	0.504	6
12	Tiruvalangadu	0.295	14	0.110	13	0.571	11	0.660	12
13	Tiruvallur	0.758	4	0.016	1	0.668	5	0.339	4
14	Villivakkam	0.834	3	0.065	11	0.798	1	0.339	3

Bottom 3 index values
 Top 3 index values

The table above presents a comparative performance of blocks with regard to all four indices under consideration. Poonamallee has high ranks with regard to all the four indices whereas Villivakkam block is close behind and can be called one of the developed blocks, except for the dismal performance w.r.t. GII. Gummidipoondi and Tiruvalangadu blocks on the other hand have consistently lower ranks. Poondi and R K Pet too have comparatively lower ranks.

It is with an intention of developing the undeveloped blocks, that the industrial parks such as SIDCO and SIPCOT were started in Gummidipoondi, whereas the Tamil Nadu's poverty alleviation programme covers the Tiruvalangadu block under its activities. It is a cause of concern, that after about a decade of project implementation, Tiruvalangadu is still one of the underdeveloped blocks and despite presence of the industrial estate in the block, the people of Gummidipoondi are still languishing in the shadow of development.

Discussions with community members reveal that the industrial development in Gummidipoondi has neither enhanced their livelihood options nor improved quality of their

lives. (See Box 3.1) Other blocks that have consistently lower ranks do share similar concerns with comparable intensity. A micro analysis of issues and concerns and enabling features for each block in consultation with local stakeholders will have the potential to evolve a clear action plan for block development.

CHAPTER 3
EMPLOYMENT, INCOME AND
POVERTY

Chapter 3

Employment, Income and Poverty

Introduction

The academic debate on economic growth vs. development questions the validity of outcomes in terms of human development from the physical growth achieved. The critical concern is, ‘whether, growth in income, employment and reduction in poverty and other outputs in the process results in the desired outcomes favoring human development in a sustainable manner?’ Both economic growth and development have not succeeded in challenging the scourges of poverty and inequality in equal measures and despite a high growth trajectory, poverty persists in varying degrees leading to vulnerability and deprivation. Therefore, to state that changes in income, employment and poverty would have a causal relationship with outcomes in human development in terms of wellness and happiness would be quite a large stretch.

In this chapter we discuss, ‘what are the changes in these outputs?’, ‘what are the issues found in the causal chain of input and output to bring forth the desired outcome?’, and what are the specific areas of focus and activities required for challenging these issues?’. This kind of probe calls for demand side micro analysis at district and block level focusing people. This approach also becomes the basis for bottom up planning or planning from below in any development intervention. Three key variables viz., income, employment and poverty in Tiruvallur district are deliberated on in the following sections.

Employment

The proportion of the population engaged in productive work, the quality of employment and the remuneration received by the working population are key determinants of gainful employment. Inadequate opportunity for employment, leads to lowering of income levels consequently driving the people into poverty. The converse is also true. Poverty leads to marginalization of human potential, capability deprivation and constrained employment options.

Size of the Workforce and Work Participation Rate

Tiruvallur district is simultaneously witnessing both industrial growth and loss of its key locations proximate to Chennai to the expanding metropolis. Movement of workers in and out of the

district is enormous making it difficult to assess the magnitude of the dynamic workforce. Villivakkam and Poonamallee blocks have recorded a maximum increase in the workforce in terms of number of workers and a substantial increase in the main worker category. (Table 3.1) This could be attributed largely to the in-migration to the blocks in search of employment opportunities. The fact that, a large number of the industrial units are located in these blocks is the main incentive for such movement.

TABLE 3.1 —TOTAL WORKERS AND NON-WORKERS

Sl. No	Block	Total workers		Main Workers		Marginal Workers		Non-Workers		Total Population	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ellapuram	52601	62150	44495	50439	8106	11711	59185	65770	111786	127920
2	Gummidipoondi	68242	85410	51518	65422	16724	19988	91356	105131	159598	190541
3	Kadambathur	43164	57279	29020	41478	14144	15801	64393	70685	107557	127964
4	Minjur	75322	96750	59696	74216	15626	22534	125333	136570	200655	233320
5	Pallipet	40806	50489	32929	37811	7877	12678	52756	59088	93562	109577
6	Poonamallee	144981	250094	125781	221048	19200	29046	286777	409828	431758	659922
7	Poondi	45521	54254	33645	35391	11876	18863	45441	53999	90962	108253
8	Puzhal	147937	222993	125812	189789	22125	33204	301413	373163	449350	596156
9	R.K.Pet	42867	51158	34200	35758	8667	15400	46932	53338	89799	104496
10	Sholavaram	50019	67286	38475	52735	11544	14551	80732	89256	130751	156542
11	Tiruttani	43176	53385	35022	37715	8154	15670	60763	65626	103939	119011
12	Tiruvalangadu	36986	48996	26642	33242	10344	15754	44857	43284	81843	92280
13	Tiruvallur	52143	80371	38481	61997	13662	18374	93505	115171	145648	195542
14	Villivakkam	193332	357439	175278	310877	18054	46562	364216	549141	557548	906580
	District	1037097	1538054	850994	1247918	186103	290136	1717659	2190050	2754756	3728104

Source : Population Census

Workers Participation Rate (WPR) is the proportion of workers to the total population. While total population in this district has increased from 2,754,761 in 2001 to 3,728,104 registering an increase by 35.33%; there is no significant change in the workers participation rate as well as proportion of main, marginal and non-workers to overall worker population during the same period. A lower proportion of marginal workers indicate that majority of the employed population has had employment for more than 180 days in a year except for Villivakkam block where the increase in marginal workers is phenomenal at 157.9%. Industrial units prefer to employ young local and migrant workers on temporary or contractual basis with no security for future. (Annex Table A3.1)

BOX 3.1 MGNREGA -Employment and Income

Rural India lacks basic infrastructure facilities to sustain livelihood of its people. The number of uneducated unskilled potential labourers far exceeds the educated and skilled job seekers. The MGNREGA came into force on February 2nd, 2006 to stem the tide of migration from villages to cities, so as to ease the pressure on urban infrastructure yet at the same time make rural economy vibrant and self-sustainable through creating durable assets. MGNREGA is a pioneering job guarantee act in the history of independent India.

This Act guarantees at least 100 days of employment per year to the rural people. The 100 days entitlement of a household can be shared among the members of that household. All adult members of the household can register and apply for work, provided they are local residents. This implies they must be residing within the village panchayat or special village panchayat area and willing to do unskilled manual work. By the end of financial year 2014 -15, MGNREGA was launched in 645 districts, 6603 blocks, 247645 Panchayats and 778134 villages throughout the nation.

In Tiruvallur District, with shrinking agriculture sector and unfriendly industrial sector, the majority unskilled labourers, are left with the option of working as contract labourers, with seasonal, irregular low paying employment.

Of the 298937 households in Tiruvallur district, 122617 households, i.e. 41.02 % of the households were given employment under MGNREGA as on July 2013. Among the blocks, Ellapuram, Tiruttani, Tiruvalangadu, Pallipet and R.K.Pet had more than 50 % of the families working under the programme. R.K. Pet topped the list with 69.66 % households participating in MGNREGA, which also has the second largest share of Below Poverty Line (BPL) families (42.16 %), next only to Pallipet Rural (63.09 % BPL families), where 54.96 % families were covered under MGNREGA. (Annex Table A3.3)

While the revolutionary scheme has brought higher wages for labourers across the country, farmers and landlords in Tamil Nadu have begun to feel the pinch. They are unable to hire labourers to work in their fields due to increase in wage rates. On the other hand, farm workers, majority of them women, now prefer to work under the MGNREGA that makes labour opportunities available within the village and are paid much better wage rate than they get elsewhere. Current MGNREGA wage rate paid in the State 183 rupees per day⁷.

The village population considers MGNREGA to be a boon for improving rural livelihood. Women feel empowered with better bargaining power in a sector traditionally dominated by landlords and political lords. It is not necessary that MGNREGA covers only BPL households. However, more efforts to involve all the BPL households will certainly be a win-win situation for both the families as well as for development projects in the district MGNREGA.

⁷ Notification, Ministry of Rural Development, Government of India, New Delhi, 31st March, 2015

Workforce participation is viewed with social vulnerability, gender and social group perspectives as the key analytical tools. The female work participation out of total female population was 23.46 % in the district in 2011. The female participation rate varies among the blocks ranging from 15.51 % in Puzhal to 44.70 % in Tiruvalangadu. Villivakkam block has highest female population with 448,760 with very low female work participation rate. (Annex Table A3.2) This reiterates the fact that development and participation of women in social, political and economic life do not necessarily go hand in hand. There is also a striking urban rural disparity in work opportunities for women, with just 18 % of urban women economically active as compared to 33.6% rural women. As a result overall unemployment is more striking in urban locales than in villages. District data on work participation rate w.r.t. social groups is not available and could not be analyzed.

TABLE 3.2 WORK PARTICIPATION RATE

Rural/Urban	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
Male	56.4	59.8	53.9	58.3	55.0	58.8
Female	28.6	33.6	12.3	18.0	19.8	23.5
Persons	42.5	46.7	33.6	38.3	37.6	41.3

Source: Primary Census Abstract, 2001 & 2011

Sectoral Composition of Workers

The sector-wise analysis on distribution of labour (Table 3.3) considers workers under four categories namely, cultivators, agricultural labourers, household industry and others which includes service and hospitality sectors. Proportion of workers in the 'other' category account for bulk of employment has increased from 70.42 % in 2001 to 73.84% in 2011.(Table 1.2) In the case of primary sector the percentage of workers employed has declined from 22.4 % in 2001 to 21.4 % in 2011. However, as the overall worker population has increased by 55.8 %; despite number of cultivators reducing by 5.5 % and net sown area reducing by 10.46 % (Annex Table A1.1), the number of agricultural labourers has increased by 76.9 % in the past decade, as a result of lack of any other adequate employment opportunities for the uneducated and unskilled workers.

TABLE 3.3 COMPOSITIONS OF WORKERS IN MAJOR SECTOR

Sl. No	Block	Total workers		Cultivators		Agri. Labourers		House Hold Industry		Others	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ellapuram	52601	62150	8302	6235	31650	30679	1989	1902	10660	23334
2	Gummidipoondi	68242	85410	11860	8787	29039	34868	3455	1876	23888	39879
3	Kadambathur	43164	57279	3884	3763	18595	17792	4023	2471	16662	33253
4	Minjur	75322	96750	6830	5008	28750	22174	1503	2829	38239	66739
5	Pallipet	40806	50489	6162	5461	14245	18928	10228	10537	10171	15563
6	Poonamallee	144981	250094	3775	2941	10033	7713	3235	5290	127938	234150
7	Poondi	45521	54254	8198	6362	27741	32676	1461	1393	8121	13823
8	Puzhal	147937	222993	2900	2150	3003	3147	3498	5429	138536	212267
9	R.K.Pet	42867	51158	10738	6782	14792	20965	8889	8070	8448	15341
10	Sholavaram	50019	67286	4293	3868	18102	16391	2595	3040	25029	43987
11	Tiruttani	43176	53385	6167	4808	16583	18626	3486	4242	16940	25709
12	Tiruvalangadu	36986	48996	7692	7135	19598	25239	638	1620	9058	15002
13	Tiruvallur	52143	80371	3721	3811	17388	14436	1843	2204	29191	59920
14	Villivakkam	193332	357439	4006	6333	5415	6952	3502	7337	180409	336817
	Tiruvallur District	1037097	1538054	88528	73444	254934	270586	50345	58240	643290	1135784

Source: Population Census 2001 & 2011

There has been a decrease in the worker population in the household industry sector (by 4.9 %) and tremendous increase in the worker population in the 'other' sector (by 63.39 %), indicating both positive and negative aspects of labour movement. On a positive note, there is a movement of workers from unorganized sectors to organized, industrial or service sectors. Decrease in household industry sector, however, suggests that traditional family based or small enterprises such as handlooms have reached a stagnation point prompting the families to explore other avenues. This brings to the fore importance of SHG movement, micro-credits and enterprise creation and strengthening existing enterprises that can empower these distressed families economically. Data pertaining to workers in organized and unorganized sectors for the years 2001 and 2011 is not available for analysis.

In the cultivator category, there has been decline in numbers in the district in general and in the six blocks in particular, namely, Minjur, Gummidipoondi, Ellapuram, Tiruttani, Tiruvalangadu, Pallipet and R K Pet. Possible reduction in cultivable lands influenced by the land conversion to real estate business could be responsible for this change and in turn for loss of employment opportunities and income deprivation. This is the flip side of rapid industrial growth, expanding industrial corridor, and increased pressure on the land for housing and other amenities. Panchayat presidents from these blocks also express similar concerns during the consultation. This is particularly of concern for the 22.36 % of combined working population depending on cultivation and agricultural labourer or both for their livelihood.

Landlessness is one of the main reasons for economic deprivation which also hinders human development. The vicious circle of lack of adequate skills, lack of work opportunities, unemployment and in turn limited options of skill enhancement, is further intensified by landlessness among the poor. Agriculture cannot be the sole livelihood option for the marginal farmers but provides them a breather, while they explore other options.

BOX 3.2 GUMMIDIPOONDI – Dwindling Livelihoods

More than two thirds of the households in the block do not own any agricultural land. The percentage of landlessness is highest among the Schedule Tribes (ST) households. Land under cultivation has reduced and fallow land has almost doubled in some areas. About 25 % of cultivators, accounting for more than 3000 farmers are now looking for alternative livelihood. Fishing that used to be a promising alternative livelihood for the marginal farmers and the landless, too run the risk of losing livelihood because of the soil erosion, forcing them to relocate away from the sea and enter the labour market as unskilled labourers in the burgeoning industries.

Gummidipoondi prides on housing two industrial parks, SIPCOT and TANSIDCO besides an array of industries. However, less than a tenth of the working population have jobs with private companies or are self-employed. Closing down of some of the industries has caused loss of jobs for the skilled population. Industries offer low pays ridding with high expectations and people of Gummidipoondi do not prefer to take up those jobs. Industries do not promote welfare activities for the development of the surrounding communities. Unemployment in Gummidipoondi was assessed at 13 %, higher than the national average of 8 %. Indebtedness is high due to high cost of living and poor wages. Dependence on money lenders is still very high in this block. Less than one fourth of the loans are taken from banks or from Self Help Groups (SHG).

Women's work participation in Gummidipoondi (29.28 %) is higher than the district average (23.46) as per 2011, which could be rather attributed to MGNREGA and does not quite translate into high earnings for the women. Two thirds of the working population, for whom unskilled casual labour is the only livelihood option, has received employment from MGNREGA and which is also instrumental in raising the minimum wages. On the flipside MGNREGA has reduced labour availability of agriculture. People are not inclined to undertake labour intensive jobs where unlike on MGNREGA sites, their output is keenly measured.

Mobilization of women into groups and facilitation of small enterprises, mobilization of farmers into cooperative farming activities and skilling the youth, women and farmers can be the right way forward. Natural resource management could also help optimal utilization of the abundant water resources, and to make agriculture a profitable venture.

BOX 3.3 Status Of Child Labour

Every year, on June 12, 'Anti-Child Labour Day' is observed for reaffirming and reinstating the innate rights of children and to spread awareness worldwide against the practice of child labour. In the National Conference on Child Labour held on 22nd January 2001 at New Delhi it was resolved to eliminate child labour in hazardous occupations and processes by the year 2005. In the line of fire are the worst forms of child labour in identified industries namely hand-rolled beedi, brassware, handmade bricks, fireworks, footwear, hand-blown glass bangles, hand-made locks, hand-dipped matches, hand-broken quarried stones and silk. Tiruvallur known for its looms and brick kilns has been a hot spot for child labour in the past. Government of India had proposed to implement the projects aimed at child labour elimination through the Indus Child Labour project as early as in August, 2004. Non-government organizations too have intervened successfully to prevent any form of existing or potential child labour. In Tiruvallur district a helpline (1098) is in place to report any observed incidences of child labour in the district. No contraventions were noted during the inspections carried out on shops and establishments, bakeries and food courts by Inspector of Labour.

The Sarva Shiksha Abhiyan (SSA) initiates and implements various strategies to help out-of-school children and migrant children re-enroll in schools. A door-to-door survey is undertaken every year for the purpose. Academically poor performing children are first admitted in Residential or Non-Residential Special Training Centres run by non-governmental organizations where Educational Volunteers help them acquire the requisite academic skills before mainstreaming them in age appropriate classes. Sarva Shiksha Abhiyan (SSA), (see Box 5.4) a Government Programme, has mobilized community through GramSabhas' in all the panchayats to enroll school dropouts back in the schools. Street plays on the benefits of education by Kalajatha Group are performed and awareness rallies are held to educate the masses. Every out-of-school child and migrant child is tracked online. This online tracking is updated and reviewed during monthly meetings with SSA and District Collector. Goinr a step further the district could also initiate an advocacy drive among the employers, to sensitize them about, and dissuade them from, employing children

In the year 2012-13, 1980 out-of-school children (including migrant children) were identified of which 1,971 were enrolled in age appropriate classes. Similarly, 4,140 migrant students were identified through the survey conducted in January 2013 in the district. For such seasonal migrant children, SSA Tiruvallur opened 101 centres and appointed 117 EVs for the academic development of the children and INR 8.2 lakh has been spent for this purpose.⁸Free education, nutritious food, school uniforms, text books, notebooks, educational accessories, school bag, footwear, bicycles, laptops, bus passes, all at no cost, are being provided in Tamil Nadu schools besides special cash incentives given to children from underprivileged social classes. As a result of participation in the national and State programs, alleviation of child labour in the district is evidently reflected in the successful enrolment drive in Tiruvallur district. Retaining the children in schools being a dynamic phenomenon, it requires continuous monitoring and alerts by the school authorities and the local NGOs and CBOs to break out of the vicious circle.

⁸CEO SSA 2012-13

Placements through the District Employment Office

Percentage of placements among registered persons in District Employment Office is rather pathetic. The placement has been consistently low ranging from 1.82 to 3.11 during the reference period between 2007 and 2011 as indicated in Table 3.4. There is neither consistency nor growth in terms of placements realized. This indicates that employment office accesses and offers public sector placements and there is no clear strategy to cater to the large portion of working age population that is out of work. With ever growing industrial estates in and around the district, the approach to employment exchange needs to be revisited. Industries and markets also have workforce requirement at the middle management level. Those vacancies could be tapped for absorbing job seekers with the employment office. There is an acute need to engage with the private sector in providing employment. It is necessary for the District Employment Office to be in contact with the recruitment cells of the Corporate houses so that there is greater possibility for placement of the registered candidates. The District Employment Office may be advised to keep a library of job portals. On the other hand district can initiate job appropriate skill training based on the employment opportunities available in the public and private sector.

TABLE 3.4 REGISTRATIONS AND PLACEMENT

Sl. No	Year	Registration	Placement	% of Placement	Sl. No	Year	Registration	Placement	% of Placement
1	2007	12179	313	2.57	5	2011	17137	312	1.82
2	2008	14212	469	3.30	6	2012	21375	176	0.82
3	2009	15979	497	3.11	7	2013	34387	465	1.35
4	2010	16113	317	1.97	8	2014	76762	419	0.54

Source: District Employment Office, 2007 - 2014

Sectoral Contribution to Gross District Domestic Product

The proportion of sector-wise contribution in the GDDP during the years from 2009-10 to 2011-12 (Table 1.2) suggests that a major share of the income of the district is contributed by tertiary sector 62.9 %, followed by secondary sector (34.1 %), with the primary sector contributing just 3.04 % to the GDDP. Respective Sectoral contribution to district income is comparable to the State level contribution of primary, secondary and tertiary sectors which is 8.94 %, 30.1 % and 61.0 % respectively.

Although the large share of secondary and tertiary sectors in both the district as well as State income is good for the economy; there is a concern about the low growth of the primary sector resulting in the declining food production and food security to the human resources. Primary

sector also provides employment opportunities to the unorganized unskilled workers in the district as well as those from neighboring districts.

People’s voices from the district have endorsed the above concerns regarding the decimating agricultural land leading to low agricultural production and food availability. Although the magnitude of the problem is not felt seriously at present, it is sensed that this situation could lead to a threat, on the one hand, to nutritional security for households who use agricultural produce mainly for consumption and on the other hand, to their traditional agriculture based livelihood options such as dairy, in the long run. The increasing pressure to convert agricultural land to nonagricultural or commercial purposes has worsened the prospects of agriculture grim in the coming years.

Breakthroughs and innovative practices in the field of agriculture to improve the crop productivity, as well as introducing and upscaling cooperativism, are needed if not a regime change in the policy for improvements in the primary sector.

Income

Income, besides other economic parameters, determines the standard of living and level of human development. Per Capita Income (PCI) in the district has remained consistently higher compared to PCI in the State over past few years. PCI in the district also indicates a higher percentage increase (43.0 %) in the subsequent years as compared to the increase of PCI in the State (38.2 %) (Table 3.5) The faster growth in district’s PCI is attributed mainly to the phenomenal growth in service and industry sector in that order.

TABLE 3.5 PER CAPITA INCOME IN RUPEES AT CONSTANT (2004-05) PRICES

	2007-08	2008-09	2009-10	2010-11	2011-12
Tiruvallur District	58464	61588	72366	78930	83594
Tamil Nadu	46293	48473	53359	59967	63996

Source: Department of Economics & Statistics,

Poverty and Inequality

The first Tamil Nadu State Human Development Report (2003) suggests that Tiruvallur (part of Kancheepuram district during the reference year for data on poverty) has been one of the lower poverty districts for the reference year 1993-94. In 10993-94, poverty in the district was 30.86 %,

with rural poverty at 36.76 % and urban poverty at 21.98 %.⁹As per the 2003 data on poverty, proportion of BPL households has reduced to 22.82 %. (Table A3.4)Tiruvallur, Puzhal and Villivakkam, predominantly urban blocks had the least percentage of BPL households whereas; Pallipet (63.09 %), R K Pet (42.16 %), Tiruvalangadu (37.15 %), the predominantly rural blocks, had higher proportions of BPL families. While Villivakkam, Tiruvallur and Puzhal blocks are located close to Chennai, which has more livelihood opportunities, Pallipet and R. K. Pet and Tiruvalangadu blocks are located at the other end, away from the State capital. Inadequate opportunity for employment in rural areas has led to lowering of income levels. In the rural areas of Pallipet, this proportion is exceptionally high with 78.15 % of the households living in abject poverty.¹⁰

When sheer number of BPL households is considered, Villivakkam (18.5 %), Poonamallee (15.5 %) and Puzhal (13.3%) had the biggest shares of the poor, underlining the issue of urban poverty and concerns of the urban poor. These blocks, despite being extensively urbanized, and replete with livelihood opportunities, have the largest number of poor inhabitants. This also suggests that the high density of population and increased pressure on the civic amenities leaves an enormous number of poor left wanting housing, sanitation and other basic services.

Pudhu Vazhvu, a project initiated by GoTN in 2005, to further the socio-economic development in the State, is designed to provide strategic support to the State government in identifying and understanding poverty of its vulnerable population, and to pilot strategies for improving livelihoods of the marginalized. Larger aim of the project is to facilitate participation of the marginalized in the planned economic development of the State. Hence, the focus is on building capacities of the poor and ultra-poor and strengthening social capital among them through pro-poor institutions such as SHGs and Panchayat Level Federations (PLF) by way of individual assistance, internal loans, skill building and technical support. Women, tribal people, youth and disabled population are mobilized into SHGs for such interventions.

In Tiruvallur district, about 204 Panchayats have been covered under the project, with establishment of 204 Village Poverty Reduction Committees (VPRCs) and 26 Tribal VPRCs in Ellapuram, Poondi, Pallipet, Tiruttani and Tiruvalangadu. Except Ellapuram, these are also the blocks with highest proportion of poor households. Approximately one lakh households

⁹ *Tamil Nadu Human Development Report, 2003*

¹⁰ DRDA, 2003

including poor, ultra-poor, disabled and vulnerable families in these blocks form the target group. About 75,000 to 80,000 families have been targeted by mobilizing them in 5,533 SHGs through the Pudhu Vazhvu Project (PVP) by 2014¹¹.

Table 3.6 indicates that proportion of poverty has reduced in the rural areas of Tiruvalangadu (33.81 %) and Pallipet (33.83) blocks in comparison with the district average for rural areas (37.84 %) in the year 2013-14, which however, continues to be comparable to rural poverty in the district during 1993-94 (36.76 %). Thirutani and Poondi blocks, continue to stay at the bottom with more than half of rural households marked to be poor or ultra poor.

TABLE 3.6 HOUSEHOLD POVERTY (YEAR: 2013-2014)

Sl. No.	Name of the Block	Total Households	Very Poor	Poor	Total	%
1	Ellapuram	27794	4597	5373	9970	35.87
2	Gummidipoondi	38321	6001	8770	14771	38.55
3	Kadambathur	33345	3382	5955	9337	28.00
4	Minjur	35814	4747	8356	13103	36.59
5	Pallipet	16834	2451	3244	5695	33.83
6	Poonamallee	26116	2308	5936	8244	31.57
7	Poondi	24380	4234	8232	12466	51.13
8	Puzhal	7219	1163	1867	3030	41.97
9	R.K.Pet	26824	3633	5524	9157	34.14
10	Sholavaram	38654	7289	11749	19038	49.25
11	Tiruttani	11869	2690	3373	6063	51.08
12	Tiruvalangadu	20581	3672	3286	6958	33.81
13	Tiruvallur	37705	3689	8429	12118	32.14
14	Villivakkam	27695	2041	9210	11251	40.62
	TOTAL	373151	51897	89304	141201	37.84

Source : Mahalir Thittam, Pudu Vazhu Project

¹¹<http://www.tiruvallur.tn.nic.in/departments/vkds.htm>

BOX 3.4 Pallipet - Economic Activities and Challenges

Pallipet block is one of the most backward blocks from Tiruvallur districts with highest proportion of BPL families. The block fairs poorly in terms of indicators pertaining to health and education status and living standards in the district. The block is quite remote; around 70 kilometres away from the District Headquarter. The nearest railway station is Tiruttani, which is about 35 km away. There are no institutes for higher education in the area other than a private polytechnic college. People, travel to Sriperumbudur, Sholingar and Tiruvallur for work in industries around these areas. There are only four branches of Nationalized Banks in the block, three Indian Bank Branches and one State Bank of India Branch. It is difficult for people to travel long distances for reaching markets and workplace.

Despite favourable conditions for agriculture, shortage of manual labour for agriculture is a major concern. Technological advancements in the agriculture sector in the last few decades have to some extent reduced dependence on manual labour. However, the use of machinery is not as widespread in the district, as one would believe it to be. Farmer community faces the problem of price fluctuation of agro products. Provision of adequate funding for a Direct Procurement Centre that already exists in the district, has the potential to ease out price fluctuation. There is a decline in the number of cultivators in the block, because of reduction in cultivable land like in the rest of the district.

Handlooms and power looms too provide livelihood to scores of families from Podhaturpettai, Sorakapettai and Athimancherry. These family run units, supplying *dbotis* (a traditional men's garment) and textiles to shops in Chennai and Erode, employ mostly the family members including children. The unfortunate practice of child labour, where families employ children in part-time or full time, is the main reason behind high rates of school drop-outs among middle school and highschool students from the block. During the past academic year, nearly 59 students dropped out of school, who were later readmitted after intense advocacy efforts among their parents.

Besides agriculture and weaving, there are no other livelihood options of consequence within the block. Promotion of family-based enterprises through SHG and other schemes have not picked up in Pallipet as much as it has in some other blocks of the district. Considering that the female work participation rate in Pallipet block is considerably higher than the district average, there is possibly ample scope to mobilize the women into groups. The SHGs require enterprise motivation and skill training and financial linkages to promote more farm-based and off-farm enterprises, which could provide steady employment during non-MGNREGA days.

Public Distribution System

Just as the government programmes and schemes that address poverty and there are also systems spreading protective cover around the poor. Universal Food Security Scheme in the form of Public Distribution System (PDS) for food grains through ration shops with the provision of family cards is one such scheme spreading a protective cover of food security around the poor. Family includes those who live in the same structure, related by blood or marriage and whose incomes and expenses are commonly used for running the household. However, there could be more number of nuclear family units residing in a single household who manage their lives and economy independently.

TABLE 3.7 FAMILY CARD HOLDERS

Sl. No	Taluk / Zone	HHs provided with Family cards	
		2012-2013	2013-2014
1	Gummidipoondi	54000	55537
2	Pallipet	58540	61140
3	Ponneri	113151	121220
4	Poonamallee	74258	82254
5	Tiruttani	56306	58047
6	Tiruvallur	115626	125012
7	Uthukottai	43611	44560
	Zones	640333	654145
	District	1155825	1201915

Source: District Supply office, zones

Amma Unnavagam or canteens serve nutritious and hygienically prepared food at highly subsidized prices of INR 1 for a plate of idlis and INR 5 for a plate of rice and dal (sambar) since February 2012. These Amma Canteens are run by SHG members and are extremely beneficial for not just the poor and the marginalized but also the homeless, migrants as well as students, and other travelers in the municipal areas.

Conclusion

Tiruvallur district, an industrially advanced district is one of the economically advanced districts not just in comparison with other districts from Tamil Nadu but from other states in the country. District's PCI is greater in comparison with the State PCI and the district's GDDP has grown faster than the State's GDP. Respective share of primary, secondary and tertiary sectors in the district and the State, however, remains comparable with the service and industry sectors contributing the lion's shares to the respective GDPs.

The district has witnessed enormous inter district and intra district labour movement, driven by diminishing and unprofitable agriculture, marginalization of small businesses such as handlooms, and industrial activities concentrated in eastern parts of the district with exception of the SIPCOT and TANSIDICO in Gummidipoondi.

While Pallipet, R. K. Pet and Tiruvalangadu have some of the highest percentage of poor; thanks to immigration by the landless and unskilled labour force to some of the urban blocks; poverty has accumulated in the urban parts of the district such as Villivakkam, Poonamallee and Puzhal which have major share of the poor households. Basic amenities such as housing and sanitation and other services to the urban poor is one of the key concerns faced by the district

administration. The State government initiated poverty reduction programme is being implemented in Ellapuram, Poondi, Pallipet, Tiruttani and Tiruvalangadu ever since its inception. Latest poverty data for the rural areas indicate that while rural areas of Tiruvalangadu and Pallipet blocks have improved their poverty status in comparison with the district average for rural areas in the year 2013-14, Thirutani and Poondi blocks, continue to stay at the bottom with more than half of rural households marked to be poor or ultra poor.

CHAPTER 4
DEMOGRAPHY, HEALTH AND
NUTRITION

Chapter 4

Demography, Health and Nutrition

Introduction

Life expectancy at birth is an indicator used for calculating HDI as it is expected to capture the overall health status of the population. Life expectancy is an outcome of nutrition, health services, sanitation, and availability of basic services like drinking water facilities which are closely related to the well-being of an individuals, families and society. In fact fertility, morbidity and mortality have significant influence on life expectancy and on demographic trends of population. These trends largely depend on the social development in terms of literacy, awareness, provision of services provided by the public and private organizations and to a large extent on the impetus given by the government through various programmes. Both Tamil Nadu and Tiruvallur district perform fairly well with respect to most of the health parameters than the country as a whole. Intra district disparities, however, demand detailed examination.

DEMOGRAPHIC TRENDS AND HEALTH INDICATORS

Demographic transition indicates changes in the population characteristics with a mix of a positive and a negative aspects human development. For example, the current phase of demographic transition witnessed in the district indicates, the challenges to be met for sustaining the level of human development as well as achievements in terms the general wellbeing of the population.

Population of Tiruvallur district was 3,728,104 in 2011 registering a growth of 35.33 % over 2001 population. Intra district growth trends reveals varying degrees of growth percentages among the blocks ranging from 62.60 % in Villivakkam and 12.75 % in Tiruvalangadu block. High growth of population in Villivakkam, Poonamallee, Puzhal, and Tiruvallur blocs is due to their being located close to Chennai metropolitan area and also the economic activities in the blocks. Social group-wise percentage population to total population was 22.04 and 1.27 for SC and ST respectively. (Table 4.1)

TABLE 4.1 DEMOGRAPHIC PROFILE

Sl. No	Block / District	Population		Growth rate %	Density		SC pop		ST pop		SC pop %		ST pop %	
		2001	2011	2001-11	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ellapuram	111786	127920	14.43	446	510	37011	45083	2165	4504	33.11	35.24	1.94	3.52
2	Gummidipoondi	159598	190541	19.39	380	453	40205	49849	3617	5100	25.19	26.16	2.27	2.68
3	Kadambathur	107557	127964	18.97	405	482	32791	41231	2249	2782	30.49	32.22	2.09	2.17
4	Minjur	200655	233320	16.28	435	503	70035	81849	3612	4998	34.90	35.08	1.80	2.14
5	Pallipet	93562	109577	17.12	562	658	20256	25018	3788	3878	21.65	22.83	4.05	3.54
6	Poonamallee	431758	659922	52.85	2421	3701	89977	134523	3781	4024	20.84	20.38	0.88	0.61
7	Poondi	90962	108253	19.01	273	325	32360	39924	3154	4442	35.58	36.88	3.47	4.10
8	Puzhal	449350	596156	32.67	3847	5104	72765	107253	1484	1700	16.19	17.99	0.33	0.29
9	R.K.Pet	89799	104496	16.37	510	594	18016	23040	719	865	20.06	22.05	0.80	0.83
10	Sholavaram	130751	156542	19.73	701	838	35503	42245	2565	2944	27.15	26.99	1.96	1.88
11	Tiruttani	103939	119011	14.50	559	640	21445	25803	3638	3311	20.63	21.68	3.50	2.78
12	Tiruvalangadu	81843	92280	12.75	312	352	26157	31494	2542	2977	31.96	34.13	3.11	3.23
13	Tiruvallur	145648	195542	34.26	747	1003	47764	64549	1921	1938	32.79	33.01	1.32	0.99
14	Villivakkam	557548	906580	62.60	2524	4104	56573	109785	2623	3780	10.15	12.11	0.47	0.42
	District	2754756	3728104	35.33	776	1098	600858	821646	37858	47243	21.81	22.04	1.37	1.27

Source: Population Census 2001, 2011

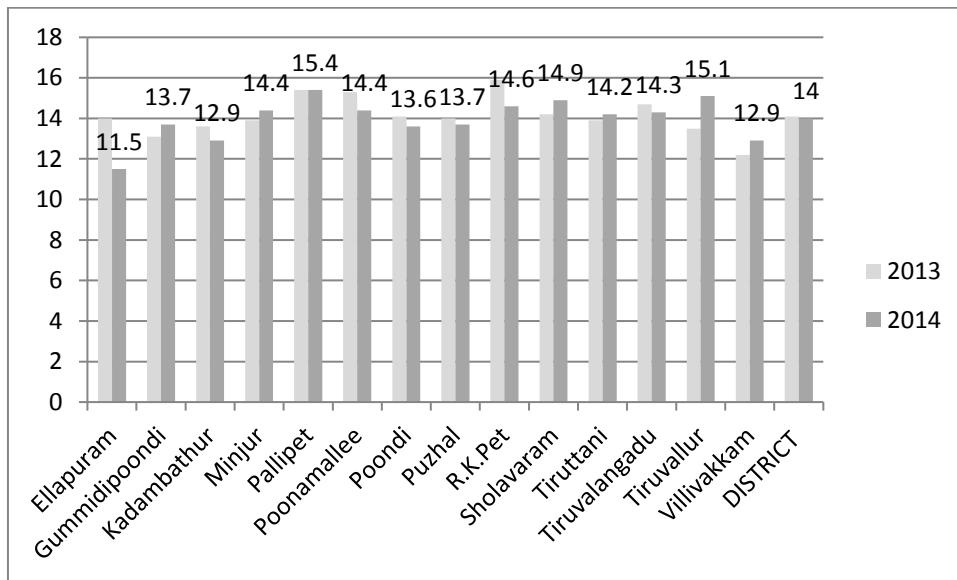
Population density implies the average number of persons living per square kilometer. While density for the Tamil Nadu was 555 in 2011, it was higher at 1098 for the district. During the period between 2001 and 2011, this ratio also has increased from 776 to 1098 indicating a steady increase in pressure on land for occupation. Population density in the blocks ranges from 325 in Poondi and 5104 in Puzhal. The high population growth rate in Villivakkam, Poonamallee, Puzhal and Tiruvallur could be attributed to the in-migration for employment. In the period between 2001 and 2011, except these four blocks, population growth rate in respective blocks has been less than 20%.

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

Demographic transition is a function of both CBR and CDR. CBR and CDR for both the district and blocks are more or less similar with slight variations when 2013 and 2014 data is considered. (Annex Table A4.1) CBR far exceeds CDR for the district as could be seen in FIGURES 4.1A and 4.1B. CBR for the district in 2013 was lower (14.1) compared to the State (15.6) and national average (21.4) for the same year. CDR for the district too is lower (4.6) than the State (7.3) and national average (7.0) for the same year.¹²

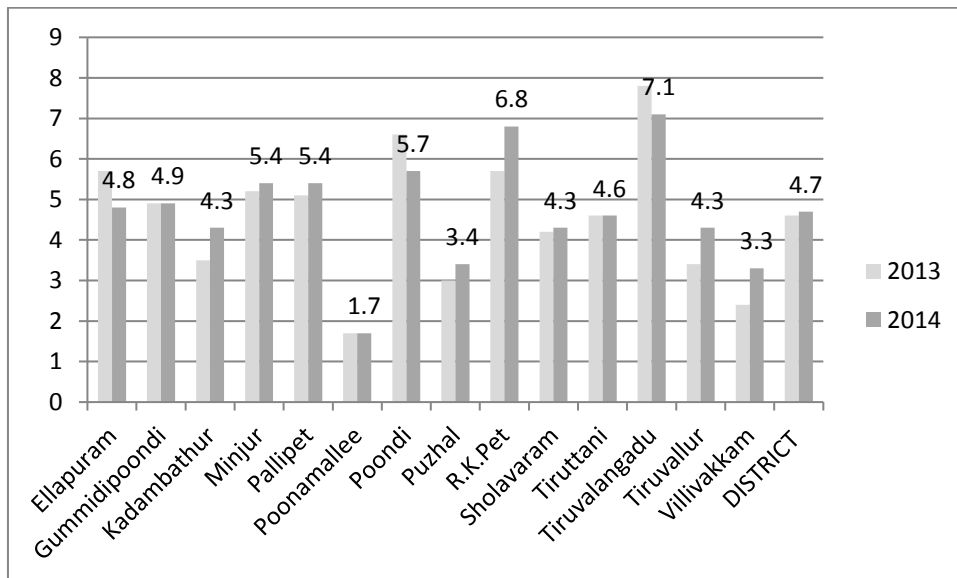
¹²<http://nrhm.gov.in/nrbm-in-state/state-wise-information/tamil-nadu.html>

FIGURE.4.1A CRUDE BIRTH RATE



Source: Deputy Director of Health Services, Tiruvallur & IPH Poonamallee

FIGURE.4.1B CRUDE DEATH RATE



Source: Deputy Director of Health Services, Tiruvallur & IPH Poonamallee

Though demographic transition is influenced by CBR and CDR, the changes are also attributed to the shift in the character of district economy from agrarian to industrial one as can be seen in places like Ambattur, Avadi and Villivakkam. Apart from the factors mentioned above, migration is yet another variable that has an impact on the population level. Migration can be rural – rural, rural- urban, or urban – urban and also can be either intra district, inter district, interstate or international making assessment of mobility patterns difficult. Tiruvallur district recording a lower CBR despite scores of unskilled labourers migrating to the district has been made possible because of the successful implementation of family planning programmes, increasing literacy and

awareness among the people and proximity to Chennai for easy access to health services. This positive trend needs to be sustained. With better medical services and welfare measures the population of elderly has resulted in an increased dependency ratio. (See Chapter 7).

Sex Ratio

Sex ratio is a widely used indicator as it is indicative of the various facets of discrimination against women such as lack of bargaining power in very private and personal matter such as bearing a child and giving birth irrespective of the gender of child, education of girl children and healthcare for women, and cultural practices such as dowry system, division of property favoring men, patrilineal family system and hence the preference for male children. Patriarchal social organization also restrains participation of women in wider social and political affairs. Economic growth of a community does not necessarily enhance status of its women and in some cases economic improvement has coexisted with declining sex ratio.

TABLE 4.2 SEXRATIO

Sl. No	Block / District / State	General		Change in No of females per	SC		Change in No of females per	ST		Change in No of females per
		2001	2011		2001	2011		2001	2011	
1	Ellapuram	1009	1021	12	1012	1015	3	1033	1002	-31
2	Gummidipoondi	983	989	6	993	1009	16	1057	1025	-32
3	Kadambathur	998	989	-9	997	996	-2	973	969	-4
4	Minjur	998	1001	3	1006	1009	3	1000	1030	30
5	Pallipet	992	998	6	998	1022	24	961	958	-3
6	Poonamallee	957	980	23	990	999	9	1006	955	-51
7	Poondi	1006	1000	-6	992	1001	9	982	1007	25
8	Puzhal	954	979	25	981	992	12	1022	1086	64
9	R. K. Pet	974	977	3	978	989	11	943	957	14
10	Sholavaram	991	992	1	1014	1006	-9	987	984	-3
11	Tiruttani	985	1001	16	985	1009	24	1023	1008	-15
12	Tiruvalangadu	997	1002	5	983	998	14	952	970	18
13	Tiruvallur	995	1003	8	1009	1011	2	1024	954	-71
14	Villivakkam	945	980	35	973	993	19	1019	985	-34
	Tiruvallur District	971	987	16	994	1001	7	1005	994	-11
	Tamil Nadu	987	996	8						

Source: Population Census 2001, 2011

Sex ratio in the district has increased from 971 in 2001 to 987 in 2011 (Table 4.2) which is, however, still, lower than the State Sex Ratio of 996 women per 1000 men (census 2011). As many as six blocks viz., Minjur, Poondi, Tiruvallur, Ellapuram, Tiruttani and Tiruvalangadu, have sex ratio more than 1,000. Except in Poondi and Kadambathur, overall sex ratio has increased in all blocks. Except in Kadambathur and Sholavaram, sex ratio among SC too has increased in all

blocks. Sex ratio among STs has however decreased in 10 out of 14 blocks of Tiruvallur. In Ellapuram, Pallipet, Poonamallee, R. K. Pet, Sholavaram and Tiruttani blocks the decrease in the sex ratio among STs is exceptional. None of these development indicators however stand testimony to absolute development when considered in isolation. Out migration by male members is a case in point, leading to more number of women headed households weighed down by economic and social burden. There is need to see whether the increased sex ratio also has a parallel in CSR; as only then we are assured of sustained increase in the overall sex ratio.

Child Sex Ratio

Child population and CSR are useful in the study of gender parity in the district. Official records indicate that the CSR and SRB are very low in the State. As per the civil registration system, the Sex Ratio at Birth (SRB) in Tamil Nadu in 2011 was only 905 which is far below the internationally accepted level of 952 female children per 1,000 male children. Percentage of child population in the age group 0-6 has decreased from 11.97 % in 2001 to 10.88 % cent in 2011 (Table 1.1). This decline in the 0-6 population is indicative of a decline in the Total Fertility Rate (TFR) in the district. However, the cause of concern is that the CSR for Tiruvallur district has reduced from 957 girls per 1000 boys in 2001 to 946 girls in 2011. (Table 4.3)

TABLE 4.3 CHILD SEX RATIO

Sl. No	Block /District	Population in the age group of 0-6				Child Sex Ratio	
		Male		Female		2001	2011
		2001	2011	2001	2011		
1	Ellapuram	7165	7336	6845	7094	955	967
2	Gummidipoondi	10336	10952	9884	10632	956	971
3	Kadambathur	4545	7050	4425	6498	974	922
4	Minjur	12125	12910	12085	12250	997	949
5	Pallipet	6792	6398	6502	5926	957	926
6	Poonamallee	25376	36109	24039	34731	947	962
7	Poondi	5596	5703	5452	5377	974	943
8	Puzhal	26820	33906	25545	31675	952	934
9	R.K.Pet	6107	6246	5521	5563	904	891
10	Sholavaram	8100	8990	7943	8686	981	966
11	Tiruttani	6856	6765	6494	6333	947	936
12	Tiruvalangadu	5225	5311	4957	4775	949	899
13	Tiruvallur	11357	10090	10850	9524	955	944
14	Villivakkam	32076	50683	30743	48156	958	950
	Tiruvallur District	168476	208449	161285	197220	957	946

Source: Population Census 2001, 2011

Female Infanticide

Female infanticide and female feticide, the main causes for lower sex ratio, are the ugly faces of patriarchy and its preference for male child. Dharmapuri, Salem, Theni, Madurai and Dindigul districts in Tamil Nadu had gained notoriety for large-scale infanticide 10 to 15 years ago. The strategies adopted and committed interventions by the State Government promoting social mobilization to eliminate female infanticide have yielded dramatic results with number of cases of female infanticide declining each passing year. The fall in female infanticide in the State, however, has not resulted in a change in the sex ratio, which continues to remain skewed in favor of male children. This situation has been attributed to a rise in the practice of female feticide becoming prevalent in more number of districts. The Welfare Center for Women and Children (WCWC) identified eight districts – Salem, Dharmapuri, Krishnagiri, Namakkal, Madurai, Dindigul, Theni and Erode – as “high risk areas”.¹³

Tiruvallur district is not included among the list of high risk districts in this regard. However it is a cause for serious concern that the district as a whole has a negative growth in the CSR, with Kadambathur, Tiruvalangadu, Minjur, Poondi and Pallipet blocks have exceptional decrease. These blocks need to be marked for focused interventions addressing this issue (Table 4.3).

Low sex ratio can give rise to problems such as the sexual abuse of girl children, polyandry and psychological disorders among both men and women. More than anything this is an indication of the perpetuation of exclusive pro-male child values that are plain anti girl child. Social action groups, women’s associations, human rights groups, advocates, doctors, educationists and researchers have been campaigning against sex-selective medical termination of pregnancies. It is an uphill task for government and non-governmental organizations to identify all direct and indirect signs of discrimination of any degree, and to engage in an all-out advocacy and action at the level of community, social, political, medical and legal arena.

Life Expectancy at Birth

Tamil Nadu HDR Report 2003 indicates that Life Expectancy at Birth (LEB) for the State for 2001 was 65.2 years for male and 67.6 years for female. The corresponding figures for India were 62.4 and 63.4 respectively. Table 4.4 indicates that LEB in the district has come to acquire lower values for the male, female and overall respectively than the corresponding State values. Female LEB at birth continues to be higher than the male LEB which is considered to be normal as the women have a biological survival advantage when compared to the male.

¹³ *Frontline*, Volume 27, Issue 07, Mar. 27-Apr. 09, 2010

TABLE 4.4 LIFE EXPECTANCY AT BIRTH

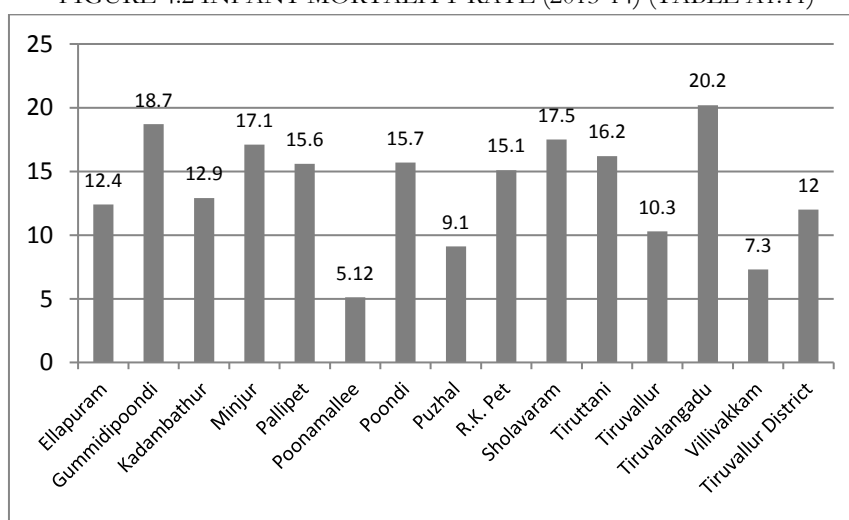
Sl. No	District	2013-14		
		Male	Female	Total
1	Tiruvallur	70.3	74.1	72.3
	State	71.8	75.2	73.4

Source: Directorate of Public Health

Infant Mortality Rate

The lower the IMR, one of the critical indicators of the human development, higher is the quality of life on account of access to and availability of health and nutritional services. IMR in Tiruvallur district is lower as compared to the State average (TABLE A1.4). In Poonamallee, Puzhal, Tiruvallur and Villivakkam blocks the IMR is particularly lower whereas in all other blocks it is higher than the district average with Tiruvalangadu and Gummidipoondi blocks having strikingly higher IMR. Availability and access in terms of presence of fullfledged government facility in the vicinity and availability of transport influence the effective delivery of maternal and child care services. Gummidipoondi Government Hospital is 25 kilometers away from the nearest village. Shortage of staff in the PHCs is also another reason that compounds the problem.

FIGURE 4.2 INFANT MORTALITY RATE (2013-14) (TABLE A1.11)



Source: Deputy Director Health Services, Tiruvallur & IPH, Poonamallee

The inter-block disparities in IMR ranges from lowest in Poonamallee (5.1 deaths per 1000 live births) to highest in Tiruvalangadu (20.2 deaths per 1000 live births) indicate high variation in preparedness for ensuring child survival, with availability of essential equipment such as incubators. Health department has to take up concerted action to address these lacunae.

Adequate round the clock healthcare facilities have successfully contained infant mortality elsewhere in the district and in the State.

Maternal Mortality Ratio

MMR is indicative of the health status of the pregnant mother in particular and overall health status of the women in general. It also reflects on the status of medical care received by the women during pregnancy and during delivery. The analysis on MMR assumes significance from both fertility and gender perspective. Though MMR for India has dropped from 212 deaths per 100,000 live births in 2007-09 to 178 in 2010-12; the country has a long way to go in achieving the MDG goal of 103 deaths per 100000 live births. It is well known that with innovative interventions like Comprehensive Emergency Obstetric and Newborn Care (CEmONC), MMR in Tamil Nadu (68) and in Tiruvallur district (79.5) are far better than India and well within the acceptable limits. (Annex Table A1.4)

TABLE 4.5 MATERNAL MORTALITY RATE

Sl. No.	Name of the blocks	2012-13	2013-14
1	Ellapuram	55.3	110.7
2	Gummidipoondi	41	117.6
3	Kadambathur	110.9	58.1
4	Minjur	92.6	29.5
5	Pallipet	193.3	63.6
6	Poonamallee	12.0	60.0
7	Poondi	143.3	148
8	Puzhal	55	42.8
9	R.K. Pet	62.6	67.5
10	Sholavaram	86	40.3
11	Tiruttani	63.4	246.6
12	Tiruvalangadu	75.2	228.8
13	Tiruvallur	164	29
14	Villivakkam	55.9	86.8

Source: Deputy Director of Health Services, Tiruvallur & IPH, Poonamallee

As per the Deputy Director Health Services (DDHS), except Ellapuram, Gummidipoondi, Poondi, Tiruttani and Tiruvalangadu, other blocks have achieved MDG for MMR. However, Ellapuram, Gummidipoondi, Thiruttani and Tiruvalangadu blocks were not able to sustain their past performance in the recent years. One of the deterrents in curtailing the MMR is that women with high risk status are not alerted on their status and regular follow up is not done. A Village Health Nurse (VHN) visits a village once in a month. For a high risk mother, it is not the weeks,

not the days, but hours and minutes count. More localized efforts are needed to curtail MMR in these blocks. (See BOX 4.1)

BOX 4.1 Maternal and Child Care - A Public Healthcare Emergency

With high IMR and MMR the health index is comparatively poorer in Gummidipoondi, Kadambathur, Puzhal, R.K. Pet, Sholavaram and Tiruttani blocks. Interactions with the Medical Officers, Child Development Project Officers (CDPO), and mothers from the SHGs revealed that poor nutritional and healthcare practices among mothers, poor healthcare delivery and poor health seeking behaviour equally share the blame.

Tiruvallur has a sizeable population belonging to Irula tribes. Women from this backward community get married at an early age and higher order births are common among them. Low nutritional intake and wrong dietary practices leading to anaemia is prevalent among the mothers. Moderate-to-severe anaemia (Hb<90 g/L) at enrolment was strongly associated with blood loss at delivery and postpartum period.

Telugu speaking women living in Tiruttani prefer to go to Tirupathi, Nagari or Sathyavedu in Andhra Pradesh, as they are more comfortable with Telugu speaking hospital staff. Similarly, as it is customary for women to have their first delivery in parental homes, they go to other places for delivery. This leads to difficulties in provision of Ante Natal Care (ANC) and in supporting the high-risk mothers with repeat visits necessary throughout the pregnancy. Awareness on health is poor due to low literacy and bilingual peripheries.

The villages are scattered and have problem in accessing the PHCs on time. In Gummidipoondi, there are some villages where even 108 ambulances are either not available or refuse to go because of bad roads. Kannakottai PHC in Gummidipoondi block is located in a remote place hard to reach.

Non-availability of technical services such as blood transfusion in some of the PHCs further worsens the situation.

The Tiruvalangadu PHC does not have sufficient space for a separate in-patient ward. The post-natal and nursing mothers are provided with beds in a common hall where out-patient (OP) clinic also functions. The nursing mothers have difficulties in breast-feeding their children due to lack of privacy. Though a new spacious building is sanctioned and the land is also identified, the construction is delayed due to the delay in acquisition of the land. The shortage of appropriately trained manpower is the case in some PHCs lacking specialized medical professionals to attend to complicated high-risk deliveries. (See Box 3)

On a positive note benefits from Dr. Muthulaxmi Reddy Maternal Benefit Scheme have resulted in increase in number of deliveries conducted at the PHCs, and reduction in IMR and MMR. The ANMs are the front liners who closely follow up and ensure safe deliveries case by case. Continued efforts such as 'community pregnancy celebrations' for creating awareness on the ANC will help to improve the health parameters for the mothers and the new born.

Kadambathur, Pallipet, Tiruvallur have shown impressive improvements in their performance from previous years, compared to the previous year. This is an impact of excellent health services provided at grass roots level despite some infrastructural gaps. Concerted efforts by the District Health Services towards providing comprehensive maternal and child healthcare have enabled

this performance. (See Box 4.2) In the better performing blocks uninterrupted efforts are needed to maintain the existing performance, just as on treadmill, one need to 'run' to be able to stay in the 'same place'.

BOX 4.2 District Headquarter Hospital -Leading by Example

The Tiruvallur District Headquarter Hospital (DHH) which also has the CEmONC services available; is centrally located catering to healthcare needs of about 12 lakh people from Tiruvallur, Tiruvalangadu, Kadambathur, Poondi, and Poonamallee blocks. Besides the CEmONC service DHH has a host of specialized services benefiting the patients from the adjacent blocks, such as, 1) Round the clock accident and emergency care, 2) Non-Communicable Disease (NCD) Control clinic, 3) District Blindness Control program, 4) NPPCD program for Deafness control, 5) District Mental Health program, 6) Integrated Counselling and Testing Centre (ICTC), 7) Prevention of Parent To Child Transmission (PPTCT) cell 8) Antiretroviral Therapy (ART) Centre for HIV/AIDS control, 9) Poison Treatment Centre, and 10) Congenital anomalies identification clinic. All the special services are provided in addition to other routine services. The introduction of 108-ambulance service has enabled the patients even from interior villages to reach the hospitals within 2 hours. As a result, more than half of the deliveries in the district's public healthcare facilities take place in the DHH. This includes the emergency cases that get referred from the HSCs and PHCs and also those who directly approach the DHH.

Some landmark cases

- * A 27-year-old woman was brought to casualty with a history of snake bite and was in respiratory failure intubated in the casualty. While stabilizing her, the airway was shifted in the 108 ambulance on the way to GH Chennai and the patient was saved by this crucial intubation performed in the casualty.
- * A baby was delivered in the GH by emergency Lower Segment Caesarian Section (LSCS) on a mother, who was referred by the PHC at Katchur. As the baby's head was fixed at the brim of the pelvis, the progression of labour was delayed. Both the baby and the mother survived the surgery and are healthy today.
- * A fibroid weighing four kilograms was successfully removed from the uterus of a 56-year-old women patient.
- * As an emergency life saving measure, an un-contracted uterus was removed from a woman who had come for her second delivery. Though she delivered normally she suffered atonic postpartum hemorrhage, which compelled the doctors to remove her uterus.

Highly satisfactory health care and successful handling of emergencies, the health seeking behaviour among the general public has now changed in favour of government healthcare services. High cost of private services is also one of the reasons for a steady rise in number of patients attending OPD and special clinics.

Box 4.3: Human Resources in Public Health Care System –Some concerns

It is a known fact that doctors are in short supply in the country. There is only one doctor per 1,700 citizens in India; against the WHO stipulated minimum doctor to population ratio of 1:1,000. While there are about 6-6.5 lakh doctors available, how many of these doctors are available for service in the public healthcare system, and specifically in rural areas is anybody's guess.

Shortage of medical staff was reported to be one of the reasons for poor IMR and MMR performance in Sholavaram, Gummidipoondi, and Kadambathur blocks. The medical and paramedical staff at DHH Tiruvallur also pointed to the need for skilled professionals such as counsellors, dieticians, special therapists to cater to the scores of patients in the age group of 30-35 years thronging the facility after introduction of NCD clinic. They need counselling and advice on life style modification. The recommendations of the Indian Public Health System (IPHS) guidelines pertaining to the doctors-patients ratio and other required staff pattern need to be implemented in the DHH. A human resources department and a housekeeping facility maintenance department should be formed there, which will decrease the burden on the existing system overburdened with administrative and clinical work.

Many sanctioned posts of the medical officers and nurses were vacant for a long time. Medical Recruitment Board has filled most of the vacancies of the Medical Officers during the massive recruitment exercise in September 2013. Few vacancies still need to be filled. The concern, however, is that, most of medical officers working in these PHCs are recently graduated inexperienced junior doctors. There are PHCs without women medical officers or resident medical officers. Male medical officers conduct deliveries with the help of staff nurses. The areas like RK Pet and Pallipet being small towns in remote locations the experienced doctors are not willing to stay there. Complicated cases are referred to the General Hospitals in Tiruvallur and Tiruttani. Such situations create fear among the pregnant women and their families prompting them to opt for the private institutions.

Place of delivery

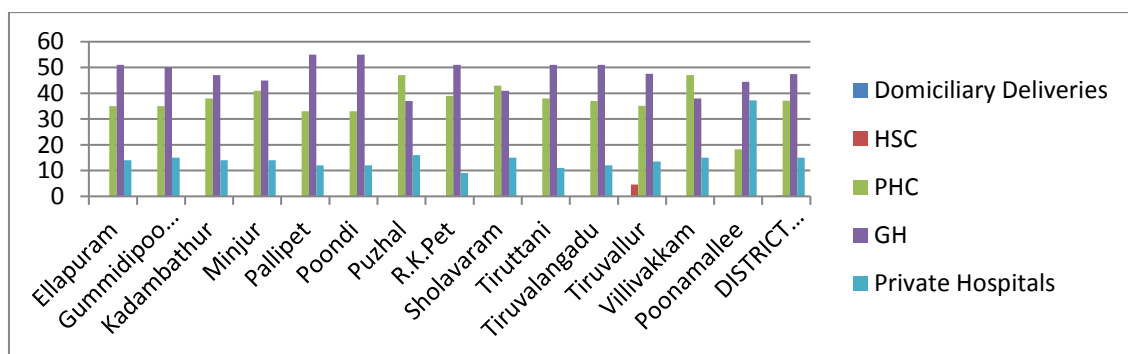
Availability of comprehensive health care facility, decision of the family members to opt for any institutional delivery and transport facility enabling access these services on time are three crucial steps that help curtail the MMR and IMR. CEmONC centres have been established at the district and sub-district hospitals. Tamil Nadu Health Services have affiliated to the National Rural Health Mission (NRHM) for 108 ambulance service, which helps women in labour to reach healthcare facility within 30 minutes of the call to toll free number 108. The ANMs and VHNs have been keenly advocating institutional deliveries among pregnant mothers and their families.

As a result of these efforts, percentage of institutional deliveries in the district has gone up to be 99.9 % with just 0.1 % domiciliary deliveries. Block-wise analysis reveals that 1 to 3 domiciliary deliveries have taken place nine of the fourteen blocks viz., Ellapuram, Gummidipoondi, Minjur, Pallipet, Poondi, Puzhal, Sholavaram, Tiruvallur and Villivakkam, showing that last mile coverage

at village level needs to be ensured. A low MMR and low IMR need to be certainly attributed to the public health services in the district where 84.8 % of deliveries take place (General Hospital (47.4 %), Primary Health Centre (37.1 %) and Health Sub Centre (0.3 %)). The share of private hospital in conducting deliveries has reduced to merely 15 %. (Annex Table A4.2)

The district has made tremendous progress in increasing the proportion of institutional deliveries. This was achieved by, on the demand side, high level of awareness among the people on the need for institutional deliveries both rural and urban areas for safety of the mother and the child and on the supply side, a very good performance of institutions like PHCs in rural areas. Apart from healthcare delivery per se other factors like infrastructure, particularly pucca building for PHC, adequate health personnel and medicine, proper road and transport facilities are essential prerequisites for sustaining the positive trends. The fact that Janani Bal Suraksha Yojana (JBSY) disbursement to the women is provided only when deliveries happen in institutions has improved the proportion of institutional deliveries. The interactions with people at the panchayat level highlighted the need to have hospital space housed in buildings on a permanent basis for some PHCs, instead of housing them in temporary rented buildings in the villages. Allotting common property land in consultation with local village panchayats for construction of the facility is the probable option.

FIGURE 4.3 INSTITUTIONAL DELIVERIES(%) (ANNEX TABLE A4.2)



Source: DD, Health & IPH, Poonamallee 2013-14

Still Birth Rate

Still Birth Rate (SBR) refers to an intra-uterine death or delivery of a dead child. It is being calculated for a number of such events that occurred per 1000 live births. Table 4.6 indicates that the district SBR has marginally declined from 13.26 in the year 2012-13 to 12.96 deaths per 1000 live births in 2013-14. Block wise SBR indicates wide disparities with Pallipet, R. K. Pet and

Tiruvalangadu recording SBR at nearly 18 which is much higher than the district average. Poonamallee block has the lowest SBR.

TABLE 4.6 STILL BIRTH RATE

Sl. No	Block /District	2012-13	2013-14
1	Ellapuram	14	16.9
2	Gummidipoondi	19.7	14.3
3	Kadambathur	12.9	10.6
4	Minjur	13.8	15.3
5	Pallipet	13.7	18.8
6	Poonamallee	4.72	6.57
7	Poondi	16.8	11.2
8	Puzhal	6.00	9.9
9	R.K.Pet	17.2	17.9
10	Sholavaram	13.9	9.4
11	Tiruttani	18.7	11.9
12	Tiruvalangadu	16.8	17.9
13	Tiruvallur	16	8.2
14	Villivakkam	6.7	12.5
Tiruvallur District		13.26	12.96

Source: Deputy Director of Health Services, Tiruvallur & IPH, Poonamallee

Poor pregnancy outcomes often result in repeat pregnancies and deterioration of women's health in addition to the financial and social burden. Prevailing incidences of SBR in the district point to the need to tackle high risk pregnancies with prior intimation and followup. Many of the cases of SBR take place due to the presence of congenital anomalies which could be corrected at a pre-natal stage if diagnosed. The women also need to be made aware of their high risk status if the case may be and advised on care to be taken during pregnancy as well as during any emergency and contacted frequently for a follow up during the entire pregnancy period. On record the ANC coverage is adequate. (Annex Table A4.3) Tamil Nadu has a very well developed Health Management Information System (HMIS). However, a critical look at the out-reach activities is called for. A concerted, localized universal drive is needed to prevent such anomalies in order to prevent still births, infant and maternal deaths.

Immunization

Immunization is crucial for prevention of childhood illnesses and morbidity. Child survival and development are contingent upon number of days the child becomes sick. Sickness in the family is a huge socio-economic burden on the family members. A vast spectrum of diseases among children is caused by infections, and they could cause poor health or even a premature death. Medical science has identified six killer diseases of childhood and named them VIP diseases

(Vaccine Preventive Diseases) which include tuberculosis, polio (poliomyelitis) measles, tetanus, diphtheria, and pertussis (whooping cough). Immunization has become an inevitable necessity as preventive measure for all these diseases. The prolonged campaign to control polio in the country has been successful with no fresh cases of polio detected for the past three years. Earlier the country has won a battle against small pox. In India the immunization drive rides on the shoulders of front line functionaries and empowering them is the key to the successful campaigns. Immunization data for the year 2013-14 indicates extensive coverage among the children below one year of age. (Annex Table A4.4)

BOX 4.4 Utilization of Public Health Services

Chennai is known to be the health capital of India, and known for a vast number of people who visit Chennai from across the world seeking specialized healthcare. Healthcare provision, particularly in the public sector in Tamil Nadu is also not far behind thanks to the political will and proactive administrations. There are several new healthcare initiative taking place in the State for past several years, Comprehensive Emergency Obstetric and New born care, Prevention of Cardiovascular Diseases, Cervical Cancer Screening to name a few. These initiatives were successfully piloted in few districts and later implemented in the whole State benefiting scores of population for whom these services were otherwise not accessible. The State also participates in many national programmes such as 108 emergency ambulance services in partnership with NRHM, programmes for prevention and control Non-Communicable Diseases. As a result utilization of health services has increased manifold in districts across the State.

Tiruvallur district has 14 Hospitals, 44PHCs, 303Health Sub Centres. Being close to Chennai, the district population has access to advanced specialty treatment available there. Of the 37.2 lakh people, 3.01 lakh people, about 8 % have used the government health services. Besides that under the NCD initiative, every patient and the people accompanying the patient have been checked for Blood Pressure and given appropriate advice. Under the cervical cancer screening a large number of women with or without any symptoms have been screened and treated if diagnosed with malignancy. The 108 service is working in coordination with the Directorate of Public Health. Women are intimated as they near the Expected Date of Delivery (EDD) and are advised to use the ambulance service to reach the hospital comfortably and on time. The service maintained a list of pregnant women registered in PHCs and district hospitals and kept a vigil on women who were likely to face complications during delivery.

An official reported that “All details about the pregnant women are registered with the help of software in these hospitals, including health complications, and this in turn is sent to the DPH. Government health staff call up the women and educate them on the benefits of using the ambulance to reach hospital from home and for shifting from one health facility to another if the need be. At the moment the project is being implemented in six districts - Tiruvallur, Kanchipuram, Villupuram, Cuddalore, Vellore and Thiruvannamalai. There has seen a surge from 23 % to 40 % of pregnant women utilizing the ambulance. This TNHSP innovation has also resulted in 76.9 % of all deliveries in taking place in government facilities.

NUTRITIONAL STATUS

Eradicating extreme poverty and hunger, reducing child mortality and achieving all the Millennium Development Goals (MDGs) related to health and education are largely dependent on progress in nutrition sector. It is widely believed that if undernourishment is not successfully addressed, it will be difficult to reach the other MDGs. When nutrition falls short, damage is done to individuals and to society. When pregnant women are not adequately nourished, their babies are born with low birthweights, putting their survival at risk. When girls are undernourished, their future ability to bear healthy children is threatened and micronutrient deficiencies among their children can lead to developmental delays throughout childhood and adolescence, making individuals less productive as adults.¹⁴

Malnutrition is quite a common phenomenon in many underdeveloped and developing countries because of the low capability of nutritional absorption; and its utilization by the body when it is exposed frequently to infectious episodes like diarrhea. The more vulnerable the population in terms of low access to nutrition, care and attention and high infection loads the lower are the likely weight and height outcomes.¹⁵ Children are graded based on their malnourishment status gauged from their age appropriate height and weight.

In a traditional society like in India, where economic status and gender play a decisive role in accessing right to adequate nutrition, women, children and particularly girl children bear the brunt of resource deprivation and food insecurity with lack of knowledge on nutritional facts adding the last straw. Malnutrition, the silent hunger, lack of adequate sanitation, low immunity further lowers the human capacity to absorb and effectively utilize nutrients and perpetuates the vicious cycle as it were.

Nutritional levels and trends

Integrated Child Development Scheme (ICDS) represents one of the world's largest and most unique programmes for early childhood development addressing the challenge of providing pre-school education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality, on the other. The healthcare, nutritional and educational services are purported to cover children, lactating and pregnant mothers and adolescent girls. Apart from the supplementary nutrition and healthcare services, the intense advocacy on nutritional practices

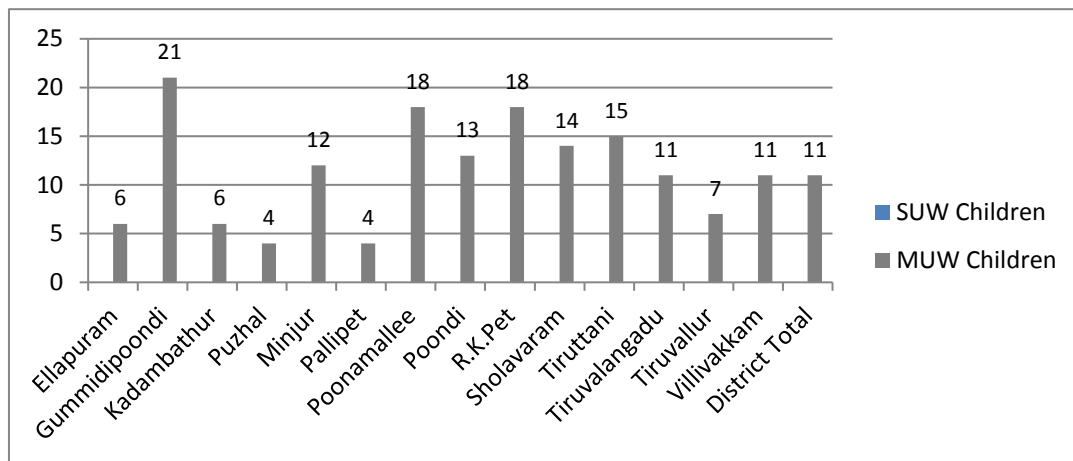
¹⁴*Nutrition and the MDGs, A report card on nutrition: Number 4, May 2006, UNICEF*

¹⁵*Tamil Nadu Human Development Report 2003 Page 51 & 52*

in general and breast feeding practices in particular appear to have brought around positive behavioural changes among the mothers.

A 2014 study conducted in the Primary Health Centres in Poonamallee block indicated that most of the mothers (89%) initiated breast feeding within one hour of delivery. Those who delayed initiation of breast feeding reported did so because of delivery with cesarean section and baby being in incubator as the reasons for the delay. Majority of the mothers (71%) practiced exclusive breast feeding for first six months and 62% of mothers continued the breast feeding for more than a year. Most of the mothers stopped breast feeding around 10 months of age. Initiation of weaning practices after six of months of age was highly significant with exclusive breast feeding.¹⁶ ICDS data from the District Project Officer is presented in FIGURE 4.4.

FIGURE 4.4 TRENDS IN NUTRITIONAL STATUS AMONG CHILDREN (0-5 YEAR)



Source: District Project Officer, ICDS 2013-2014(ANNEX TABLE A 4.5)

The fact that most of the children who were weighed in the Anganwadi are either normal (89 %) and moderately malnourished (11 %); speaks well of ICDS nutritional services for the children below five years. Among the blocks the proportion of children graded as moderately or severely malnourished is in the range of 4 % to 21 % with Gummidipoondi registering highest and Pallipet and Puzhal recording the lowest percentages. Overall there were only 17 severely malnourished children in the district. However, the overall number of moderately malnourished children is very high at 18,717 in the year 2013-14. (Annex Table A4.5) Nourishment is as much about the service delivery as about nutritional behavior by the parents. Improvement in quality

¹⁶Breast feeding practices: A predictor based study from Tiruvallur district, Tamil Nadu, DileepMavalankar, Online International Interdisciplinary Research Journal 01/2014;

of services and outreach and advocacy activities are the key to improving nutritional status among under-5 children.

In Tiruvallur, with continuous movement of workforce and their families, the universal coverage of migrant population by welfare scheme is often a challenge. Often AWWs are not clear about who can be called 'migrants'. Migrant population living on the outskirts of the villages does not make efforts to seek AWC services, nor, is it ensured that the services reach them. Superstitions such as weighing the children repeatedly bring them under some evil spell too hamper the routine. Since the census data is not collected on a regular basis, migrants and their children as well as pregnant and lactating mothers, remain outside the gamut of AWC services.

ICDS data however needs to be understood in the operational context of the gigantic flagship programme and its operations are very dynamic in nature with involvement of frontline functionaries such as Anganwadi Workers (AWW), VHNs, ASHAs and Supervisors. Review of registers and documents maintained by the AWWs, training and hand holding could go a long way in improving quality of AWC data, which forms the basis for formation of policies, programs and schemes for the target population.

Pregnant Women with Anemia

The economically disadvantaged pregnant and lactating mothers are most vulnerable to malnutrition in general and anaemia in particular. Anemia among pregnant women affects the mortality of the mother and infant. During the year 2013-14, among the women registered with District Health Services, 13 % were found anemic (HB count < 9). (Annex Table A4.6) ICDS coverage among the urban poor is most crucial for dealing with high risk pregnancies. Among the blocks considered as a unit including urban and rural areas, Pallipet and Poonamallee had maximum percentage of anemic mothers. (20 % each) In the absence of data on population of pregnant women in the district, and considering the share of private medical services, it is not possible to assess the extent and adequacy of ANC coverage.

Pregnant women in urban sectors seem to be living in the shadow of health services. Poor intake of iron rich food is one of the main causes for anemia. Majority of the women in the municipal areas, accessing the public health facilities belong to the migrant population. Most of the women either work as unskilled labourers on construction sites and do not necessarily follow the dietary practices nor adhere to consumption of Iron & Folic Acid (IFA) tablets as prescribed.

Innovative strategies such as pregnancy celebration day where the target community is located in the city need to be devised to ensure administration of IFA tablets to these women -.

Provision of IFA Tablets

No matter what the statistics about pregnant women with anaemia suggests, there are no two ways about under privileged status of women and girl children so far as access to adequate nutrition is concerned. Along with other supplementary nutrition services, provision of IFA tablets is a small step in readjusting the gender nutrition balance. Provision of IFA tablets is an essential part of the program strategy for improving the overall nutrition status of women of reproductive ages, specifically targeting nutritional anemia among urban and rural poor.

TABLE 4.7 PROVISION OF IFA TABLETS (2013-14)

Sl. No	Block	% of women took IFA tablets	% of children took IFA tablets	% of adolescent girls took IFA tablets
1	Ellapuram	113	54	67
2	Gummidipoondi	94	61	66
3	Kadambathur	103	55	71
4	Minjur	92	50	70
5	Pallipet	111	66	60
6	Poonamallee	99	14	75
7	Poondi	110	52	57
8	Puzhal	92	39	65
9	R.K.Pet	111	49	67
10	Sholavaram	91	44	46
11	Tiruttani	102	57	63
12	Tiruvalangadu	97	69	63
13	Tiruvallur	117	51	63
14	Villivakkam	94	25	56
	Disrict	102	49	63

Source: Deputy Director of Health Services, Tiruvallur & IPH, Poonamallee

Provision of IFA tablets to pregnant women has been universal at 102 % in 2013-14 (Table 4.7), while coverage among adolescent girls (63%) and children (49%) got IFA supplements needs further improvements. As a preventive measure for ensuring healthy mothers and healthy children in the future, ICDS coverage among adolescent girls needs to be stepped up to reach 100 %. There is no way to ensure that the girls and mothers consume the tablets except through continuous advocacy and behavior change communication. It is also difficult to gauge the outreach among the pregnant women as the data on pregnant women in the district is not available. Insufficient stock of IFA tablets with the VHN was reported as a reason for less than 100 % coverage among girls and children.

BOX 4.5 Government Nutrition Programmes

The Noon Meal Programme (NMP) of the State is one of the earliest food programmes in the country. There have been changes in the menu to increase the nutrient value of food provided in consultation with National Institute of Nutrition. Tiruvallur District participates in the NMP for children in schools and Anganwadis; supplementary nutrition program for Anganwadi children and pregnant and lactating mothers; and Provision of IFA tablets to pregnant and lactating mothers, school children and adolescent girls.

Supplementary nutrition and provision of IFA tablets are crucial for the lactating and pregnant mothers considering that 13 % of the women registered for ANC have been found to be anemic. Health department provides 100 IFA tablets and Albendazole as a preventive and prophylactic measure to all anemic mothers and pregnant women. Based on their Hb levels, mothers with mild to moderate anemia are given 200 IFA tablets as a therapeutic measure where as severely anemic mothers (Hb 7-9 gms %), are given Iron Sucrose intravenously as per schedule. Blood transfusion is done in government institutions for mothers with Hb less than 7gms.

Children below five years are given meals and nutritional supplements as required at AWCs under ICDS programme. The 2,085 AWCs in the district have been providing nutrition to pre-school children and for anti-natal and post-natal mothers under supplementary nutrition programme. It is necessary to increase the outreach of the programs to potential beneficiaries residing in remote places, in the outskirts of the villages, and particularly among the migrant population. Coverage of pregnant and lactating mothers is crucial for improving nutritional status of the children and birth outcomes. Reasons for target population not accessing ICDS services need to be reviewed. Low quality of ICDS services is found to be one of the key reasons prompting some of the potential deserving beneficiaries switching to private facilities.

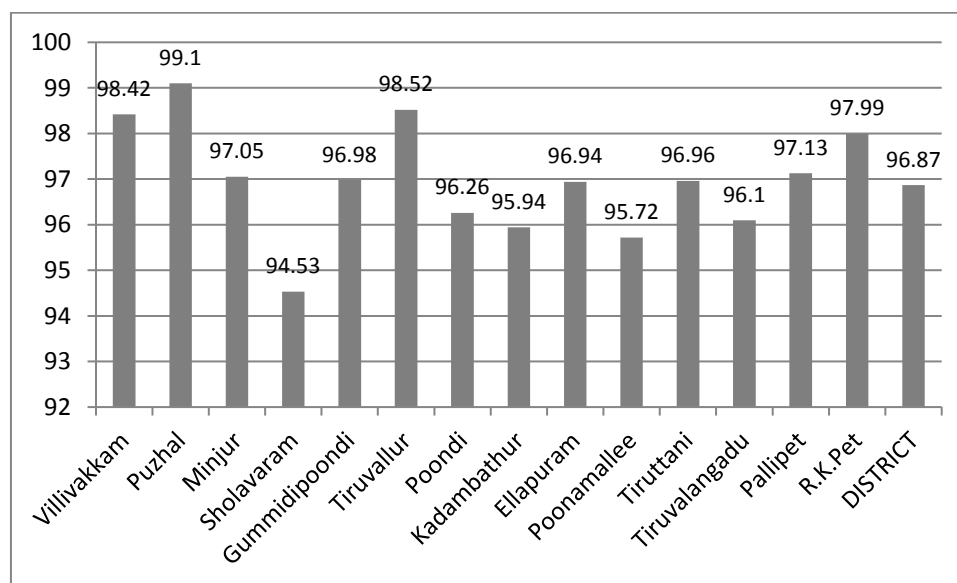
NON-NUTRITIONAL FACTORS AND THEIR IMPACT ON NUTRITION

Beside nutritional intake, other factors that influence nutritional as well as health status include access to clean water, sanitation and healthcare services. In this regard, besides availability of facilities and quality of services, household level practices assume key significance. Polluted food and water cause infections and parasitic diseases. Historically, it has been reported that incidence of diarrhea cases is less among those consuming water from protected water sources like well and piped water at home and 80 % of all diseases are water-borne and water-related. Inter-sector coordination between the departments dealing with water and sanitation and health is crucial for the prevention of water borne diseases as well as malnutrition. Improvements in environmental sanitation and personal hygiene have played a key role in bringing around reduction in morbidity which is further reduced with the help of preventive medicine.

Water Supply

Annex TableA4.7 indicates that 96.87 % of all habitations and wards in the district are provided with safe drinking water. While, 100 % urban wards have the drinking water facility, 3.13 % habitations accounting for 131 habitations still do not have potable water available locally. This means that people there have to depend upon unprotected, open water sources like rivers, tanks, ponds, lake or open wells and rural women and adolescent girls have to bear the additional burden of taking water from sources far away from their homes. Blocks such as Gummidipoondi, is bestowed with rich water resources and the plant for subsidized bottled water plant is located in Gummidipoondi. Effort of the district administration is to cover all hamlets and villages with drinking water facility.

FIGURE 4.5 ACCESS TO DRINKING WATER (% HABITATIONS WITH DRINKING WATER IN 2013-14)



Source: *mdws.gov.in, Town panchayats, Municipalities and zones*

Apart from susceptibility to water borne diseases, and low performance in health and environmental sanitation because of lack of sufficient water for use, there is also loss of human resources, in terms of the time spent of fetching water that the girls and women could be spending studying, learning skills, engaging in economically productive activities. Loss of quality of life in terms lack of quality time spent with family members and especially with children and lack of recreation points to physical and emotional burden on the women and girls.

Sanitation

As population increases are witnessed in both State and district, the demand for more housing and other related amenities such as bath rooms, toilets, and drainage facilities also increase.

Sanitation facilities are crucial not just from the health and nutrition dimension, but from the perspective of ensuring dignity and privacy to women.

TABLE 4.8 HOUSEHOLDS WITH ACCESS TO TOILET

Sl. No	Block	Total Number of HHs	Number of HHs with Toilet facilities	% of House Holds provided with toilets	Number of HHs with Toilet facilities	% of House Holds provided with toilets
			2012-2013		2013-2014	
1	Ellapuram	33880	10766	31.78	13104	38.68
2	Gummidipoondi	50144	19047	37.98	19047	37.98
3	Kadambathur	32392	7967	24.60	7967	24.60
4	Minjur	60698	24470	40.31	30211	49.77
5	Pallipet	24876	10962	44.07	13323	53.56
6	Poonamallee	168063	122723	73.02	127783	76.03
7	Poondi	27807	7493	26.95	7493	26.95
8	Puzhal	150990	132987	88.08	132987	88.08
9	R.K.Pet	24441	7456	30.51	7456	30.51
10	Sholavaram	40168	13053	32.50	23134	57.59
11	Tiruttani	29301	18462	63.01	18700	63.82
12	Tiruvalangadu	23189	7029	30.31	7029	30.31
13	Tiruvallur	49475	20575	41.59	28874	58.36
14	Villivakkam	231525	185929	80.31	187593	81.02
	District	946949	588919	62.19	624701	65.97

Source : BDOs, Town panchayats, Municipalities, Zones

Table 4.8 indicates that percentage of households that have toilets in this district in 2013-14 was 65.97 %. In Puzhal and Villivakkam more than 80 % households have toilet facilities whereas, in rural blocks such as Poondi and Kadambathur have less than 30 % household having toilets; placing them far behind the goals of Total Sanitation Campaign (TSC). As open defecation is practiced by both the genders in rural areas; even by members of households where toilets are available; utilization of toilets is a good indicator of sanitation rather than that of availability of toilets and this could be the basis for future data collection. A study in Gummidipoondi suggested that 90 % of households practice open defecation.¹⁷ Some of these 90 % households might actually have toilets. The reason for practice of open defecation could be just a matter of choice, besides, lack of access to a 'functional' toilet, complete with facility for water and adequate drainage system. Even among the upper caste households that have a latrine constructed within the premises, only the women use the toilets while the men practice open defecation. Socio-cultural and operational reasons that prevent people from using the toilets are

¹⁷Socioeconomic Study of 31 Villages in Gummidipoondi & Uthukkottai Taluks, Tiruvallur District, Tamil Nadu, Forrad 2010-11

taking away a great opportunity to prevent health hazards that are related to sanitation and hygiene.

There is no data available on construction of community sanitary complexes and women sanitary complexes, though many villages in the district are known to have common toilet blocks. SHG members could be encouraged to take up maintenance of paid community toilet blocks as enterprises. Panchayat local bodies and some non-government organizations provide loans for construction of household sanitary units. All schools in the district have separate toilet for girl students. It is important to ensure that these facilities are functional, maintained and not kept under lock and key. Further efforts to sensitize people and provide advocacy and handholding support are required, on behalf of government as well as non-government organizations before we can successfully achieve the TSC goals.

SPECIAL PROGRAMMES

Acquired Immuno-deficiency Syndrome (AIDS) Control

Human Immuno-deficiency Virus (HIV) as a communicable and sexually transmitted disease is life threatening and has no known cure. Prevention is the best option. Tamil Nadu is one among the hot spot states in the HIV map of India. Tiruvallur district is no exception. In the year 2011 number of newly diagnosed positive peoples had gone up to 403 from 376 in 2007, whereas the decade long advocacy efforts appear to be paying off if we go by the reduction in fresh incidence of HIV in 2014 to 279 (Table 4.9). There is just one Anti-Retroviral Therapy (ART) Centre functioning at the District Government Hospital. Of the 2149 people with HIV registered at the ART Centre till May 2015, a total of 1640 people are currently under active HIV care, with 333 under Pre ART processes and 1307 under ART regime. (Annex Table A4.8)

TABLE 4.9 INCIDENCE OF HIV

Sl. No	Age-Group wise	No. of HIV Positive People Newly Diagnosed										
		2007			2011				2013-2014			
		Male	Female	Total	Male	Female	TG	Total	Male	Female	TG	Total
1	0-14	5	6	11	6	3		9	5	5		10
2	15-19	0	1	1	1	4		5	2	0		2
3	20-24	12	29	41	11	15		26	7	16		23
4	25-29	47	40	87	49	25		74	28	27		55
5	30-39	106	59	165	93	55	1	149	39	38		77
6	40-49	36	14	50	63	43		106	50	25		75
7	50&above	15	6	21	22	12		34	19	17	1	37
	Total	221	155	376	245	157	1	403	150	128	1	279

Source : District Aids Prevention Control Unit

Tuberculosis Control

India's battle with Tuberculosis (TB) has been long and exacting. Revised National Tuberculosis Control Programme (RNTCP) is in place since as early as 1992. Despite RNTCP, the Cure for Sure campaign and concerted efforts by multiple agencies for more than two decades. Lack of success in preventing new incidences of TB has been rather disappointing. There are also people with HIV TB co-infection. Major challenges to control TB in India include poor primary health-care infrastructure in rural areas of many states; unregulated private healthcare leading to widespread irrational use of first-line and second-line anti-TB drugs and spreading of HIV infection. Multidrug-resistant TB (MDR-TB) is another emerging threat to TB eradication. Notification and treatment of TB in the private healthcare system does not take place as per the guidelines, besides the prevailing practice of over the counter sell of drugs further deteriorates chances of complete cure. World Health Organization (WHO) with its "STOP TB" strategy has given a vision to eliminate TB as a public health problem from the face of this earth by 2050.

TABLE 4.10 INCIDENCE OF TUBERCULOSIS DISEASE

Sl. No	Block	No. of persons with TB		
		2007	2011	2013-2014
1	Ellapuram	54	71	80
2	Gummidipoondi	101	129	130
3	Kadambathur	43	72	75
4	Minjur	100	137	128
5	Pallipet	71	45	53
6	Poonamallee	224	246	255
7	Poondi	45	38	79
8	Puzhal	164	281	238
9	R.K.Pet	31	22	45
10	Sholavaram	81	107	117
11	Tiruttani	72	69	63
12	Tiruvalangadu	39	46	54
13	Tiruvallur	88	88	92
14	Villivakkam	311	255	260
	District	1424	1606	1669

Source: District TB Centre, Poonamallee

Table 4.10 shows an increase by 17.2 % in the number of people having TB from 1,424 in 2007 by with 1,669 cases in 2013-14 in the district. The highest number of people affected by TB was found in Puzhal, Villivakkam and Poonamallee. This upward trend is seen in almost all the blocks except three blocks of Tiruvallur, Poondi, R K Pet and Tiruttani. The increasing incidences of in both urban as well as rural areas are also indicative of increased awareness and increase in sputum examination by people with symptoms.

If has been established that if the treatment regime is followed strictly, sufficient precaution is taken to keep the nutrition levels in acceptable limits and efforts are made to stop further infections, TB could be controlled. Hence TB is now an information and advocacy issue both among the patients as well as healthcare providers rather than clinical issue. Improving healthcare outreach and quality in remote areas could be another key strategy for TB control. Though Government TB sanatorium is not very far from Tiruvallur, at least a TB and Chest ward can be proposed at the district level for taking care of TB patients in early stages. Availability of a chest physician will be particularly useful for patients who are not willing to undergo any test or treatment for fear of it adverse effects.

Conclusion

Tamil Nadu leads the country in terms of both the advancement in health care, private or public, and innovative initiatives in public healthcare delivery. Tamil Nadu State's pro-healthcare status has rubbed on to Tiruvallur district as well with district's performing very well with regard on many health parameters. With a lower CBR and CDR the district has a faster population growth rate than the State in a complex web of influences including better health services and movement of labour. Sex ratio, though improved over the years is lower than the State average, and the CSR shows a declining trend, which calls for serious attention from district administration. Ironically, the district displays some of the best case and worst case scenario when health infrastructure and facilities across blocks is considered. Services such as institutional deliveries and immunization record nearly universal coverage across blocks. Proportion of severely malnourished children too is low across blocks. Universal access to sanitation and toilets is conspicuously absent in many blocks. Besides speeding up toilet construction drive, efforts are also needed to ensure that existing facilities are functional and used by the population. While data pertaining ICDS is known to be doubtful, there is also no way to ensure supplementary nutrition programme has 100% outreach and measures are taken to ensure on actual consumption of the nutritional mix or IFA tablets by the women and girls. Further improvements in access and outreach of services, particularly in remote areas, and to marginalized population can make the public health care delivery more equitable.

CHAPTER 5
LITERACY AND EDUCATION

Chapter 5

Literacy and Education

Introduction

It is evident that education is critical for strengthening people's capabilities and freedom. Education has significantly contributed to the progress in the HDI over the past 40 years. Inequality in access to and quality of education is a critical challenge for advancing HD.¹⁸ Education has the ability to empower the population socially, economically and politically. India has made every effort at both pursuing educational excellence as well as its universalization. Excellence in sciences is directed more at making the country self-sufficient in industrial, medical as well as defense sectors, whereas universalization of education makes it available to all, giving equal opportunity to all sections of society including the marginalized groups and women. Tamil Nadu has been one of the high performing states in the area of education and literacy. Over the decades, the performance of the State w.r.t. literacy rates, enrolment and completion rates in the school education systems as well as higher education has been impressive. Aiming at reaching the last mile, the State is now focusing on reaching out to the out of school children. Considering the deficit in quality of educational outcomes at primary and upper primary levels, GoTN has also instituted SSA since 2001, introducing innovative ways to enhance quality of school education. The programme aims to provide useful and relevant, free and compulsory elementary education for all children in the age group 6 to 14 years under Right to Education (RTE) Act, 2009.

Tiruvallur is one of the districts exceeding the State performance on the education front. However, disaggregate data on literacy indicates poor performance for female literacy in some blocks. Present chapter makes an effort to identify the general trends and various issues pertaining to developments in the sector. Data from 2013-14 on key parameters such as literacy rate, enrollment rate in primary and upper primary, school completion rate have been reviewed and analyzed. Other parameters discussed here include transition rate from primary to upper primary, drop out rate in primary and secondary, gender wise transition from upper primary to secondary, children never enrolled in schools, out of school children, pupil-teacher ratio, school infrastructure, Mid-Day Meal (MDM), scholarships and hostel facilities. Lastly, education sector has been placed in the context of skill gap analysis providing inputs for a planned skilling of the

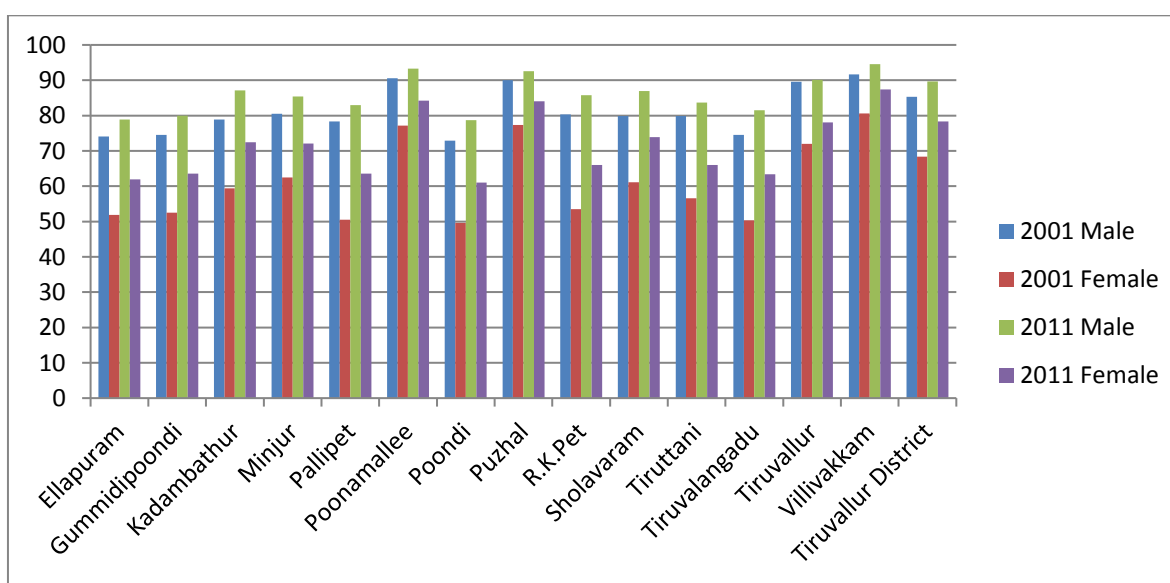
¹⁸The value of education in the HDI and human development broadly, Eva Jespersen, Human Development Report Office, UNDP Meeting of EFA working group, Paris 2-3 Feb 2011

new generation in order to bring a match between skill sets available and requirement in the industry and service sectors.

Literacy

Male and female literacy rates in Tiruvallur district are comparatively better than the State for both 2001 and 2011. Overall literacy of the district, which was expected to increase by 10 %, has increased by 7 % during the period 2001 and 2011, from 76.9 % to 84 %. Male and female literacy rates have also increased by 4.4 % and 10 % respectively during the reference period. Higher increase in female literacy is encouraging. However, the difference between male and female literacy which was about 17 % points in 2001 has reduced to about 10 % points in 2011.

FIGURE 5.1 MALE AND FEMALE LITERACY RATES



Source: Census 2001, 2011, (Annex Table A5.1)

Block disaggregate data suggests that four blocks, namely, Villivakkam, Poonamallee, Puzhal and Tiruvallur; had higher literacy rates than the district average. Gender wise literacy rates reveal that in 2011, the same four blocks also had a higher or equally high female literacy rates than district average. Inter-block variation in literacy rates prevail because of the differences between geographical accesses to the educational institutions for students from interior villages.

ELEMENTARY EDUCATION

The education system in Tamil Nadu and in Tiruvallur district is based on the national pattern with 12 years of schooling. Eight years of elementary education has five years of primary and three years of middle school education for the age groups of 6-11 and 11-14 years, respectively,

are followed by secondary and higher Secondary education of two years each besides two years of pre-primary education.

Primary Education

The entry age in class 1 is 5+ years. Pre-primary classes make the children school ready. Anganwadis play a key role in ensuring that children have adequate nutritional status, are receptive to scholastic inputs and perform as per WHO standards of early growth. Elementary education has received a great boost since the initiation of the SSA, which has worked on a mission mode towards a goal of 100 % enrolment into primary schools. Department of Human Resources, Government of India and the Tamil Nadu State Education Department have worked tirelessly to ensure that each child goes to school. Tamil Nadu is also one of the pioneers adopting innovative pedagogy like Activity Based Learning (ABL) under the SSA.

Enrolment

TABLE 5.1 GROSS ENROLMENT RATE IN PRIMARY EDUCATION

Sl. No	Block	Primary								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Ellapuram	101.57	101.67	102.32	101.23	101.33	102.67	101.40	101.50	102.49
2	Gummidipoondi	102.46	102.46	103.22	101.33	101.33	102.76	101.90	101.90	102.99
3	Kadambathur	102.31	102.32	103.06	101.56	101.56	103.00	101.94	101.94	103.03
4	Minjur	102.10	102.16	102.85	101.21	101.21	102.65	101.66	101.69	102.75
5	Pallipet	102.46	102.48	103.21	101.51	101.51	102.94	101.98	102.00	103.07
6	Poonamallee	101.75	101.76	102.50	100.95	100.95	102.38	101.35	101.36	102.44
7	Poondi	102.14	102.64	102.89	101.50	101.50	102.93	101.82	102.07	102.91
8	Puzhal	100.93	101.03	101.67	100.62	100.62	102.05	100.78	100.83	101.86
9	R.K.Pet	102.44	102.44	103.19	100.81	100.84	102.23	101.62	101.64	102.71
10	Sholavaram	101.83	101.84	102.58	101.11	101.11	102.54	101.47	101.48	102.56
11	Tiruttani	102.35	102.35	103.10	100.60	100.60	102.02	101.48	101.48	102.56
12	Tiruvalangadu	101.87	101.87	102.62	101.30	101.30	102.73	101.58	101.59	102.67
13	Tiruvallur	102.43	102.44	103.18	101.57	101.61	103.00	102.00	102.03	103.09
14	Villivakkam	102.05	102.15	102.80	101.07	101.17	102.50	101.56	101.66	102.65
	District	102.05	102.11	102.80	101.17	101.18	102.60	101.61	101.65	102.70

Source: CEO (SSA), Tiruvallur

The district has had impressive achievements in enrolling almost all school-going age children into school. It is evident from the Table 5.1 that the district enrolment rate for primary section is consistently high for past three years. Enrollment ratio is evenly high in all the blocks for primary sections indicating involvement of both the institutions as well as the community level stakeholders in encouraging the school-going age children of both sexes join school.

BOX 5.1 Incentives for Enrollment

Tamil Nadu has been pioneering in the introduction of various incentives to encourage enrollment of school children. In Tiruvallur district, prior to the enrollment drive, habitations without schools were identified through school mapping and District Information System for Education (DISE) data 2008-09 and 100 % school access at primary level was achieved. The programmes like NMP, scholarship and hostel facilities helped in improving enrollment of school-going age children from lower income segments, as well as, children from SC and ST communities. The noon meal centers at village level cater to the food and nutrition requirements of the government school students.

The district administration has achieved 100 % coverage in all the blocks covering 451,557 students. The District Chief Educational Officer (CEO) reports that as many as 757 students have availed scholarship in the district in 2011. Tiruvallur district also has 60 schools which are attached with 76 hostel facilities for Adi-Dravidar Welfare (ADW) and Backward Caste Welfare (BCW) students. About 4,545 ADW and BCW students accounting 48.97 % of the total were staying in the hostel. Children enrolled in schools also get text books, note books, uniform and footwear free of cost, and learning enhancement items like crayons, colour pencils, atlas, self-learning kits, bicycles, computers at various levels of their schooling. Students who lose their parents are given financial assistance to continue their education without any hindrance. Cycle scheme for the 10 standard students is very popular among the children. Higher secondary class students are given laptops through another such scheme.

Completion Rate and Dropout Rate in Primary Education

TABLE 5.2 COMPLETION RATE DROP OUT RATE IN PRIMARY EDUCATION

Sl. No	Blocks	Completion rate						Dropout rate					
		Boys		Girls		Total		Boys		Girls		Total	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Ellapuram	98.09	98.85	98.13	99.03	98.11	98.94	2.31	2.11	1.88	1.80	2.09	1.90
2	Gummidipoondi	98.02	98.56	98.02	98.29	98.02	98.43	1.39	1.27	1.12	1.07	1.25	1.16
3	Kadambathur	98.12	98.33	98.12	98.59	98.12	98.46	1.31	1.19	1.00	0.96	1.15	1.09
4	Minjur	98.01	98.43	98.02	98.26	98.02	98.35	0.91	0.83	0.69	0.66	0.80	0.68
5	Pallipet	98.02	98.41	98.03	98.28	98.03	98.35	1.06	0.97	0.95	0.91	1.01	0.98
6	Poonamallee	99.07	99.33	98.14	99.55	98.61	99.44	1.52	1.39	1.23	1.17	1.38	1.31
7	Poondi	98.18	97.98	98.24	98.90	98.21	98.44	2.12	1.94	1.16	1.11	1.64	1.58
8	Puzhal	98.00	98.53	98.06	98.83	98.03	98.68	1.41	1.28	1.05	1.00	1.23	1.19
9	R.K.Pet	98.16	98.61	98.15	98.06	98.16	98.34	1.46	1.34	1.70	1.62	1.58	1.44
10	Sholavaram	98.16	98.33	98.55	98.30	98.36	98.32	1.18	1.08	1.13	1.08	1.15	1.08
11	Tiruttani	98.03	98.60	98.12	98.61	98.08	98.61	1.63	1.49	1.29	1.24	1.46	1.37
12	Tiruvalangadu	98.11	98.53	98.00	98.20	98.06	98.37	1.52	1.39	1.38	1.32	1.45	1.37
13	Tiruvallur	99.10	99.62	99.10	99.25	99.10	99.43	1.47	1.35	0.70	0.67	1.09	1.00
14	Villivakkam	98.01	97.59	98.14	98.21	98.08	97.90	1.53	1.40	2.12	2.03	1.83	1.76
	District	98.22	98.55	98.20	98.60	98.21	98.57	1.49	1.36	1.24	1.19	1.36	1.28

Source: CEO, SSA, Tiruvallur

The completion rate has marked consistently high performance at the primary level. This indicates that opportunities for schooling are available and both girls and boys in rural areas of all the blocks in the district universally access education. High completion rates at the primary school are mainly the function of evaluation and promotion system followed in government schools. There are no tests and no one is failed and everyone is promoted to the next class. The data presented in the Table 5.2 is not indicative of children's academic performance, but indicative of the fact that they have been successfully retained in the schools.

Out of School and Never Enrolled Children

BOX 5.2 Back to Where They Belong!

Gowri, the mother of two toddlers Vijayakumar and Rekha, passed away, leaving them with no other option but join their father, Ganesan, in collecting garbage and selling it for a meagre sum at the end of the day. These siblings from Theerthamkirayampatty village had never been to a school. But that was only until Child Rights Protection Committee (CRPC) volunteers from their village spotted them. CRPCs, formed by Hand in Hand India, an NGO, consist of groups of volunteers from the local communities who address issues pertaining to education, child rights and importantly child labour. The volunteers convinced Ganesan to allow his children to go to school so that they could have a better future. But having never gone to a school there was always an uncertainty about their coping skills. Hence, Vijay and Rekha were first admitted in Hand in Hand India's Residential Special Training Centre (RSTCs) funded by SSA in Dhamanery in Tiruvallur district.

The RSTCs are meant for all out of school children aged between 6 and 14 years who have never been to a school or dropped out of school for more than six months because of their engagement in labour or various other reasons such as migration by parents, death, separation or illness in the family. The children are provided special training for 10 months and when they are school ready they are enrolled in a regular government school. Vijay and Rekha being young and with a zest to learn picked up everything very fast and within 10 months they were ready for regular school. Soon, the children joined the 3rd and 2nd grades respectively in a government aided school in Thiruvellaivaayil. Today, after couple of years in the school, they can't wait to go to school every morning, to learn, to play; to be where they belong. Hand in Hand India's Child Labour Elimination Programme (CLEP), initiated in 2002, was started with the aim of bringing children out of bonded labour and giving them a chance to learn and regain their lost childhoods. Over the years, the Programme has identified many out-of-school children, who have been enrolled and retained in regular schools, making 'education for all' a reality. Hand in Hand India runs nine such RSTCs in Tamil Nadu.

A fraction of students dropping out of the school for various reasons continues to be a concern for the school administration. There are also a considerable number of never enrolled and out of school children, despite various measures taken up for improvement in education. In the year 2011 there were 775 girls and 892 boys in the age group of 6 to 14 years who were never enrolled in any school. These children accounted for 0.36 % of the children in the school-going age

group. This percentage has further reduced to 0.08 % in 2013-14, but for the thankless efforts taken during the enrolment drive in the district. (Annex Table A5.2) It is still a large number of children who stand to lose an opportunity of more fulfilling life and better employment opportunity in the future. It is also a loss of human resource. By ensuring adequate schooling facilities support to students and counseling the families, it is possible to mainstream these children and help them complete the 10th grade that will help them pursue a professional course that gives them a stable employment.

Elaborate steps have been taken to enroll the out of school children in the district through summer camps, residential and nonresidential bridge courses since 2008-09. Nearly 535 children were enrolled in summer camps and 995 in non-residential bridge courses in 2008-09. In three blocks, Tiruvallur, Sholavaram and R.K .Pet, residential bridge courses were conducted for 121 students. Such efforts have continued and have curtailed the dropout rate to 1.28 % in the year 2013-14. Block-wise data shows that Poonamallee and Tiruvallur had the least number of out of school children in 2013-14, whereas Minjur and Gummidipoondi had comparatively higher proportion of dropouts. (Table 5.2)

UPPER PRIMARY / MIDDLE SCHOOL EDUCATION

Enrolment

Table 5.3 GENDER WISE GROSS ENROLMENT RATE IN UPPER PRIMARY EDUCATION

Sl. No	Block	Upper Primary								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Ellapuram	101.12	101.22	102.76	101.23	101.33	102.33	101.18	101.28	102.55
2	Gummidipoondi	101.22	101.22	102.87	101.26	101.26	102.36	101.24	101.24	102.61
3	Kadambathur	101.22	101.23	102.87	101.24	101.24	102.34	101.23	101.24	102.60
4	Minjur	101.12	101.22	102.76	101.00	101.03	102.10	101.06	101.13	102.43
5	Pallipet	100.97	100.97	102.61	101.03	101.03	102.13	101.00	101.00	102.37
6	Poonamallee	100.97	100.98	102.61	100.70	100.17	101.79	100.84	100.58	102.20
7	Poondi	100.71	100.75	102.34	101.28	101.28	102.38	100.99	101.02	102.36
8	Puzhal	100.93	100.94	102.57	101.14	101.24	102.24	101.04	101.09	102.41
9	R.K.Pet	100.99	100.99	102.63	101.24	101.25	102.34	101.12	101.12	102.49
10	Sholavaram	101.22	101.22	102.87	100.98	100.98	102.08	101.10	101.10	102.47
11	Tiruttani	100.15	100.25	102.60	101.29	101.29	102.35	100.72	100.77	102.47
12	Tiruvalangadu	100.96	100.96	101.78	101.06	101.06	102.39	101.01	101.01	102.09
13	Tiruvallur	100.96	100.96	102.60	101.25	101.25	102.15	101.10	101.11	102.38
14	Villivakkam	100.88	100.88	102.52	100.69	100.69	101.79	100.79	100.79	102.15
	District	100.96	100.98	102.60	101.10	101.07	102.20	101.03	101.03	102.40

Source : CEO, SSA

The successful enrolment performance at primary level continues at the upper primary section as well (Table 5.3) indicating retention of children in the schools in the higher classes.

Completion Rate and Dropout Rate in Upper Primary Education

At the upper primary level completion rate during year 2012-13 was lower at 94.27 % as compared to that at the primary level 98.57 %. (Table 5.2, 5.4) Completion rate is slightly higher among girls. This indicates that opportunities for schooling are available and accessed by girls, and schools have facilities such as separate toilets for girls, and there is supportive atmosphere in their families. The dropout rate during upper primary is marginally higher among boys. Early entry in the job market by some of the boys could be the reason for slightly higher dropout rate among boys. Compulsion to start earning money, engagement in household business or agriculture compelled to earn, and parents migrating to other places are some of the reasons for children dropping out of the school.

TABLE 5.4 COMPLETION RATE AND DROPOUT RATE IN UPPER PRIMARY EDUCATION

Sl. No	Block wise / District	Completion						Dropout					
		Boys		Girls		Total		Boys		Girls		Total	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Ellapuram	92.43	96.44	93.53	97.27	92.98	96.86	1.67	1.64	1.19	1.16	1.43	1.4
2	Gummidipoondi	93.01	96.16	93.98	96.55	93.5	96.36	2.16	2.12	2.25	2.19	2.2	2.16
3	Kadambathur	97.6	95.93	98.09	96.84	97.85	96.39	0.54	0.54	0.63	0.61	0.59	0.57
4	Minjur	93.05	96.03	93.45	96.52	93.25	96.27	2.05	2.02	1.53	1.49	1.79	1.75
5	Pallipet	92.1	96.02	92.96	96.54	92.53	96.28	2.29	2.25	1.18	1.15	1.74	1.7
6	Poonamallee	95.52	96.92	96.2	97.78	95.86	97.35	1.21	1.19	1.25	1.22	1.23	1.21
7	Poondi	93.94	95.59	94.02	97.15	93.98	96.37	1.28	1.26	2.59	2.53	1.94	1.89
8	Puzhal	93.24	96.13	93.94	97.08	93.59	96.61	1.4	1.37	1.68	1.63	1.54	1.5
9	R.K.Pet	93.08	96.21	93.68	96.32	93.38	96.27	2.09	2.06	1.25	1.22	1.67	1.64
10	Sholavaram	93	95.94	93.2	96.56	93.1	96.25	2.49	2.45	1.82	1.77	2.16	2.11
11	Tiruttani	93.1	96.2	94.68	96.86	93.89	96.53	1.6	1.57	1.81	1.76	1.7	1.67
12	Tiruvalangadu	92.15	96.13	93.01	96.46	92.58	96.3	2.41	2.37	1.16	1.13	1.78	1.75
13	Tiruvallur	98.95	97.19	98.98	97.49	98.97	97.34	0.54	0.54	0.52	0.51	0.53	0.52
14	Villivakkam	94.23	95.22	94.43	96.47	94.33	95.84	2.89	2.84	0.8	0.78	1.85	1.81
	District	93.96	96.15	94.58	96.85	94.27	96.5	1.76	1.73	1.4	1.37	1.58	1.55

Source: CEO, SSA

Transition Rate

Transition rates from primary to upper primary are 99.80% during 2013-14 with minor or no difference among girls and boys in this regard.

TABLE 5.5 TRANSITION RATE FROM PRIMARY TO UPPERPRIMARY AND FROM UPPER PRIMARY TO SECONDARY (%)

Sl. no	Block	Transition from primary to upper primary						Transition from upper primary to secondary					
		Boys		Girls		Total		Boys		Girls		Total	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Ellapuram	99.90	98.89	99.89	98.79	99.90	98.84	98.99	95.81	97.94	96.84	98.47	96.33
2	Gummidipoondi	99.79	98.93	99.97	98.79	99.88	98.86	98.97	98.78	95.99	96.72	97.48	97.75
3	Kadambathur	100.00	99.06	99.88	98.78	99.94	98.92	99.94	98.52	95.95	98.48	97.95	98.50
4	Minjur	99.98	99.01	99.97	98.86	99.98	98.94	99.95	98.85	98.12	98.78	99.04	98.82
5	Pallipet	99.95	99.00	99.97	98.86	99.96	98.93	99.56	96.99	98.00	95.82	98.78	96.41
6	Poonamallee	100.00	99.02	99.93	98.82	99.97	98.92	99.96	98.99	98.50	99.18	99.23	99.09
7	Poondi	99.86	98.93	99.88	98.77	99.87	98.85	98.95	97.58	97.45	98.51	98.20	98.05
8	Puzhal	98.89	97.92	98.94	97.80	98.92	97.86	99.95	97.58	99.90	98.25	99.93	97.92
9	R.K.Pet	99.79	98.82	99.96	98.69	99.88	98.76	98.99	95.97	98.15	96.89	98.57	96.43
10	Sholavaram	100.00	99.04	99.84	98.74	99.92	98.89	99.95	97.28	98.95	98.74	99.45	98.01
11	Tiruvalangadu	100.00	99.05	99.72	98.67	99.86	98.86	98.99	98.74	98.98	97.97	98.99	98.36
12	Tiruvallur	100.00	99.04	99.85	98.74	99.93	98.89	99.95	97.57	98.99	96.99	99.47	97.28
13	Tiruttani	99.87	98.93	99.88	98.67	99.88	98.80	99.55	98.61	99.95	98.75	99.75	98.68
14	Villivakkam	99.91	98.92	99.87	98.78	99.89	98.85	99.97	99.57	99.00	99.72	99.47	99.65
	Total	99.85	98.90	99.83	98.70	99.84	98.80	99.11	97.92	98.03	97.97	98.91	97.95

Source: CEO, SSA, and RMSA, Tiruvallur

It has also been a matter of policy, that, there are no qualifying exams for promoting the students to higher classes. Hence, children are retained in the school and safeguarded from getting trapped in child labour. This system though enables the children to learn without pressure of competition and examination; it does not ensure adequate learning among the children. It also does not guarantee their enhanced capacity to absorb learning at higher levels that could open doors to safe and secure employment opportunities for the children when they enter the job market. Transition from upper primary to secondary school is slightly lower, overall, and also comparatively lower by a fraction among the girls. (Table 5.5) It is the transitioning from upper primary to secondary school that takes a beating, as promoting students does not happen automatically after the eighth grade. A sizable number of students drop out of the system at the secondary level.

Access to Schools

For equity in education, universal access is crucial. Attempts are being made that schools are located within easy reach of both girls and boys. Distance from school and availability of transport; however, determine the actual access to school. As per of GoTN norms, a habitation is entitled to have a primary school, if it has a total population of 300 or more and has no school

within a distance of one kilometre. For upper primary schools, the corresponding norm is total population of 500 and more no school within a distance of three kilometres.

TABLE 5.6 AVAILABILITY OF SCHOOLS (2013-14)

Sl. No	Block wise/District	Number of Habitations	Number of Primary School	Number of Upper Primary School
1	Ellapuram	266	77	25
2	Gummidipoondi	360	95	31
3	Kadambathur	226	63	25
4	Minjur	495	112	38
5	Pallipet	231	81	20
6	Poonamallee	237	47	34
7	Poondi	282	84	18
8	Puzhal	237	55	24
9	R.K.Pet	248	79	17
10	Sholavaram	268	51	23
11	Tiruttani	188	72	27
12	Tiruvalangadu	170	80	15
13	Tiruvallur	300	50	23
14	Villivakkam	475	67	32
Tiruvallur District		3983	1013	352

Source: CEO, SSA for Primary and Upper Primary Schools, Tiruvallur

The data provided in Table 5.6 indicates number of schools available and number of habitation catered to by those schools. However, the information on distance, transport and approach to these schools from the habitation, if compiled, could throw more light on actual accessibility to some hamlets. In geographically hard to reach location, schools may be located within the reach but due to bad conditions of roads and lack of transport facility the students have to go around longer distance to reach the school. Hence, the norm is often relaxed in case of hilly and tribal dominated areas, difficult terrains and border districts. A distance of one and three kilometer is treated as the maximum walking distance to which a child is expected to travel from his residence to school. Hardships in access are experienced more by female students.

The problem of difficult access to the schools has been widely discussed by the panchayat presidents and they do have suggestions w.r.t. appropriate locations for the school. The cycle programme for children has hit the jackpot. Programmes such as mini bus service that has started in Chennai could be adapted to address school transport issue. Youth in the villages could also be encouraged to run share autos in places where public transport is not available or infrequent. This could turn out to be a win-win situation where the youth have a source of livelihood, and the school students and other people in the villages have access to transport.

Pupil Teacher Ratio in Primary and Upper Primary

The disaggregated block level data for 2011 and 2013-14 in Table 5.7 indicates that the student-teacher ratio is in acceptable limits across both primary as well as upper primary schools. Student teacher ratio is a good indicator that can facilitate quality teaching-learning in the class rooms and better academic performance. However, there are other factors such as filling all vacant posts for teachers, regularity in attendance, frequent training on modern teaching methodology, active parent-teacher associations, availability and adequate supply of electricity, and even adequate drinking water and toilet facilities, that can influence the teaching-learning processes. Secondly, in the current education system in the district, and in the State, expects teachers to facilitate Activity Based Learning (ABL) by the students rather than delivering knowledge and information to the students. In this scenario, teacher needs to engage with the students much more than in traditional unilateral teaching methods. Hence, teachers' physical presence, continuity and personal rapport with each of the children is important for administering the more personalized learning technique as against 'mass' learning promoted through rote techniques.

TABLE 5.7 PUPIL TEACHER RATIOS IN PRIMARY AND UPPER PRIMARY SCHOOLS

Sl. no	Block	Primary School				Upper Primary School			
		Pupil Teacher Ratio	Pupil School Ratio	Pupil Teacher Ratio	Pupil School Ratio	Pupil Teacher Ratio	Pupil School Ratio	Pupil Teacher Ratio	Pupil School Ratio
		2011		2013-14		2011		2013-14	
1	Ellapuram	23:1	84:1	24:1	55:1	27:1	130:1	18:1	107:1
2	Gummidipoondi	24:1	107:1	26:1	59:1	25:1	163:1	25:1	134:1
3	Kadambathur	20:1	86:1	20:1	54:1	28:1	130:1	17:1	78:1
4	Minjur	21:1	96:1	23:1	48:1	28:1	147:1	20:1	104:1
5	Pallipet	23:1	78:1	20:1	53:1	25:1	132:1	20:1	118:1
6	Poonamallee	25:1	187:1	27:1	89:1	26:1	188:1	21:1	117:1
7	Poondi	20:1	58:1	21:1	43:1	25:1	118:1	25:1	89:1
8	Puzhal	24:1	207:1	31:1	108:1	26:1	264:1	24:1	197:1
9	R.K.Pet	22:1	82:1	21:1	57:1	26:1	145:1	25:1	120:1
10	Sholavaram	22:1	132:1	26:1	73:1	35:1	181:1	25:1	143:1
11	Tiruttani	25:1	89:1	22:1	49:1	26:1	137:1	17:1	97:1
12	Tiruvalangadu	21:1	61:1	21:1	47:1	24:1	126:1	20:1	105:1
13	Tiruvallur	22:1	133:1	24:1	60:1	25:1	174:1	17:1	80:1
14	Villivakkam	26:1	237:1	29:1	120:1	22:1	225:1	21:1	172:1
	District	23:1	117:1	24:1	65:1	26:1	162:1	21:1	119:1

Source: CEO SSA

Quality of education is a concern, considering Tamil Nadu's poor performance as per the Annual Status of Education Report (ASER) assessments that are conducted across the country every

year.¹⁹ During a consultation, village panchayat presidents highlighted the need of private tuitions for students to enable them to learn basics of computer and related technology. The panchayat presidents also insisted on providing free laptops to primary school children as there is greater demand among students to understand computers. Having a laptop at home also provides a social status to the rural people irrespective of their economic status. The panchayat presidents also feel that providing free laptops also may attract more enrolments in the school. Representatives from Tiruttani and Ellapuram panchayats cited an example of an NGO call Tripura Foundation that has arranged private computer coaching classes in their blocks, for teaching computer application to the needy students by paying 2500 INR salary to the teacher.

BOX 5.3 Reading and Writing Skills Among Primary School Students

Imparting basic reading writing and arithmetic skills is considered the core purpose of primary education. These skills if acquired they last a person all through her active professional and personal life. These skills are developed through ABL that is more facilitative than prescriptive. The SSA has focused on teaching math and language through specially developed materials and broadcasting of interactive English lessons for class five, with the help of private service providers like British Council. Under SSA, schools are provided with television and digital video disk players. ABL approach also has several skill based ladders to help in assessments.

A study on the relationship between the teacher commitment and the academic achievement of students at primary level was conducted by the State Council for Educational Research and Training (SCERT) in Tiruvallur District and subsequent interventions were planned based on its findings. Learning enhancement programme initiated by SSA has helped improve the reading skills among students. National Book Trust (NBT) & Children Book Trust (CBT) books, Poothaga Poongothu and multi colored cards have been issued to all Primary schools. However, improving reading writing skills among students universally could still be difficult, particularly, when the students are first generation learners as they could hardly expect any support from their parents. The concept of after school programs or Evening Tuition Centers (ETC), being conducted by some NGOs is an earnest effort in that direction. In some places these ETCs are partly patronized by the parents themselves, and in a way owned by them.

SECONDARY EDUCATION

Enrolment in Secondary Education

Enrolment in secondary education is on dot. It is the dropout rate among the secondary school children that is the tough one to address, as discussed in the subsequent sections.

¹⁹ *Annual Status of Education (Rural) 2012 (Provisional)*, Pratham, 2013

TABLE 5.8 GROSS ENROLMENT RATE IN SECONDARY EDUCATION

Sl. No	Block	Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Ellapuram	110.56	114.91	109.54	111.79	114.91	110.58	111.18	114.92	110.06
2	Gummidipoondi	111.96	114.98	111.96	111.78	114.67	111.84	111.87	114.83	111.90
3	Kadambathur	112.69	114.89	111.96	112.85	113.98	110.14	112.77	114.44	111.05
4	Minjur	110.98	114.59	109.97	111.89	114.48	111.98	111.44	114.54	110.98
5	Pallipet	112.94	114.98	111.98	111.89	114.79	110.98	112.42	114.92	111.48
6	Poonamallee	112.97	114.57	111.98	112.59	114.96	110.99	112.78	114.77	111.49
7	Poondi	111.96	114.99	108.99	111.98	114.91	109.98	111.97	114.95	109.09
8	Puzhal	111.98	114.54	109.12	111.95	114.87	110.96	111.97	114.71	110.04
9	R.K.Pet	111.99	114.89	110.99	111.88	114.98	111.88	111.94	114.94	111.44
10	Sholavaram	110.99	114.99	110.85	112.99	114.87	109.87	111.99	114.93	110.36
11	Tiruttani	111.97	114.89	108.96	110.79	114.99	109.99	111.89	114.94	109.48
12	Tiruvallangadu	110.99	114.45	110.99	110.99	114.99	110.99	110.99	114.72	110.99
13	Tiruvallur	111.99	114.99	110.98	112.99	114.81	111.95	112.49	114.90	111.47
14	Villivakkam	112.99	114.78	111.99	112.84	114.99	112.84	112.82	114.89	112.42
	TOTAL	111.93	114.82	110.73	112.08	114.80	111.06	112.03	115.40	110.90

Source : RMSA

Dropouts in Secondary Education

Dropout rate in secondary education is very high both in comparative and absolute terms at 7.16 % which is more or less same among girls and boys. (Table 5.9) However, through various incentives and persuasive efforts by SSA as well as other stakeholders involved, the dropout rate shows a declining trend. Inter-block variation in dropout rate is quite high. Dropout rate is low in the backward blocks of Poondi, Tiruvallangadu, R K Pet, whereas, developed blocks of Villivakkam and Poonamallee have a high proportion of dropouts. Easy access to unskilled labour opportunities in the urban areas could be one of the reasons in these blocks receiving a continuous inflow of migrant population.

Retaining the children in school until they complete schooling is very important as every child out of school is a potential child labourer. Secondly, the dropout children also lose the opportunity for skill development or professional training and thereby stand to lose better livelihood options. It is important to identify the dropouts at this stage and assist them to complete tenth grade board exam. Hand in Hand India runs Transit Schools in the district just for this purpose where so far 1895 students were assisted to write the 10th exam of which 585 students have passed the board exam by year 2014. NGOs could play a crucial role in this regard. With the current government focus on skill development among the youth, this will prepare the students for further professional skill training.

TABLE 5.9 DROPOUT RATIO IN SECONDARY EDUCATION (%)

Sl. No.	Block	Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Ellapuram	8.36	8.11	3.35	8.21	8.14	4.48	8.26	8.22	3.92
2	Gummidipoondi	8.56	8.24	10.98	8.54	8.44	10.42	8.55	8.29	10.70
3	Kadambathur	8.15	8.19	10.05	8.44	8.34	9.9	8.27	8.26	9.99
4	Minjur	8.12	8.16	10.98	8.46	8.16	7.8	8.29	8.16	9.39
5	Pallipet	8.25	8.14	4.46	8.34	8.28	6.15	8.39	8.31	5.60
6	Poonamallee	8.18	8.81	11.91	8.86	8.83	10.92	8.52	8.82	11.42
7	Poondi	8.34	8.14	2.42	8.46	8.31	2.68	8.24	8.27	2.55
8	Puzhal	8.27	8.16	9.68	8.71	8.64	10.15	8.49	8.14	9.42
9	R.K.Pet	8.41	8.11	2.97	8.46	8.29	3.48	8.43	8.22	3.27
10	Sholavaram	8.42	8.41	6.51	8.74	8.49	5.48	8.58	8.25	6.14
11	Tiruttani	8.17	8.12	3.91	8.43	8.27	5.14	8.23	8.24	4.53
12	Tiruvalangadu	8.23	8.17	2.04	8.45	8.26	3.15	8.34	8.28	2.60
13	Tiruvallur	8.49	8.27	8.01	8.82	8.55	7.97	8.71	8.28	7.99
14	Villivakkam	8.81	8.61	12.66	8.92	8.88	12.29	8.86	8.74	12.48
	TOTAL	8.34	8.26	7.14	8.56	8.42	7.15	8.44	8.32	7.16

Source: RMSA

BOX 5.4 Initiatives for Quality Improvement in Education

Learning levels among the primary and upper primary schools in the State are some of the lowest in the country.²⁰ Low quality of education also hampers the capacity to absorb and learn at higher levels, in turn affecting employability of the youth when they graduate from professional institutes. Improvements in quality of education are the essential corollary of universalization of elementary education, a mandate of the Indian Constitution. The GoTN has adopted SSA, a key programme in this direction in a mission mode, with four main objectives, namely universal access and enrolment, bridging gender and social category gaps, quality education and universal retention. The unique ABL approach deployed by SSA is effective in attracting children in schools. The teachers are trained to evolve activities that could facilitate readiness for learning, instruction, reinforcement and evaluation. ABL has transformed the classrooms into hubs of activities and participatory learning. Teachers in this changed scenario are capacitated to take facilitator's role rather than that of an instructor unlike the one in rote methods. Several teacher training programs are also initiated by SSA that relies on the 'bottom-up' process in planning and implementation. It ensures participation of the village community, teachers and parents in planning, to ensure the adequate reflection of school specific needs. The need for quality education to the young learners from the under-privileged economic sector of the society living in small remote habitations has also been considered while planning and implementation. Other steps taken by SSA to universalize quality education in the district are ...

1. Provision of free textbooks, notebooks, color pencils, geometry boxes, Science equipment's etc.
2. Provision of a library of books
3. Adaptation of Continuous and Comprehensive Evaluation (CCE)
4. Conducting State, school level achievement test surveys, periodic monitoring and reviews
5. Online entry of scholastic and co-scholastic grading of the students
6. Periodic health check-up done for every student and maintenance of individual health cards

²⁰Annual Status of Education (Rural)2012 (Provisional), Pratham, 2013

Access to Higher Secondary Schools

Availability of high schools and higher secondary schools is provided in Table 5.10. Considering the number of primary schools (1,013) and upper primary schools (352), there is a sharp decline in number of high schools (164) and number of higher secondary schools (112). Though there is no way we can calculate any gross accessibility ratio, it can be said that the number of high schools is only about 16 % of the primary schools and number of higher secondary schools is only about 11 % of the primary schools indicating a reduced opportunity for subsidized schooling up to higher secondary classes.

TABLE 5.10 AVAILABILITY OF HIGHER SECONDARY SCHOOLS (2013-14)

Sl. No	Block	Number of Habitations	No of High Schools	No of Higher Secondary Schools
1	Ellapuram	266	10	5
2	Gummidipoondi	360	11	8
3	Kadambathur	226	11	10
4	Minjur	495	19	9
5	Pallipet	231	12	5
6	Poonamallee	237	17	12
7	Poondi	282	14	4
8	Puzhal	237	8	14
9	R.K.Pet	248	8	8
10	Sholavaram	268	10	5
11	Tiruttani	188	4	5
12	Tiruvalangadu	170	8	3
13	Tiruvallur	300	8	8
14	Villivakkam	475	24	16
	Tiruvallur	3983	164	112

Source: CEO, Tiruvallur 2013-14

Basic Infrastructure

School infrastructure plays vital role in attracting the enrollment of the students as well their retention till they transition to higher levels of education without any break. Tiruvallur district has fairly good school infrastructure. Children are provided with tables and chairs in all schools. All schools have electricity, safe drinking water and toilet facilities with separate toilets for girls. (Table 5.11) While there are villages with 100% electrification in the district, surprisingly some of the government owned facilities did not have power supply in 2011. However, there have been improvement in this situation over past years, and at present moment all schools have electricity. Presence of toilets and particularly, having separate toilets for girls is likely to enhance quality of

health and sanitation practices among the children, and have positive impact on enrolment and transition rates as well as reducing the dropout rates particularly among girls.

Number of class rooms in each school is an indicator reflecting the facilities available to accommodate the different grade students in different classes enabling quality teaching-learning. Half of the schools in the district have less than three class rooms indicating crowded class rooms with classes for different grades conducted in a single room. Nearly 27.2 % of the schools do not have compound walls. Minjur and Gummidipoondi blocks have highest number of schools, 60 and 55, respectively, without compound wall. Lack of compound wall poses a security risk for students as well as for school infrastructure and assets. There is also a risk of the school premises being misused by some anti-social elements in the villages. School infrastructure with more number of class rooms and compound walls should be accorded on a priority basis in the planning by district administration. During a meeting with Panchayat Presidents, many members suggested construction of new infrastructure for public utilities such as school, PHCs and toilets in the villages. Currently most of the schools and hospitals are housed in old and rented buildings which cannot be upgraded with modern amenities. Presidents from Kadambathur and Tiruvallur blocks reported that due to growth of population and consequent demand for upper primary schools in interior villages, the existing primary school premises remain inadequate for expansion or conversion to upper primary schools.

TABLE 5.11 SCHOOL INFRASTRUCTURES (YEAR: 2013-2014)

Sl. No	Block	Total no. Of schools	With 3 class rooms	More than 3 class rooms	Without toilet	Without girls toilet	Without electricity	Without compound wall	Without drinking water	Without desk and chair
1	Ellapuram	110	108	60	0	0	0	39	0	0
2	Gummidipoondi	134	23	54	0	0	0	55	0	0
3	Kadambathur	93	49	44	0	0	0	17	0	0
4	Minjur	168	34	51	0	0	0	60	0	0
5	Pallipet	106	41	58	0	0	0	17	0	0
6	Poonamallee	85	53	53	0	0	0	8	0	0
7	Poondi	105	71	63	0	0	0	30	0	0
8	Puzhal	77	42	44	0	0	0	18	0	0
9	R.K.Pet	102	34	83	0	0	0	25	0	0
10	Sholavaram	86	78	27	0	0	0	29	0	0
11	Tiruttani	99	51	43	0	0	0	38	0	0
12	Tiruvalangadu	94	37	37	0	0	0	23	0	0
13	Tiruvallur	74	59	51	0	0	0	20	0	0
14	Villivakkam	117	43	59	0	0	0	15	0	0
	District	1450	723	727	0	0	0	394	0	0

Source: CEO, SSA, Tiruvallur

BOX 5.5 Technology Initiatives in School Education

In Tiruvallur district, 243 computer aided learning Centres have been created during 2010-11. Laptops were given to elementary and upper primary schools. The capacities of all primary and upper primary teachers were built with regard to using computers, television sets and CDs and DVDs

Following initiatives have been undertaken by the District Education Department

- Provision of computers, laptops, desktops to schools
- Provision of projector to upper primary schools
- Connect Classroom Programme being conducted in select schools
- Appointment of part time computer instructors to schools with student strength more than 200
- CDs, television sets and DVDs provided to students.
- Training to use computers as learning aids given to all teachers in the district
- Initiation of Centres for Applied Linguistics

Hostel Facilities

Hostel facilities for students from marginalized social groups go a long way in promoting inclusive education. About 2341 Adidrawidar (ADW) students and about 2045 Backward Class (BC) students from 62 schools stay in the 40 and 36 hostels available for them respectively. Each block has more than one hostel with highest number of hostels in Tiruvallur and Pallipet blocks each having 9 hostels.

TABLE 5.12 HOSTELS FOR THE ADW AND BC STUDENTS (2013-2014)

Sl. No	Block	No. schools		Total Number of students		No. of students in hostels		No. of Hostels	
		ADW	BCW	ADW	BCW	ADW	BCW	ADW	BCW
1	Ellapuram	3	-	96	-	143	110	2	2
2	Gummidipoondi	4	-	499	-	110	270	2	5
3	Kadambathur	1	-	38	-	55	205	2	4
4	Minjur	10	-	866	-	259	100	5	2
5	Pallipet	2	-	120	-	138	360	3	6
6	Poonamallee	10	-	1990	-	309	100	4	2
7	Poondi		-		-	0	50	0	1
8	Puzhal	6	-	2356	-	179	50	3	1
9	R.K.Pet		-		-	187	190	3	3
10	Sholavaram	4	-	313	-	115	50	2	1
11	Tiruttani		-		-	280	235	5	3
12	Tiruvalangadu	2	-	269	-	110	110	2	2
13	Tiruvallur	11	-	1973	-	346	215	5	4
14	Villivakkam	9	-	933	-	110	0	2	0
	District	62	0	9453	0	2341	2045	40	36

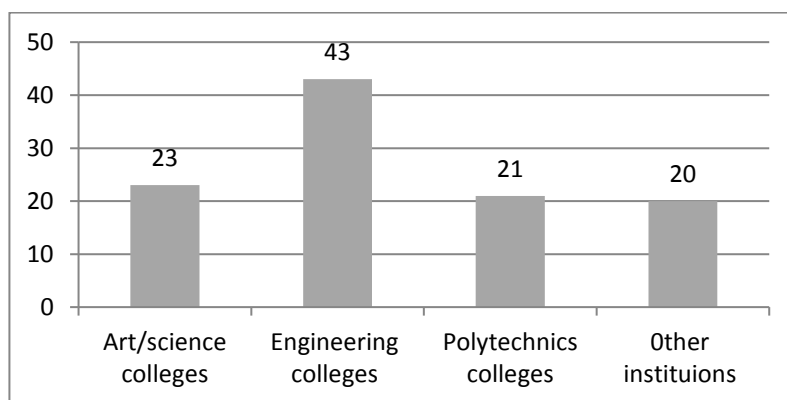
Source: District Adi Dravidar and Tribal Welfare (ADW) Office, District Backward Classes and Minorities Welfare (BCW) Office

HIGHER EDUCATION

Arts and Science Colleges and Technical Education

The youth in Tiruvallur have a location advantage as they are close to Chennai harboring higher educational institutions for all key streams. There are remarkable number of educational institutions within the district as well. There are seven universities including one veterinary university increasing the opportunities for higher education and human resources development. Nearly 2.5 lakh students were seeking higher education in 23 arts and science colleges (2.07 Lakh students), 43 engineering colleges (17452 students), 21 polytechnic colleges (5497) and one medical college (400) and other facilities (25,162 students) to study pharmacy, nursing, physiotherapy dental, polytechnic engineering and hotel management. (Annex Table A5.3)

FIGURE. 5.2 ARTS, SCIENCE, ENGINEERING AND POLYTECHNIC COLLEGES (ANNEX TABLE A5.3)



Source: District Statistical Handbook 2013-2014

Despite presence of fairly adequate educational institutes, the mismatch between the available skill base and market demand continues. There are umpteen numbers of engineering colleges, but there are qualified unemployed youth, who are eking out a living doing low paying odd jobs in the service or business sector. There is also an excess of unskilled labourers. Industries and the education system both are responsible for this mismatch some ways.

The National Skill Development Corporation (NSDC) commissioned a district level Skill Gap Assessment for Tamil Nadu, liaising with key stakeholders such as departments of the GoTN, industry and skill training providers. The study was aimed at identifying the district-wise skill gap across industries for the period 2012-2022.²¹ A detailed review of the skill gap assessment report

²¹Tamil Nadu Skill Gap Assessment, National Skill Development Corporation, 2012

and recommendations therein will help improve the mismatch between skill sets and employment options (See Box 5.6)

BOX 5.6 Skill Gap Assessment²²

Human resource requirement and skill gap: Construction, retail, travel, hospitality and tourism are expected to drive the incremental requirement for skilled human resources. Chennai, Kancheepuram and Tiruvallur, forming a large industrial hub on the eastern coast are expected to generate considerable skilled human resource requirements. Low availability of appropriately skilled human resources is a problem faced by employers across sectors and districts. The problem is particularly acute in the case of Small Scale Industries, while larger firms can afford to conduct campus recruitments at skill training institutes or set up captive training centers. Highest semi-skilled and skilled human resource requirement is expected in Chennai, Kancheepuram, Tiruvallur, Madurai and Coimbatore. Enrollment trends and primary research suggest that unskilled human resources are more likely to become skilled rather than semi-skilled. This will cause the skill gap at the semi-skilled level to persist. Hence the largest skill gap is expected to arise at the semi-skilled level. There is also an excess availability of unskilled human resources in 2012-17 (Annex Table A5.4).

Skill Development Facilities: Per capita availability of training infrastructure is low in Tiruvallur district. There is also a need for registration and standardization of existing skilling initiatives, and an emphasis on quality control for new capacity to ensure employability and relevance of the training provided. There is a need for skill infrastructure and targeted student mobilization activities through awareness campaigns and student interactions in sectors such as leather, construction and food processing.

Youth aspirations and participation of women: Youth aspirations and infrastructure creation for skill development are correlated. Highest youth aspirations as well as incremental manpower potential is in the area of automobile, IT and ITES, travel and tourism, retail, Banking Financial Services and Insurance (BFSI); whereas agriculture, handloom and handicrafts has the least aspiration as well as labour potential. There are gaps between industry demand and youth aspirations. Youth aspirations are strongly influenced by expected income and family aspirations. A significant proportion of the workforce in sectors such as gems and jewelry, textiles and leather is female. SHG models have been successful in imparting skill training to women, particularly in relatively backward areas. There is a need to facilitate transition of female workers from home enterprises to factories through awareness campaigns and targeted skilling initiatives.

Greater coordination among government departments, with the Tamil Nadu Skill Development Mission acting as the nodal agency for all skill development initiatives in the State and improved mobilization and targeting can steer the district out of the maze of skill gap and district's resource requirement.

Lower development of learning capacity at early stage leads to lower learning outcome at an advanced stage. Available skill sets and capacity to apply the skills is low among the youth. Industries that push farming activities, small and family based enterprises out of business, and render the farmer, farmhands and entrepreneurs jobless, do not exactly offer them proportionate

²²Summarized from Tamil Nadu Skill Gap Assessment, National Skill Development Corporation, 2012

employment in return, possibly because industry preference of hiring semi-skilled, unskilled workers from outside the State. For example, industries that are part of SIDCO and SIPCOT located in Gummidipoondi, have offered no significant job opportunities for the local youth. Most importantly, number of professionals that enter the job market far exceeds the industry requirement.

All educational institutes in the district are concentrated nearer to Chennai, around Poonamallee, on the Chennai Bangalore highway and there are none in many other blocks. Many of the mushrooming private professional training institutes, including medical and engineering colleges, operate on the lines of business ventures rather than as centres of excellence with vision for the region's future and certainly do not cater to educational needs of the youth in the district.

Conclusion

Keeping with the history of Tamil Nadu, Tiruvallur district fares well, with respect to all educational parameters, which are considered to assess human development. In the recent years, the enrolment drive, proactively pursued by SSA and school education department, as well as efforts to mainstream out of school children has resulted in high enrolment ratio. School infrastructure too has been upgraded, with 100% school having drinking water and toilet facilities, with separate toilets for girls, to ensure that the children, particularly the girl children are encouraged to attend the school.

Retention of children till they complete upper primary has been fairly successful. However, a sizable number of girls and boys drop out in the eighth standard. Not able to cope with the exam system which they face for the first time during that year could be one of the reasons. However, early marriage for girls or compulsions to engage in economic activities for boys, and migration by parents, also force to them out of school. Unfortunately, these children lose a lifetime opportunity for better living in the future, despite the district having ample infrastructure for higher learning. Government and NGOs in the district have been, to an extent, successfully, preventing such drop outs, by mainstreaming the out of school children and guiding them to complete SSC, SSLC.

Institutes for higher learning are however, concentrated in eastern part of the district and not accessible to all. In the light of skill gap analysis for the district, targeted skilling among youth to cater to the industry demand on one hand and opening opportunities for skill labour and other professions on the other hand is the need of the day.

CHAPTER 6
GENDER

Chapter 6

Gender

Gender equality is more than a goal in itself. It is a precondition for meeting the challenges of reducing poverty, promoting sustainable development and building good governance

...Kofi Annan

Introduction

Gender as an important component was recognized in the 1990s in the UNDP Human Development Report when it stated that unless human development is engendered, development would be endangered. This highlights the significance placed on the gender perspective in the development process. The 11th Five year Plan of the Government of India considered the importance of gender budgeting and the efficacy of programmes in addressing issues regarding women for the first time. The Plan recognized that “Gender inequality remains a pervasive problem.” The 11th Five Year Plan acknowledged women’s agencies and tried to ensure that their needs, rights and contributions are reflected in every section of the Plan document. Gender thus became a cross-cutting theme and not confined to a single chapter on women and children. The plan focused on increasing participation of women in the labour force through skills development, and on improving health of women and children. It also acknowledged that gender budgeting which had not so far received enough attention, would now be a mainstay and that “significant outcomes can be expected only if the gender issue is addressed through the planning initiatives across all the ‘heads of development’ in the Plan, with requisite lead from the ‘Women and Child Development’ head.”

There has been a steady progress; from ‘Women's Budgets’ to ‘Gender Budgets’ (reflecting the ongoing shift from a focus on women to the focus on gender and the relations between women and men); to ‘Gender-Sensitive Budgets’ where gender perspective is mainstreamed into the Budgets, implying that the aim is not to produce a separate gender budget but to incorporate relevant gender perspective into the overall budgeting processes. Studies on gender and development, all over the world, have highlighted one common point - in the process of development, irrespective of other factors, there is always a significant difference in the outcomes for men and women. Government Budgets are, by themselves, never gender-neutral; in the sense, government expenditures and revenues never impact men and women in an equal manner.

Methods intended for gender development are analyzed under three heads, namely, political empowerment, social empowerment and economic empowerment. While political empowerment facilitates ownership of the problems and solutions evolved; social inclusion helps participation in the implementation process; and economic empowerment ensures graduation of women above poverty line by improving access to credit. Holistically, all the three empowerment processes would result in the desired outcome, i.e. gendered human development. With this premise, an attempt has been made to analyze gender differentials in Tiruvallur district. In the first section, the position of women is analyzed in the district as a base and then followed by micro analysis under empowerment processes as referred to earlier.

Status of Women

Gender differentials are identified in the following indicators for analysis and the relevant data are culled out from the tables presented in different chapters for district and block level analysis.

- Sex ratio
- Femalework participation
- Trends in female employment
- Life expectancy
- Education and literacy
- Female workers wage rate
- Child sex ratio
- Health
- Membership in StateAssembly local bodies

For analysis, social indicators pertaining to health and literacy; economic parameters viz., employment in terms of women’s work participation, access to credit and other government subsidy linked employment oriented programme for women; and their political participation at different administrative levels in the government is discussed in the following sections.

Social empowerment

TABLE 6.1 COMPARATIVE STATUS OF WOMEN POPULATION – 2011

Sl. No	Particulars	District	State
1	Total Number of women*	1,852,042	36,009,055
2	Per cent women in total population*	49.68	49.91
3	Sex-ratio*	987	996
4	Female literacy rate*	78.3	73.44
6	MMR (2013-14)**	80	68
7	Per cent of women worker in agriculture sector*	34.28	54.85
8	Per cent of women in non-agri. Sector*	65.72	45.15

Source: *Census 2011, **Directorate of Public health

Social empowerment is largely the outcome of educational and health inputs in terms of adequate and equitable access to facilities and services in both these sectors. State and central

government support in health and education sector including social welfare programmes being implemented in the district are considered to assess social empowerment.

Female literacy in the district (78.3 %) is lower by more than 10 % than male (89.18 %). (FIGURE 5.1) In the 12th plan period, the differential in literacy rate should be limited to less than 8 %. Female literacy rate however is higher than both the State and National averages. School enrolment and transition rates are very high. (Tables 5.1, 5.3, 5.8)

District's performance with respect to sex ratio, female literacy rate and MMR is comparable to the State performance (Table 6.1). Availability of adequate health infrastructure and facilities; and Maternal and Child Health (MCH) and CEmONC services; in the district has resulted in a lower MMR (80) though it is still higher than the State average (68). The district, however, has achieved the MDG goal of less than 109 deaths per 100,000 live births, well in advance, and far ahead of the National average. (178, 2010-2012 SRS). District's overall sex ratio has improved considerably from 971 in 2011 to 987 women per 1000 men in 2011, which is comparatively lower than the one for Tamil Nadu. However, the blocks of Minjur, Tiruvallur, Poondi, Tiruttani, Tiruvalangadu and Pallipet have higher sex ratios than the that the State average (Table 4.2)

Socio-cultural practices among different social groups play a major role. Among the SC (1001) and ST (994) population sex ratio was found to be higher than the district average. However, sex ratio has declined among the STs from 1005 to 994 in the past decade, with nine of the 14 blocks registering negative growth. It points to a need for advocacy and administrative alerts directed at ST population. Moreover, declining CSR in the district is a most critical concern. (Table 4.3) It is not only indicative of current gender inequality and regressive attitude towards women, but its continuation through generation sounds an alarm for the times to come.

Access and control over resources

Economic development and gender equality do not have any direct correlation between the two in the sense that the growth in the former does not ensure improvements in the latter. In fact industrially advanced blocks such as Poonamallee, Villivakkam and Puzhal, have a comparatively low sex ratio, whereas, Pallipet block that has highest percentage of BPL families is among the blocks with sex ratio (998) higher than the district (987) and State (996) averages. As observed by many economists and sociologists, women withdraw from the work force as their families' economic standing improves. Hence it is not the economic growth per se but work participation,

participation in the governance and access to and control over resources by women, complemented with annihilation of discriminating socio-cultural practices against women, can improve the status of women.

Subsidy linked bank loan, entrepreneurial development programme and capacity development programme for women assume a very important role in the context of low level absorption of women in organized sector. The banks and the government with their subsidy component and their credit inputs jointly contribute to the promotion of self-employment opportunities for women towards their economic empowerment. This integrated service with social and financial empowerment creates and has the potential to create immense employment opportunities for the women.

BOX 6.1 Towards Gender Budgeting in Tamil Nadu

Gender budgeting consists of empirical exercises that focus on public policies and aim to bring out their gender-specific implications. Data for these exercises are drawn from the budgets and official records, in order to assess the relative weightage given to different policy goals of the State and in turn, the relative benefits or costs accruing to men and women under different policy goals. Gender-responsive budgeting, in simple terms, refers to the analysis of actual Government expenditure on women in comparison to their needs. Gendering the budget is not meant (merely) to bargain for a larger share of the resources for women or to create a separate budget for them. The aim is to analyze the budgetary expenditures from a gender perspective.

In the process of gendering the policies, the GoTN has advised banks to strengthen the credit flow to women and ensure that their share in bank credit is increased to the desired level of 5 % or more. According to State level bankers committee meeting agenda document, September, 2013, “credit advances to women with about INR 38,131.02 crores constitute 7.16 % of the total bank credit as against the national norms of 5 %. This reassures the involvement of banking sector in supporting gender concept in their credit outlays. Exclusive credit target for women could go a long way in improving the access to finances for the women in the lower income families and strengthens government efforts to empower the women economically.

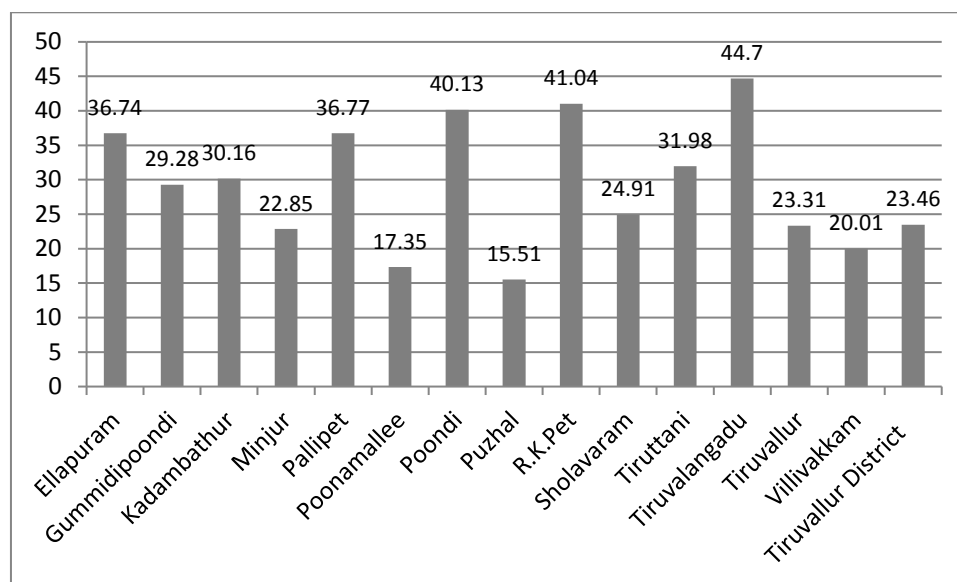
Employment

Women could be called empowered only when cultural biases against women that are harmful to their health and social and emotional well-being are curtailed, when they have access to and control over economic resources such as employment opportunities and capacity to negotiate wages, and finally freedom to make decisions at household level as well as at village, block, district and higher levels of State administration.

Female Work Participation

Women constitute about a half of the eligible workforce (aged between 18 to 60 years) in the district. However, women workers amount to only about 30 % of the worker population. (Annex Table A6.1, A6.2) Overall female work participation rate is 23.5 %, however, it is better in rural areas (33.6 %) compared to urban areas (18%). (Table 3.2)

FIGURE 6.1 FEMALE WORK PARTICIPATION RATE (%) (Annex Table A6.3)



Source: Census 2011

The intra-district variations revealed that Tiruvalangadu had the highest female participation rate and the lowest was in Puzhal. Tiruvalangadu (44.70 %), R K Pet (41.04 %) and Poondi (40.13 %) blocks have a better female work participation rates. Incidentally, these are also the blocks with high percentage of BPL families. On the other hand, women's work participation was found to be below the district average in the developed blocks such as Villivakkam (20.1 %), Minjur (22.85 %), Puzhal (15.51 %) and Poonamallee (17.35 %). (FIGURE. 6.1)

About one-third of the women residing in rural areas who are employed, are engaged in agriculture related labour, who do not have access to social security mechanisms such as post retirement financial benefits available in the organized sector. They dependence on sons, the changing social values thanks to a shift to small nuclear families have intensified the vulnerability of the agedwomen in rural areas.

BOX 6.2 Self Help Groups

Women's participation in work is one of the key human development indicators and the status of women is the benchmark for societies' claims to progress. SHG programmes world over and specifically in India are designed to leverage their overall well-being and status of women by

economically and socially empowering them. SHG movement and micro-finance practices that originated in Bangladesh have been adopted in India in a modified form. To alleviate the poverty and to empower the women, micro-finance has emerged as a powerful instrument in the new economy. With availability of micro-finance, SHGs and credit management groups have emerged in India, and nourished in many of its states. SHG programme is equally driven by Government programmes and NGOs working in respective areas, and they follow more or less similar method of mobilization, capacity building, and providing access to credit for self-employment.

Typically, ten to twenty women from poor living in a neighborhood are mobilized into SHGs. SHG members are oriented on group dynamism, financial literacy, promoting and upgrading enterprises. Group representatives are trained on leadership and accounts book keeping. Women are facilitated to realize their skills, existing trade opportunities and market opportunities. SHG members are given small credits for their small businesses or provided bank linkages for bigger loans. Additional income earned and the confidence gained help the women command more respect in their families and better decision making powers, paving way to an improved quality of life for their families and better education for their children. The group dynamics provides them a voice in the society for meaningful social and political participation. Trade based federations of businesses, let the women enjoy better bargaining power, access bigger markets, mobilize high order finances, and establish their own brand. The expanded businesses have a ripple effect in sustainable jobs to other people employed by the entrepreneurs.

In Tamil Nadu the first set of SHGs were formed in 1989 at Dharmapuri District. By 2013-14 Tiruvallur district had more than more than 8000 SHGs with approximately 400,000 women members mobilized through government programmes alone. (Annex Table A6.5 and Table A6.6) The government programmes Mahalir thittam and Pudhu Vazhvu have credit linked 8484 SHG and their 106728 members availing INR 19776.5 lakh. In addition other non banking financial institutions and non-government organization contribute to this process.

Another important outcome of the process is financial inclusion of a much larger number of households as well as empowerment of the poor and ultra-poor women including women from SC and ST communities. Among Mahalir Thittam (MATHI) groups, about 20 % SHGs are among SCs and 2 % among STs. From the equity and poverty reduction perspective, economic empowerment of poor women by the means of SHG system is impressive in this district. It also speaks about the good work of the Government's arm of Mahalir Thittam; Self Help group Promoting Institutions, Micro Financial Institutions (MFIs) and the banks which function as social change agents in the district.

Women's Work Participation in Organized Sector

Among the female workers, 65.72 % was engaged in the non-agricultural sector indicating more employment opportunities were available in the industry and service sectors in the district. (Annex Table A6.5) Information on worker participation in organized sector in general and that of women workers is particular is not available. However, considering the lower skill base, women-worker's absorption in formal or organized sector is likely to be lower indicating low pay and lower security. In response to presumably a large proportion of unskilled or semiskilled women in the working age group, Government and non-government organizations in the district

have been mobilizing women into SHGs, building their capacities and facilitating credit linkages with MFIs as well as banks, enabling the group members initiate small family based enterprises, thereby achieving social as well as financial empowerment for women. The district has many schemes for providing access to main economic resources in terms of credits, linkages and subsidies. The subsidy linked bank loan entrepreneurial development programme for women in the district and capacity development programme for women are given below.²³

Name of the scheme	Type of benefit
• Prime Minister's Employment Generation Programme (PMEGP)	25 % on project cost for rural area as subsidy for women
• Bank Loan Interest Subsidy Scheme (BLISS)	Loan amount INR 2.50 lakh with 50 % interest rate for SHG of Ex service men and widows For business purposes
• New Entrepreneur –cum Enterprise Development Scheme (NEEDS)	Entrepreneurial activities with subsidy for educated women
• Unemployed Youth Employment Generation Programme (UYEGP)	For creating employment opportunities to the socially and economically strata in the society – women included
• Village Poverty Reduction Committee (VPRC) under World Bank aided Vazhndhu Kattuvom Programme (VKP)	Skill training and individual assistance for women SHG members and youth
• Women Development Programme MAHIMA under National Bank for Agriculture and Rural Development (NABARD)	Loan and subsidy for marketing of product manufactured by rural women both available.
• Tamil Nadu Women Development Project	

Banking and commercial credit network has contributed to the growth of the industrial and services Sector in this district with opening of more employment opportunities, overall. Direct financial access with formal banking system has also improved self-employment opportunities, specifically for the women. After the advent of SHG movement with official patronage under the NABARD SHG-Bank linkage programme, access to bank credit has increased significantly for poor women enabling them benefits such as micro credit services for their income generating activities and other savings and insurance services linked to credit. The State government programme Mahalir Thittam and World Bank assisted Pudhu Vaazhvu project have been specially designed for women's empowerment and poverty reduction.

²³Source: BDOs, Municipalities, Town Panchayats & Zones

BOX 6.3 Kuthuvillakku SHG - The Lamp of Success

In July 2009, 15 women belonging to Tholuvur Kuppam in Tiruvallur district started an SHG called Kuthuvillakku. Initially the group members saved INR 100 per month. This group opened a savings account in the Indian Bank Micro State Branch in Tiruvallur in August 2009 and started internal lending to its members. Most of the members worked under the NREGS at the time of formation. This group was mobilized by HIIH India, a not for profit organization based in Tamil Nadu which provided training to its members on functioning of the groups, their dynamics and in finance management. HIIH India deployed its Credit Plus model that combines access to affordable financial services with a process of social empowerment of the SHG members.

In January 2010, when Kuthuvillakku groups savings added up to INR 28,500 in its bank account, the bank sanctioned a loan of INR 50,000 and this amount was divided among the five group members for their respective businesses. The members strengthened their dry fish manufacturing and imitation jewelry design businesses, with the loan amount. The members repaid their loan instalments on time and they gained the bank's trust. The bank sanctioned the group a second loan of INR 100,000 in November 2010 and this was utilized by the ten other group members to strengthen their respective enterprises. The saree selling, tailoring, provision store businesses were run profitably and the second loan was also repaid by the group members in ten equal instalments within twelve months.

There was a steady increase in income for all members and the group savings soon reached INR 43,500. Impressed with the prompt loan payments of the group, the Indian Bank Micro State Tiruvallur branch sanctioned a third loan of INR 300,000 in December 2011, which was divided equally among all the 15 members. This was utilized by them to expand their enterprises further and increase their income. This amount was also repaid by July 2013. By 2014, the group had savings of INR 120,000 and is a model SHG in their village.

The members, however, did not just stop at running businesses and increasing their earnings. The newly acquired confidence and sensibilities also prompted them to participate in social awareness activities. In 2011, the members organized an AIDS awareness camp in their village in collaboration with the Panchayat President and the Tiruvallur local body.

Trends in Political Participation

Participation in local governance empowers the women to undertake greater ownership of decisions to address those issues that are most close to and impact women. Women's participation in governance including State Assembly, village and town panchayats and municipality is indicative of political empowerment. Consultations with line department officials confirm that women's participation in village and town panchayats, and municipality is more or less similar and is in the range of the district aggregate of 39 %. Across the blocks proportion of women representatives ranges from 34 % to 42 % across the blocks.

TABLE 6.2 MEMBERSHIPS IN STATE ASSEMBLY, LOCAL BODIES YEAR: 2011

Sl. No	Member ship of women in State Assembly and local Body	Number of Male	Number of Female	% of female participation
1	Ellapuram	285	175	38
2	Gummidipoondi	343	218	39
3	Kadambathur	240	148	38
4	Minjur	333	209	39
5	Pallipet	187	137	42
6	Poonamallee	258	147	36
7	Poondi	245	169	41
8	Puzhal	79	41	34
9	R.K.Pet	202	130	39
10	Sholavaram	235	142	38
11	Tiruttani	170	112	40
12	Tiruvalangadu	219	135	38
13	Tiruvallur	228	144	39
14	Villivakkam	115	60	34
	District	3139	1967	39

Source: BDOs, Municipalities, Town Panchayats & Zones

It is heartwarming to note that at least on paper, there is more than the stipulated 33 % representation of the women in the political arena at district level, while a landmark in the form of women's bill, is still pending in the lower house of the parliament. Whether the women who have been elected as leaders are capable of executing their responsibilities independently without the influence of the men in their families; or are free to make decisions independently is the key question.

Women have to do a lot of struggle to maintain their dignity in the system. Women in Tiruvallur district have education on their side which is a potent weapon for their struggle. Women are more aware of the need for basic healthcare and sanitation facilities, quality education and capacity building, besides access to employment and economic resources. Hence women Panchayat leaders invariably prioritize welfare works for health and education unlike their male colleagues who focus merely on infrastructure and economic activities. Women are empowered only when they exercise their political rights independently and freely. However, election to various governing bodies; no matter, only in compliance to the gender participation norm; is a first necessary step in that direction.

Conclusion

Discourse on gender has evolved from having women as subjects of policies and programmes directed at their empowerment to having women's perspective and sensitivity integral to policies and programmes targeted at people in general. In conformity to the gender responsive budget, GoTN has made credit advances to women more than the prescribed 5 % during 2013. Women's work participation in the unorganized sector is mainly in the rural areas, as agricultural labourers or at MGNREGA sites. Considering that many family based businesses, such as handlooms are on their way out, there is no other employment avenue of the unskilled or semiskilled women. In that respect self-employment through the SHG, skill training and micro-credit route is the light house of opportunities. Tiruvallur district has more than twenty thousand SHGs whose members are vying to occupy the economic space with the credit support from banks, if we go by the Annual Credit Plan by the Lead Bank for Tiruvallur district. Women's participation in the local government and State Assembly is good at 40 % indicating that the district is inching towards gender equality.

CHAPTER 7
SOCIAL SECURITY

Chapter 7

Social Security

Introduction

In developing countries, poverty is the most pressing vulnerability, followed by the ones impacted by gender and caste dynamics. GoTN's initiatives to alleviate poverty, besides targeting the poor and ultra-poor households, also target most vulnerable individuals such as destitute, widowed and deserted women; the aged and the children orphaned by disease and disasters; marginalized communities including the tribal; and the differentlyabled including those with mental illnesses. The State, through various welfare schemes, also targets children of migrant people, who often drop out of school or are never enrolled, people with chronic or terminal diseases, sexual minorities and ironically the women. It is unfortunate that the concerns of the fairer sex need to be addressed in a manner in which concerns of a population; that is considered 'less than normal' in administrative lingo; are addressed. However, it is encouraging that, signs of both subtle and on your face ways of gender discrimination are recognized and the more visible and quantifiable among them are addressed through not only special programmes for women but also used as pointers for policy formation.

The two pronged strategy of responding to the range of vulnerabilities involves, a) bringing in more inclusive programmes and policies such as gender budgeting, Right to Education Act, Universal Health Insurance and caste based reservation etc., in an effort to reverse forms of exclusion in social, economic and political spheres; b) providing a succor in the form of welfare schemes for the underprivileged with vulnerabilities; such as various types of disabilities, advanced age of the elderly, chronic or terminal illnesses; that are not reversible in a manner gender inequality or caste discriminations are, at least in principle.

In most of the cases a combination of rehabilitation and welfare measures is deployed in a manner rescue, relief and rehabilitation measures are deployed after natural disasters, as, often, the affected face more than one type of vulnerabilities. For example, the children orphaned during disasters face poverty, inadequate nutritional intake, education and healthcare, and risk of exploitation. Certain risks, such as pollution, toxic waste, unsafe goods, natural calamities and manmade disasters, crime and violence, unemployment, old age, social exclusion, and gender discrimination know, neither caste, nor class. And in a way everyone is vulnerable. The poor,

however, face larger risks, to their lives and livelihood; than the non-poor. Hence, the government schemes are, on priority, targeted at the vulnerable among the poor. They are empowered socially and financially through long term and short term measures with the aim to help them tide over the combined impact of poverty and vulnerability.

Tamil Nadu has a history of social reforms and has pioneered initiatives such as officially recognizing transgender (TG) as an alternative gender and instituting Tamil Nadu Aravanigal Welfare Board to address the social protection and inclusion needs of the TG population. Historically, Tamil Nadu was also seen supporting reservation policy when the rest of the country was rallying against it. Eventually, reservation policy in the State was given a pro-poor dimension by introduction of creamy layer and expanding the safety net around the socially and economically underprivileged groups. Tamil Nadu's extensive provision of basic amenities need to be appreciated in the light of social changes in the State.

Demographic Profile of the Aged

In the process of human development, sustaining the wellness of the elders in the given demography assumes importance due to the increased dependency ratio and lower degree of participation in the development process by the aged. Their happiness and health are also good indicators of human development. When the economy grows and there is corresponding growth in life expectancy of the population, it results in an increase in the share of the elderly in the demography with greater demand for care for them. The share of elderly in India is rising and is expected to cross 9% in 2016 and 10 % in 2021 from 7.5 % in 2001.²⁴ There is an increasing gender gap among the elderly, with an escalation in the share of elderly women. Very few of the elderly are covered under pension or insurance schemes, because the majority of them have worked in the unorganized sector. Their major healthcare needs remain unmet. Present section deliberates on the status of the aged in Tiruvallur district and their multidimensional problems.

Table 7.1 indicates that the Tiruvallur district had 314765 elderly, representing 8.44 % of the total district population in 2011 with 51.5 % of elderly women and 48.5 % of elderly men. It is a matter of urgency to note that, there is an increase in the population of aged across India as per Census 2011. Census 2011 reports that, 8.6 % people are above 60, as opposed to 7.4 % in the Census 2001.

²⁴*Human Development in India: Analysis to Action, UNDP 2010*

TABLE 7.1 DEMOGRAPHIC PROFILE OF AGED

Sl. No	Age group	Total	Male	Female
1	60-64	124619	62816	61803
2	65-69	76318	36811	39507
3	70-74	56084	27202	28882
4	75-79	27792	13290	14502
5	80+	29952	12509	17443
Total		314765	152628	162137

Source : Population Census 2011

Tamil Nadu was among the top five states with higher old dependency ratios (Tamil Nadu 13.12 in 2011)²⁵, while, its young dependency ratio is among the lowest five. This means that the State is already reaping the benefits of the demographic dividend and is likely to find an increase in its elderly population over the next decade. The disaggregate dependency ratio for the district is not available. But surely, considering that there are more women among the aged and it is likely to continue to be so, there will be more poor old women who will be vying for administrative attention in comparison to the men. The State and district administration need to brace up to the fact.

Financial and Social Security to Aged

The vulnerability and deprivations such as, in the form of physical handicap, destitution and desertion, widowhood and spinsterhood, vex the elderly group in varying degrees. Financial and social security for elderly is a non-negotiable from the perspective of equitable human development. The district administration implements various social welfare programs which include Indira Gandhi National Old Age Pension (OAP), Tamil Nadu State Government OAP, Destitute Physically Handicapped Pension, Destitute Widow Pension and Destitute & Deserted Wives Pension among them. The data on financial assistance and social transfers made to the elderly is presented taluk wise in Table 7.2.

Target aged population (60+) in the district was more than three lakh persons in 2011. Though there is no very clear information on proportion of vulnerable elderly in the district in 2014, present coverage looks impressive. GoTN as a policy gives double the amount of allocation for OAP which has a majority share of coverage (53.3 %) among the welfare schemes followed by Destitute Widow Pension (19.2 %) and Indira Gandhi National Widow Pension (18 %). The spectrum of social security schemes that benefit the aged with multiple vulnerabilities deployed by the State and central government is quite wide.

²⁵Tamil Nadu Human Development Report, 2003

TABLE 7.2 FINANCIAL SECURITY OF THE AGED MARCH 2014

Sl. No	Name of the Taluk	Indira Gandhi National Old Age Pension	Destitute Physically Handicapped Pension	Destitute and Deserted Wives Pension	Destitute Widow Pension	Unmarried Poor Women Pension	Indira Gandhi National Disabled Pension	Indira Gandhi National Widow Pension	Total Operating Strength
No. of Beneficiaries									
1	Ambattur	10403	1396	415	4764	99	202	1388	18667
2	Gummidipoondi	3955	592	165	4097	35	106	3377	12327
3	Madhavaram	10424	810	294	3584	41	119	2417	17689
4	Pallipet	13390	1206	936	2197	47	357	3931	22064
5	Ponneri	12764	1384	468	4842	91	58	4317	23924
6	Poonamallee	8193	960	600	3457	158	194	3921	17483
7	Tiruttani	8757	847	447	2432	76	103	1529	14191
8	Tiruvallur	11033	761	554	2416	83	347	5888	21082
9	Uthukottai	3480	509	281	1900	12	31	1091	7304
	District	82399	8465	4160	29689	642	1517	27859	154731

Source :Special Deputy Collector

Help Age India Report states that 53 % of the Chennai's surveyed elders claim to have experienced some kind of abuse. While 25 % of the State's senior citizens live in 'all elderly' households, one in 11 elders live alone as per the report.²⁶ Often the financial, social and health related problems that the elderly face drive them into depression. Cases of depression and dementia are on a rise among the elderly who live alone in the villages and cities as their children have migrated for work. GoTN has a Geriatric Care Policy in place and a District Mental Health Programme (DMHP) is underway. DMHP will provide one trained psychiatrist in every district, to take care of geriatric needs. A weekly clinic especially for senior citizens will be made functional under this program. The caregivers will also be trained to address the needs of the elderly. Owing to improved healthcare facilities, there is an increase in the longevity. DMHP's geriatric care services aim at improving the quality of life of the senior citizens²⁷.

²⁶Report on Elder Abuse in India, Help Age India, 2014

²⁷Mental Health Programme to focus on the elderly too, The Hindu, December 16, 2014

Assistance to Differently Abled

The district provides special assistance to all the eligible differently abled under various categories. Details on assistance provided in Annex Table A7.1.

- Persons with disability among the aged, are given Destitute Physically Handicapped Pension
- In case of accident INR 100,000 is given to the disabled persons.
- In case of normal death INR 20,000 is given to the family members.
- Persons with disability who are married to able-bodied people are given INR. 2000 as a one-time benefit.
- Yearly INR 1,500 is given as scholarships to students with disability studying for their 10th, 12th and degree examinations.
- Employment office reserves 3% of the available jobs and 3% of all government recruitment for persons with disability.
- INR 500,000 from the fund of Member of Legislative Assembly (MLA) from each constituency is used to buy tricycles for persons with disability. So far around 1000 such tricycles have been issued.
- Online registration is accepted for Guardianship for persons with mental retardation, by the district level committee of National Trust, Government of India, which meets once in three months under the chairmanship of the District Collector.

TABLE 7.3 ASSISTANCE TO DIFFERENTLY ABLED (JULY 2014)

Sl. No.	Type of Differently abled	Identity Card			Welfare Board Member		
		Up to June 2014	Up to July 2014	Total	Up to June 2014	Up to July 2014	Total
1	Autism	3	-	3	-	-	0
2	Cerebral Palsy	963	26	989	195	4	199
3	Hearing Impaired	5771	65	5836	2991	33	3024
4	Leprosy Cured	1194	-	1194	168	-	168
5	Loco-motor Disability	23339	99	23438	8392	75	8467
6	Mentally Ill	638	9	647	425	2	427
7	Mentally Retarded	8545	110	8655	4098	33	4131
8	Multiple Disability	387	3	390	101	2	103
9	Vision Impaired	3222	35	3257	1284	20	1304
Total		44062	347	44409	17654	169	17823

Source: District Differently Abled Department, Tiruvallur, 2014

Importantly there is no income ceiling for seeking such benefits. These schemes are publicized and made accessible to the public through various avenues. Information regarding all these

schemes is published in the local newspapers. The District Collector conducts a Grievance Day Petition every Monday, at the Collectorate. Loan fairs and special camps are conducted block-wise every three months. ID cards are issued to all the eligible persons as soon as they are identified and it is ensured that response period for pending applications is minimal. However, only about 40 % of the persons holding disability identity cards have become Welfare Board Members. (Table 7.3) Lack of sufficient staff could be the reason for the limited outreach.

Education for Differently Abled Children

Assisting children with disabilities during their formative years is crucial for their learning to manage their disability as well as for gaining adequate life skills. A provision for special schools has also been made for children with higher degree of mental health issues requiring special attention. These schools are equipped with ramps, modified toilets, adaptive teaching and learning materials and are benefited from frequent visits by special educators. Supreme Court mandates the availability of at least one toilet per category of students. This includes female students and students with disability, which would be the next step in the direction conforming to the principle of equitable human development. Provision of specialized institutional care for imparting education to children with disability would go a long way in enhancing their educational achievements and also preventing their social exclusion. There are 19 such special schools all over the district engaging a total of 1252 differently abled girls and boys, to help them learn and grow at their own pace (Annex Table A7.2, Table A7.3).

District administration deploys some innovative strategies to enroll the children with disabilities, including those suffering from mentally retardation, autism, dyslexia, impaired vision, multiple disorder, orthopedic dysfunctions etc. Adhering to the policy of inclusive education, district administration also makes efforts to mainstream the children with disabilities in regular schools. There are 2752 disabled children studying in various regular government schools (Annex Table A7.4).

According to the District Project Officer, Differently Abled Department Report for 2011, the district has 5011 Children With Special Needs (CWSN) in Tiruvallur district. Assistive devices are supplied to 874 Children, 999 children study under home-based care, 280 children are benefited by the day care center and 30 schools provided with ramp. The inclusive education drive is supported by an NGO called, “The Spastic Society of Tamil Nadu”. Many CWSN between the age group of 5 to 10 years are never enrolled in public schools due to their severe impairment and are instead enrolled in special schools. Despite all out efforts by the district

administration there are still some children with varying disabilities that remain excluded from the education system.

Special Focus by Poverty Reduction Programmes on Differently Abled

State initiated Pudhu Vazhvu Project (PVP), has a special commitment to empower and mainstream the physically challenged, by providing them preferential treatment during social mobilisation and institution building under the project. They are also provided with financial assistance, hand holding support to create livelihood assets and start livelihood activities, to restore quality of life and to secure their dignity. The project has reached out to the marginalized like the disabled, vulnerable and tribal populations and has successfully brought them into the mainstream. Some of the project interventions for the benefit of persons with disability and the vulnerable are given below.

- Disability assessment with the help of Developmental Disabilities Regional Officers (DDRO) and Government Doctors
- Day Care Centres for the children with disability.
- Assistance to get National ID cards from DDRO
- Assistance to get aids and appliances
- Formation of Special SHGs for persons with disability
- Providing medical care
- Providing vocational skill training
- Individual financial assistance for the development of livelihoods
- Formation of Special Economic Activity Groups
- Assistance in availing Old Age Pension
- Enrolling the persons with disabilities in free or subsidized insurance scheme

Five blocks of Tiruvallur district, namely, Ellapuram, Poondi, Tiruttani, Pallipet and Tiruvalangadu; have been identified for the project intervention. Of the 6188 persons with disability identified by 2013-14, more than 90 % are given identity cards and more than 80 % have already received economic assistance. (Annex Table A7.5) The persons with disability are not the only vulnerables getting benefits from the project. Project recognizes, widows, women headed families, orphans, people with chronic illnesses, people with HIV/AIDS, the elderly etc. besides the poor and ultra-poor as vulnerable and has a special focus on them through its programmes. In Tiruvallur district 5384 people with such vulnerabilities were identified and 4501 were given economic assistance.

While addressing the poor, the focus is on facilitating livelihood activities. When targeting the persons with disability, the State government interventions include both financial as well as non-financial inputs. In conformity with the provisions of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 in MGNREGS, the GoTN, has ordered for special provisions for the persons with disability²⁸. As per the Government Order, the special activities for persons with disability under MGNREGS include, watering the site, assisting the facilitator in marking, clearing scrubs and light jungle, levelling of the Bund etc., and other tasks appropriate to their capacity and skills.

BOX 7.1 Marriage and Maternity Assistance Programme

Tamil Nadu is perhaps the only State in India, which has a social welfare initiative for marriage assistance for vulnerable women and their families, demonstrating the political will of the State Government. The Annai Theresa Marriage Assistance Scheme for orphan girls allows for marriage assistance up to INR. 12000. Marriage assistance schemes for inter-caste and widow re-marriages are provided through the Muthulakshmi Reddy Ninaivu Inter-caste Marriage Scheme and the Dr. Dharmambal Widow Remarriage Scheme. Further, poor widows can avail marriage assistance for their daughters through the Maniammaiya Ninaivu Marriage Assistance Scheme. Assistance in marriage is also given to visually impaired, people with orthopedic disability and people with hearing impairment.

A four gram 22ct gold coin is given to the beneficiaries of marriage assistance scheme for making the Thirumangalyam²⁹ for the brides. In order to ensure purity and correct weight as well as cost, these gold coins are procured from public sector banks. An additional amount of INR 25000 is given as marriage assistance. In case of graduate and diploma holders, a grant of INR. 50000 is given to the girl. In Tiruvallur district, so far 5898 women have received marriage assistance. The marriage assistance is provided as a succor to underprivileged families who have girl children to minimize unfair burden that they have to carry because of unfavourable social status and cultural practices that the women are faced with in the patriarchal societies.

Maternity assistance is also being provided to encourage women and their family members access public healthcare facilities as against expensive private facilities and promote institutional delivery to ensure safety of the mothers and the newborn by making early registration and regular followup as the precondition for getting these benefits. The assistance is given under two schemes, JSY and Dr. Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) covering 9786 and 18618 mothers respectively during the year 2013-14.

²⁸ *Vide G.O. (Ms). No.52 RD&PR, (CGS-1) Department dated 25.06.2012*

²⁹ *Thirumangalyam is a holy necklace tied around the bride's neck by the groom. This ceremony certifies the completion of the marriage.*

Crimes against Women

Women face violence in work places, during travel and in public places, besides the worst form of domestic violence. Tiruvallur district is no exception and women are subjected to all types of cognizable crimes. Number crimes against women Tiruvallur district had gradually increased from 38 in 2011 to 83 in 2013, a trend which as witnessed a reversal during 2014 with the number of crimes against women restricted at 40. (Table 7.4)

TABLE 7.4 CRIMES AGAINST WOMEN

Sl. No	Crime Heads	2011	2012	2013	2014
Crimes that do not result in death of the victim					
1	Cruelty by husband and his relatives	12	19	19	15
2	Kidnapping & Abduction of women	10	12	23	9
3	Molestation	2	8	11	2
4	Rape	6	18	21	8
5	Sexual Harassment	1	1	-	2
	Total	31	58	74	36
Crimes resulting in death of the victim					
6	Dowry Death	7	5	9	4
	Total	7	5	9	4
	Grand Total	38	63	83	40

Source : Superintendent of Police

Reduction in the of cases reported is a good indicator of crimes against women, however, lack of easy access to legal system, lack of cooperation by the police, fear and social stigma associated with the crime could be the reason for under reporting of crimes against women. It is a known fact that sexual harassment in the workplace is on the increase but is rarely discussed in the public domain or reported. Domestic violence and marital rapes mostly stay invisible. Many cases are either pushed under the carpet reporting at the police stations. Increased visibility of the crimes in public domain alone could lead to effective measures in curbing the crimes against women. Ensuring a conducive, protective atmosphere would encourage women to come forward to report crimes is the collective responsibility of administration, legal systems, social sector organizations, and families of the women themselves. Many government legal cells, civil society organizations and NGOs have stepped in to provide protection to women and ensure judicial action against such crimes.

In the context of increased feminization of poverty, one finds that women are faced with the responsibility of managing the household with lower resources and faced with lower entitlements in health and nutrition, besides having to add to the families' kitty, with low or no negotiating powers at the workplaces. Flagship programs such as MGNREGA have to some extent given a

chance for poor or ultra-poor women to get 100 days of employment without having to negotiate with the local authorities.

Migrant Children

Tiruvallur district has an excess of unskilled workforce, which drives lot of families who work as farm hands to migrate seasonally or round the year to other parts. Conversely, there is lot of in-migration in the construction sector. Education of the children of these migrants is often a causality of the labour movement. Keeping in line with the theme of inclusive education, multiple strategies deployed by SSA strive to school all out of school children including and migrant children. (See Appendix Table A7.5 and Box 3.3) During seasonal migration in the month of January 2013, 4140 migrant students were identified through a district wide survey conducted by the SSA. SSA Tiruvallur reports that with a cost of INR 8.2 Lakh, the agency has opened 101 Centres and appointed 117 Educational Volunteers for the academic development of the migrant children in the district

Sexual Minorities

GoTN has established India's first Transgender Social Welfare Board in 2008. This body was assembled in response to the great discrimination and health hazards faced by Tamil Nadu's TG community. GoTN has also commissioned a State census to identify TGs and to provide them with identity cards and ration cards. GoTN guarantees reserved seats for TGsin colleges and universities in the State, besides implementing special schemes addressing the basic needs of the TGs such as employment, housing, healthcare and food security.(Annex Table A7.6, A7.7). Inclusive approach of the State towards its TG population has been internationally recognized.

Conclusion

GoTN has had an impressive history of social reforms and has adopted pro-poor policies. Considering, a very high dependency ratio, the State has doubled the amount provided as old age pension. Through a stream of schemes of the old, destitute and vulnerable, Tiruvallur district covers more than 50 % of the senior citizens to ensure their safety and well-being. GoTN's poverty reduction programmes too are specially targeted at the poor and vulnerable, including the mentally ill. Disabled in the district are given assistance in terms of appliances, treatment and job related skill training. Tamil Nadu is the first State to recognize sexual minorities as official gender and has established a board for addressing their concerns. Children orphaned by disease or disasters, children of the migrant, and the poor are given educational and marriage assistance.

CHAPTER 8
INFRASTRUCTURE

Chapter 8

Infrastructure

Introduction

Infrastructure development is critical for sustaining the economic growth as well as human development. Hence the term ‘infrastructure’ has two connotations; economic infrastructure, that includes amenities and public utilities such as roads, bridges, culverts, transport, electricity, telecommunication, storage systems, and markets; and social infrastructure that includes utilities to benefit specific target social groups such as educational and healthcare facilities, homes to care for children and elderly, housing, water supply and sanitation, as well as, training institutes to enhance employable skills, and banking and insurance institutes for financial inclusion and support.

Development of social and economic infrastructure needs to go hand in hand so that the impact of their synergy can be realized in full measure. These two are bound to create a mutually stimulating and reinforcing effect on each other. Economic infrastructure can deliver most visible benefits, such as, faster economic growth, improved productivity, poverty alleviation, and environmental sustainability, whereas, social infrastructure on the other hand, builds social capital in terms of well-being and empowerment of the people.

Tamil Nadu is one of the most rapidly industrializing and urbanizing states in India, with 48.45 % of its population living in urban areas. Tamil Nadu will continue to lead the country towards urban growth over the next decade also. The projected growth rate of the urban population for Tamil Nadu by the year 2030 has been estimated as 67 %, which will be the highest in the country. There will be many major policy and managerial challenges in coping with the increased pressure on urban infrastructure and provision of basic civic services necessary for the burgeoning population. Capacity building, accessing funds for infrastructure development, employing new, relevant green technologies will be the key to meet these challenges.³⁰

³⁰ *Water Supply Department, Government of Tamil Nadu, Policy Note - 2013-2014*

BOX 8.1 Kuthambakkam–Setting Precedent³¹

Kuthambakkam, panchayat in Poonamallee taluk, 30 kilometers away from Chennai has 1,040 families residing in the 70 odd hamlets. A vast lake irrigates 1,400 acres of farm land whereas another 700 acres harbour rain fed agriculture. Water conservation has been a part of Kuthambakkam's DNA. Income is mostly from agriculture and cottage industries. Every family earns around INR 40,000 a month. Every family boasts of having at least one college graduate. This village is a center of attraction now as it has become an example of Gram Swaraj representing balanced social and economic development sculpted with a vision of an engineer-turned-panchayat president, Rangaswamy Elango.

A native of Kuthambakkam living in Chennai, Elango witnessed degradation of natural resources, caste riots, and presence of illicit breweries with the associated evils in his village and was determined to make a change. In a bid to alter the course of his village, Elango returned to Kuthambakkam for good, quitting his job as a Chemical Engineer at the Council of Scientific and Industrial Research. His initial efforts to transform the village ran into roadblocks. Caste clashes and alcoholism were rife among villagers. Illicit liquor was freely available and the local businessmen flourished because of it. Elango worked against these evils day and night.

Elango contested the Panchayat elections in 1996, as an independent candidate and won hands down. In his first term as sarpanch, he travelled countrywide and studied several experiments in rural development. He realized that there were vast gaps between national and State policies and their implementation at the grassroots especially in the case of specific rural development measures formulated to address issues at the village level.

Elango facilitated access to Indira Awaas Yojana, Nirmal Bharat Abhiyan, MGNREGA, Mahalir Thittam, etc. for people of Kuthambakkam. Gradually, employment was ensured for all families. Low-cost, eco-friendly houses were built and healthcare centres were established. Roads and drains were laid, streetlights installed and rainwater-harvesting structures were commissioned under various other government schemes. Seventy two SHGs were formed and a Panchayat Level Federation was established in Kuthambakkam panchayat, empowering the women through the Mahalir Thittam. The SHGs availed loans of various amounts for enterprise creation and now have direct linkages to nationalised banks. The women were also given training in various trade-related skills. NGOs like Pratik's Enviro Foundation have implemented their innovative solid and liquid waste management projects in the village.

Dalits account for more than half of the population in Kuthambakkam, yet own only two percent of the productive land leading to a traditional caste and class based rivalry. Elango was effective in bringing together the traditionally antagonistic Dalit and non-Dalit communities. Twin houses were built within a compound, and the houses were shared by a Dalit and non-Dalit families. Long before the Tamil Nadu Government launched its *samathuvapuram* (Egalitarian Village) programme, Kuthambakkam had become egalitarian. It is believed that the Kuthambakkam model had inspired the Government to launch the programme. Caste barriers have not been completely overcome in Kuthambakkam, but there is no animosity. There are no caste clashes and alcoholism has been reined in. Last year about six inter-caste marriages took place in the village. Kuthambakkam has seen radical changes over the recent years and has set an example for other such villages.

³¹Source: *The Week*, Dec 15, 2013

Roads

Roads and transport are considered as the main arteries that accelerate progress in various sectors of the economy by facilitating increased productivity, as well as, improve access to basic amenities. Length of roads available is a key input in the process of human development, and an important development indicator. Quality of the roads determines their value and utility in the rural economy in terms of efficiency in movement and standard of living.

Tiruvallur district has roads of 8389.897 kilometers length by year 2013-14. Three fourth of roads in the district are being maintained by 14 Panchayat Unions (blocks) while the rest are maintained by 10 Town Panchayats, 5 Municipalities and Zones. Volume of funds managed by the village panchayats at Panchayat Union level is adequate for such activities. This also illustrates an increased awareness among Panchayat level stakeholders about the importance of link roads for connectivity with mainstream economy as well as with schools, healthcare institutes, banks etc.

Nearly 70% of the roads in Tiruvallur district are bituminous, and while 12.7 % of roads are mud road and remains unusable during rainy seasons. During the past three years a large segment of mud roads has been converted to Cement Concrete (CC) roads with better utility value, with low maintenance cost for transport.

Poonamallee, Villivakkam and Puzhal have the largest share of roads in the district, about 13 % each. Gummidipoondi and Villivakkam have the highest share of mud roads (10.8 % and 16.7 %). More than 90 % of the mud roads are predictably in rural areas, making access to schools, hospitals, government offices, banks, workplaces difficult for the people there. Inter block variation indicates lack of uniform access to essential amenities. Reportedly, difficulties in reaching hospitals and schools on time due to the poor condition of the mud roads during rainy days are the key concerns for people living in rural areas. At the very least, WBM roads need to be laid in all the villages, for better utility and satisfaction of the public and better management of rainwater.

The Government in G.O. (Ms) No. 2010 Municipal Administration and Water Supply (TP2) Department dated 9-9-2010 has sanctioned, "Special Roads Programme 2010-11" for the improvement of roads in the Urban Local Bodies (ULBs) damaged by wear and tear, natural calamities or while laying of sewer lines or water supply lines. Puzhal block that had the largest proportion of mud road in 2011 has about 132 kms roads constructed during by 2014, enabling more connectivity for its villages.

TABLE 8.1 BLOCK WISE DISTRIBUTION OF TOTAL ROAD LENGTH

Sl. NO	Block	Total road length (in Km) Year : 2013-2014				
		Mud	WBM	BT	CC	Total
1	Ellapuram	59.095	28.416	430.572	17.209	535.292
2	Gummidipoondi	115.747	115.656	473.346	30.272	735.021
3	Kadambathur	75.810	42.750	344.390	6.750	469.700
4	Minjur	35.651	32.718	435.965	21.546	525.880
5	Pallipet	16.596	22.050	195.579	40.094	274.319
6	Poonamallee	68.784	149.019	692.520	227.450	1137.773
7	Poondi	82.312	60.875	241.575	23.555	408.317
8	Puzhal	73.151	92.758	840.476	75.685	1082.070
9	R.K.Pet	107.450	53.230	259.783	4.150	424.613
10	Sholavaram	8.490	18.205	189.395	25.141	241.231
11	Tiruttani	94.480	17.600	247.960	42.400	402.440
12	Tiruvalangadu	89.595	35.780	334.850	2.550	462.775
13	Tiruvallur	62.350	25.550	310.770	15.850	414.520
14	Villivakkam	178.080	30.770	771.566	128.110	1108.526
	National Highways	-	-	167.420	-	167.420
	District Total	1067.591	725.377	5936.167	660.762	8389.897

Source: BDOs, Town panchayats, Municipalities, Zones, DE, Highways Department, Tiruvallur, ADE, National Highways, Chennai.

Electricity

Electricity is a critical input for all the activities in the digital world, particularly so, for technology intensive activities and products entering into the market unabated, increasing demand for electricity. By 2011, 96.87 % of the households had electricity connections. (Table 8.2) and by 2014, all the households in the 4 zones, 14 blocks, have been provided electricity connections.

However, the supply of electricity in most of the districts except Chennai is dismal. There are scheduled and unscheduled power shut-downs. Considering the growing electricity needs of the population, the limited energy resources need to be used judiciously. The citizens also need to be educated towards a careful, responsible, and sustainable use of energy. The district can use the abundant sunlight during summers, the presence of a coastline etc. to plan for a green and sustainable energy infrastructure that will help to meet the demands of a growing population. In the year 2013-14, there were 206815 street lights on the 8389.897 kilometre long roads.

TABLE 8.2 STATUS OF ELECTRIFICATION 2011

Sl. No	Block	2011*			2014**
		No. of HHs	No. of HHs with EB connection	Percentage HHs with EB connection	No. of street lights
1	Ellapuram	31759	29836	93.95	9559
2	Gummidipoondi	48509	46160	95.16	8276
3	Kadambathur	35972	34275	95.28	10124
4	Minjur	60346	58366	96.72	19535
5	Pallipet	25599	23712	92.63	5081
6	Poonamallee	160430	157669	98.28	35494
7	Poondi	31010	29184	94.11	4275
8	Puzhal	152718	150228	98.37	35486
9	R.K.Pet	23900	21970	91.93	3505
10	Sholavaram	39058	37908	97.06	8875
11	Tiruttani	27208	25183	92.56	4549
12	Tiruvalangadu	25139	22742	90.47	5437
13	Tiruvallur	40007	38263	95.64	15363
14	Villivakkam	237167	233904	98.62	41256
	District Total	938822	909400	96.87	206815

Source: *Census 2011, ** BDOs, Town panchayats, Municipalities, Zones, DE, Highways Department, Tiruvallur, ADE, National Highways, Chennai.

Liquefied Petroleum Gas Connections

It could be observed that 66.24 % of the total households in the district had access to Liquefied Petroleum Gas (LPG) in 2011, accounting for 621,907 households. (Annex Table A8.1) While the same district level trend in accessibility to LPG could be seen in many blocks; about six blocks have less than 50% household accessing LPG that include, Ellapuram, Gummidipoondi, Poondi, Pallipet, R. K. Pet and Tiruvalangadu. Tamil Nadu government provides subsidized LPG connections to the BPL households.

It is assumed that households that do not have access to LPG, depend on traditional fuels such as kerosene or firewood. In rural areas, with dwindling supply of kerosene, just about two to three liters per month per family, use of firewood is the only cooking fuel option families are left with. It not only places additional burden on the women and children to collect and carry firewood home foregoing their time that could be used for study, rest or recreation, the women are also faced with health hazards by inhaling smoke and harmful gases besides causing indoor air pollution in their homes. Families in the villages using firewood could be encouraged to use smokeless earthen stoves for cooking while using firewood, which are known to improve energy efficiency of the firewood and protect the women and their families from health hazards. The smokeless stove models could be propagated in the villages where firewood is used.

BOX 8.2 Chennai Metropolitan Development Authority Initiative³²

In view of the fast-paced development taking place in areas beyond the present metropolitan area jurisdiction, like Sriperumbudur, Kelambakkam, Tiruvallur and Maraimalai Nagar, it had become necessary to review the Chennai Metropolitan Planning Area that was notified in 1973-74. Hence, among other expansion plans, GoTN proposes to develop a satellite township at Thirumazhisai a town in Tiruvallur district, at a cost of INR 2,160 crore on 311.05 acres of land owned by the Tamil Nadu Housing Board.

Chennai Metropolitan Development Authority (CMDA) plan includes provision of adequate infrastructure for better housing at affordable cost and other amenities in order to relieve congestion in the metropolis. CMDA has also initiated a program for the improvement of the environment and improvement of basic amenities of seven Town Panchayats from Tiruvallur district within the CMDA area with following objectives:

- To enable the participation of the community at the grassroots, to identify and prioritize environment related issues affecting all sections of the community.
- To ensure stakeholder participation including the elected representatives, to create a common platform for the community to work together to solve the local issues that will be unique to the respective areas in a manner that is acceptable to all stakeholders.
- To ensure better maintenance and utilization of the assets created and to develop a spirit of ownership amidst beneficiaries.
- To institutionalize and to replicate and to upscale the process of development in the district

Communication System

Communication system comprises of post offices, telecommunications and internet. Use of telephones and internet has revolutionized the way we communicate and has accelerated economic and other activities phenomenally. Bharat Sanchar Nigam Limited (BSNL), India's state-owned telecom and internet service provider, provides telephone and broadband internet services. At present, private service providers like Airtel, Aircel, Vodafone, idea etc. also provide telephone, mobile and internet services in the district. Greater participation of private sector in telecommunications system serving the people has helped in increased outreach of the communication services and the coverage could be far higher than the figures projected in the table. Data pertaining connectivity through private channels is not available.

³²<http://www.tiruvallur.tn.nic.in/departments/townpanch.htm>

TABLE 8.3 BSNL TELECOMMUNICATION SYSTEMS

Sl. No.	Items	2013-14
1	Telephone exchanges	75
2	Mobile phone towers	185
3	Number of PCOs	3215
4	Number of land lines	103003
5	Number of households with telephone connections	103003
6	Population covered	2738866

Source: Chief General Manger BSNL, Chennai

Financial Institutions

Lack of access to basic financial services is a major challenge in a country such as India where more than 65% of the population is classified as ‘under banked’ or ‘unbanked’. Recognizing this problem, the Reserve Bank of India (RBI) had introduced a regulation in 2006 allowing banks to provide service at people’s doorsteps through the use of third party services. This model is referred to as ‘Business Correspondents’ or ‘Banking Correspondents’ in short ‘BCs’. BC is a representative authorized to offer services such as cash transactions where the lender does not have a branch. Primary role of the BCs is to oversee the proper development and functioning of indirect banking channels for a commission. The BCs are subject to RBI regulations and have direct contact with one or more financial institutions.³³

Tiruvallur district has 320 commercial bank branches including rural and semi urban branches providing various financial services and 193 cooperative societies with a membership of 460129³⁴Through the financial inclusion drive, banking services are provided to hitherto unbanked areas through banking outlets in every village having a population of over 2000. In an effort to take banking services to the last mile, the Indian Overseas Bank, which is a Lead Bank for the Tiruvallur district, has identified 184 villages for provision of banking services through BC model. The district also has a fairly good network of cooperative societies. (Table 8.4)

³³*Banking Correspondent: A Channel For Financial Inclusion in India & Micro ATMs, Posted in Banking, Commerce, Payments By LTP Team On March 5, 2014*

³⁴*Joint Registrar of Cooperative Societies. LDM 2013-14*

TABLE 8.4 COOPEARTIVE BANKS AND SOCIETIES

Bank	Branches	Bank	Branches
Primary Land Development Bank	10	Industrial Cooperatives	13
District Central Cooperative Bank	20	Khadi and Village Industries Societies	34
Urban Bank.	1	Primary Cooperatives	19
Primary Agricultural Credit Societies	124	Cooperative Sugar Mills	2
Housing Cooperatives	25	Cooperative Marketing Societies	5
Employees' Cooperatives	81	Industrial Cooperatives	13
Lift Irrigation Society	1	Khadi and Village Industries Societies	34
Weavers Cooperatives	73	Other cooperatives	142

Source: Annual Credit plan report of the Lead Bank, Tiruvallur district, 2011-2012

According to the Annual Credit Plan document, total bank advances made for various sectors of district economy was to the tune of INR 9756.48 crore in December 2012 with an increase by INR 2496.07 crores over March 2012. During the same period, the percentage of priority sector advances including agriculture and other weaker sections in the district to the total advances has increased by 5.09 % (from previous year) amounting to INR 2556.73 crores in December 2012³⁵.

The extended banking and commercial credit network at district level has contributed to the growth of the industrial and the services sector. The presence of a large industrial sector encourages the development of the ancillary industries and support services for which credit availability is crucial, which also spurts overall growth and development in the district. Banking infrastructure at the micro level has demonstrated that the extensive availability of credit at village panchayat level and easy accessibility of banking facilities with innovative delivery mechanism, such as banking correspondent model, has the potential to empower people financially for alleviation of poverty and development. Bank – SHG linkage program merits special mention in the context of promotion of gender equality in the State (Box 6.1)

District credit plan outlayed by the lead bank for different sectors blocks for the year 2013-14 envisages growth of the respective block economies with an implication on income, employment, food security, poverty reduction and gender development. (Annex Table A8.2) The credit plan envisages a target of INR 2157 crores for 2013-2014 to be provided for various priority-sector activities including agriculture, allied activities, small and tiny and cottage industries and service activities in the district. Tiruvallur block has the highest share allocated (10.89 %, INR 235 crore). The lowest share of just 5 % (INR 108 crores) was marked for Tiruvalangadu block benefiting. In the case of accommodating beneficiaries with entitlement of

³⁵ *Annual Credit plan report of the Lead Bank, Tiruvallur District, 2011-2012*

subsidy under Government programmes; Villivakkam has the highest share of 17.69 % (INR 45.8 crore) covering 25600 poor while Tiruvalangadu has the share of 4.25% (INR 11 crore) benefiting 2968 individuals.

Unique feature of the district credit plan is that it is inclusive of subsidy linked credit programmes like Prime Minister’s Employment Generation Programme (PMEGP), Swarna Jayanti Gram Swarojgar Yojana (SGSY), Tamil Nadu Adi Dravidar Housing Development Corporation (TAHDCO) implemented by the government for the poor and vulnerable sections of people in the district. It is a welcome feature, as it would ensure credit with subsidy to the poor for their livelihood activities for income and employment obsoleting them from poverty.

Insurance

Life Insurance Corporation of India (LIC) with 21 branches have issued 289892 polices in the district during 2011-12 and 283672 policies in the year 2013-14. There is a large private sector present in the world of insurance offering services that provide financial and social security to its clients.

TABLE 8.5 LIFE INSURANCE CORPORATION OF INDIA

Year	No. of branches	Polices Issued
2011-12	21	289892
2013-14	21	283672

Source: District Statistical Handbook, 2013-14

Transport Facilities

Transport is the back bone of all economic and social activities in this industrial district. Tiruvallur is well connected by road and rail. The Chennai International Airport is just 42km (26mi) South-east of the town which could be reached in about 45 minutes by road. The airport is placed in between Chennai-Bangalore broad-gauge railway line and Chennai-Tirupathi Trunk road. There are two major roads connecting Chennai and Tiruvallur. One route is through Pattabiram, Avadi, Ambattur and Villivakkam and the other one is through Poonamallee and Koyambedu.

Bus Service

The Metropolitan Transport Corporation (MTC) runs an extensive city bus system. The MTC bus service is available from Tiruvallur to most of the important places in Chennai city and Chennai Metropolitan Area (CMA). The Tiruvallur Region of Tamil Nadu State Transport

Corporation (Villupuram) Ltd. is functioning as a separate region with its head quarters at Tiruvallur. The bus transport needs of Tiruvallur District are met by Tiruvallur region which has depots at Tiruvallur, Tiruttani, Uthukottai, Ponneri and Koyambedu.

At present, all major places of in the district are well connected to Vellore, Tiruchy, Bangalore, Chennai, Kancheepuram, and Chengalpattu. To monitor the functional operation of buses Time Keepers have been posted at Tiruvallur, Tiruttani, Poonamallee, Ponneri, Uthukottai, Koyambedu, Red hills, Tirupathi and Sri Kalahasthi. Adequate number of additional buses is being operated to various places for the benefit of devotees during Adi Kiruthigai and PadiUrchavam festivals at Tiruttani and Adi festival at Periyapalayam. The Tiruvallur region of Tamil Nadu State Transport Corporation (Villupuram) Ltd., is taking every possible steps to meet the bus transport needs of Tiruvallur District. The public and private sectors operate their own fleets of buses.

Railways

Tiruvallur is located on the Main Broad Gauge line and some of the West-North bound trains stop here. There are two Suburban railway lines, namely, West line and West-North line. West line is from Chennai Central to Arakkonam and west-north line is from Chennai Central to Tiruttani. These two lines have many suburban trains running from Tiruvallur to Chennai Central, Chennai Beach, Arakkonam and Tiruttani. Fast train is also available which starts at Tiruvallur and stops at Thirunindravur, Pattabiram, Avadi, Ambattur, Villivakkam, Perambur, and Basin Bridge and finally reaching Chennai Central Station. Tiruvallur region is equipped with advanced computerised reservation of train tickets. Frequent trains are available between Tiruvallur and Chennai Central. Commuter rail system in CMA operated by Southern Railway consists of the following 3 lines: i) Chennai Beach - Tambaram, running south-west ii) Chennai Central – Tiruvallur, running west and iii) Chennai Central – Gummidipoondi, running north. The first 2 lines have dedicated tracks for commuter trips. The thirdrd line, however, caters to both suburban and inter-city passenger movement. There are 37 railway stations covering more than route length of 120kilometers and track route of about 140 kilometers in the district. The movement of Chennai Beach – Tambaram rail line is especially restricted by the presence of a number of roads and rail level crossings. Both the Chennai Beach–Tambaram and the Chennai Central–Gummidipoondi rail corridors see an overcrowding of trains during peak hours. Despite development of the new rail corridor viz. Mass Rapid Transit System (MRTS), the patronage of the corridor has been below par. Lack of adequate access and circulation, under-development of inter-modal interchanges at the stations, higher rail fares and non-exploitation of the inter-

operability of services among the four rail sectors are some of the reasons for this underutilization of MRTS facilities.

BOX 8.3 Gummidipoondi- Looking for Development

Gummidipoondi is an industrial block challenging the southern and eastern industrial dominance in the district. Yet, it is a backward block with respect to sex ratio, literacy, gender literacy gap and a high number of out of school children, who are enrolled in the school but do not attend school regularly. The reason – a wearisome to commute of about 3 to 14 kilometers one way to the school. There is no government college in Gummidipoondi; and private institutes are not affordable. Availability of unskilled jobs prompts early entry into the job market. Lack of awareness and empowerment among the people has led to low aspirations for a better life.

HSCs and PHCs lay within five kilometers radius of some of the villages, however for some villages health facilities are as far as 18 kilometers away. The district hospital is less accessible, being situated 25 to 45 kilometers away from the villages. The patients find these distances overwhelming, resulting in low rate of seeking health care. There are some villages where even 108 free ambulance services are either not available or the operators refuse to go because of poor approach roads to remote places such as those where Kannakottai PHC is located. Not surprisingly, performance with respect to health indicators in Gummidipoondi below the district and State averages. IMR was 18.7 deaths per 1000 live births in 2013-14 whereas MMR was very high at 117.6 per lakh live births. (FIGURE. 4.2, Table 4.5) despite a high proportion of institutional deliveries (99.9 %) and despite the block registering a good percentage of ANC coverage. Proportion of severely underweight under-five children is also more in the block (21 %) than the district average of 11 %.

Majority of the households have electricity, whereas only 39.64 % have LPG connections, firewood being the key source of cooking fuel for majority families. A large proportion of migrant population in the area working with the industries does not have a pucca houses. Many houses were not covered under the government programme as they were unregistered and were located in the paramboku or waste land owned by the government where provision of civic amenities is nonexistent.

While about 37.5 % households in Gummidipoondi have toilets. In some villages 90 % of the population practices open defecation. The risk of e-coli contamination of water sources in the absence of any waste management system is therefore high. Some parts of Gummidipoondi and similar parts in other backward blocks need urgent administrative attention if it has to match the superlative development in other parts of the district. As the adage goes, the fleet of ships is only as fast as the last ship that trails behind.

BOX 8.4 Narikurava, the Urban Poor and Slum Development Programmes

A fly over was constructed very close to Tiruvallur railway station to decongest the traffic. This fly over provides shelter to around 60 Narikurava families migrated from Sankarapuram of Arcot in Vellore district, Polur and Chengalpattu looking for livelihood. The Arcot and Polur natives go to their respective villages where, they have their houses and ration cards. They find some livelihood through selling their handicrafts in the bus stand and in running trains. They are compelled to live in Tiruvallur under the flyover all seasons. They use makeshift bathrooms to wash, using water from the street taps. Their children attend schools in Tiruvallur. Men, women and children use the railway tracks for defecation.

Relocating from Tiruvallur will be hard on them. It will affect their livelihood. Like the Narikurava, there are number of other families without sites in the district. Considering the receding livelihood options in rural areas and distress migration to urban locations, there is every possibility that proportion of such households is very high. There is no assessment of such households. Housing and sanitation is the key concern for the urban poor. About 40 % of the households in Villivakkam block do not have pucca houses. (Annex Table A3.4)

Studies have indicated that, while the urban poor contribute significantly to the city economies, only a fraction of the poor entrepreneurs have ever approached for any loan and less than one third had a bank account.³⁶ With the recently introduced *Jan Dhan Yojana* for financial inclusion of the poor, there seems to be some hope. The Government of India has merged the erstwhile National Slum Development Programme and Valmiki Ambedkar-Avas Yojana into a new programme named The Integrated Housing and Slum Development Programme (IHSDP). This programme extends financial assistance to upgrade the standards of the living conditions of the slum dwellers. Currently, in Tiruvallur district, IHSDP is being implemented in Arani Town Panchayat, whereas, Basic Services To Urban Poor (BSUP) programme is being implemented in Minjur Town Panchayat.

In the year 2013, Tamil Nadu government has formulated a special scheme, the State Balanced Growth Fund (SBGF), to target backward areas in the State and to initiate focused interventions for enhancing the socio-economic outcomes and thereby, achieve balanced growth. In Tiruvallur district urban slums from four municipalities were selected for focused attention under the scheme. A perspective plan for the slums in Tiruvallur district includes infrastructure development such as renovation of schools, anganwadi, foot bridges, water tanks, community toilets, water purification plants, solid waste management plants, recreation hall, information resource centres, three-phase power connections, public transport facility, provision of bus stop and mini bus services etc., based on a needs assessment exercise. The perspective plan focuses not just on infrastructure development but includes soft interventions such as training, advocacy and information to the community, motivation to students to continue education, mass awareness campaigns on various issues seeking sustained integrated development..

Port

Ennore Port, officially renamed Kamarajar Port Limited, is located on the Coromandel Coast about 24 km north of Chennai Port, Chennai, it is the 12th major port of India, and the

³⁶ *How India's urban poor also help the economy grow*, Business Standard, June 10, 2013

first port in India which is a public company. The port is designed as Asia's energy port, envisaged being a satellite port to decongest and improve the environmental quality at the bustling Chennai Port. The port is, however, evolving itself into a full-fledged port with the capacity to handle a wide range of products. With a permissible draught of 13.5 m, the port handled a total volume of 11.01 million tonnes in 2010–11, up by 2.86 per cent from the previous year. Ennore Port Limited (EPL) has been endowed with large chunks of land. The Port would have about 2000 acres of land where it will be provided with all the infrastructure facilities required viz., water supply, electricity, transmission corridor, firefighting services, environmental protection measures etc.

Larsen & Toubro (L&T), in association with the Tamil Nadu Industrial Development Corporation Ltd, has set up a shipyard-cum-port at Kattupalli, about 32 km north of Chennai. The Kattupalli yard is mainly built for making warships and to augment the existing capacity at Hazira in Gujarat for sub-marines. A draft of up to 14 m and a waterfront exceeding 2.2 km makes the facility well suited to building large defense ships.

Conclusion

Tiruvallur district has seen an east west divide so far as development of infrastructure is concerned. Poonamallee, Villivakkam and Puzhal, the urban, industrial blocks have better roads and other facilities compared to some of the western blocks of Gummidipoondi, R K Pet and Pallipet. Considering that with the continuous inflow of people seeking employment, the urban blocks are thickly populated; these blocks also have extensive demands on the infrastructure, particularly, housing and sanitation. Need of basic amenities for the urban poor is most pertinent. To ease out the impact of such imbalance resulted from concentration of industry and business in few blocks; the industrial estates are established in Gummidipoondi. However, it will need some time before the industry requirement and skill sets among the local youth match, and the blocks such as Gummidipoondi have developed economic as well as social infrastructure.

CHAPTER 9
SUMMARY AND WAY FORWARD

Chapter 9

Summary and Way Forward

In the preceding chapters of this HDR the district has been profiled in terms of key development indicators in all major sectors; in comparison to State parameters, as well as, inter block variations. The report also traces measures taken by district administration in conformity with national and State policies and programmes as well as unique activities and innovations at district level. Present report highlights the challenges faced by the district population and the broad strategies that may be called to address these challenges, as the discourse on people centric policy for sustainable development takes center stage.

In July 2011 the UN General Assembly passed a historic resolution, inviting member countries to measure the happiness of their people and to use this to help guide their policies. Several alternative measures have been proposed to capture the social dimension of development, combined with or independent of economic indices. A small south Asian country like Bhutan has embraced and espoused the concept of Gross National Happiness to contextualize Gross Domestic Product.³⁷

Tamil Nadu is one of the top ranking states in terms of its share in India's GDP³⁸, below only to Maharashtra, Uttar Pradesh and Andhra Pradesh. Tiruvallur district has the third highest GDP³⁹ in the State, next only to Chennai and Kancheepuram. Without doubts, 'progress' that has favourable economic implications is bound to sustain. However, economic progress is futile unless it is paralleled by enhanced socio-political and environmental performance. Synergy in the complex two way relationship between economic and social progress alone will lead to an acceptable Gross National Happiness if we were to measure it for Tiruvallur district. With this perception, in this report, district's progress in the economic sector is juxtaposed with its social sector performance; the performance indicators that are measured are juxtaposed with process indicators that are not measured. Present section provides a profile of the district in a nutshell, underscoring the challenges in each of the key sectors and proposes action points that may be considered by the district administration.

³⁷K. Srinath Reddy, *The Hindu*, July 21, 2014

³⁸ For Sl. No. 1-32 -- Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office, 2011

³⁹ *Indicus Analytics Market Skyline of India (2011)*

District Profile

Tiruvallur, a newly formed district on the east coast has just 5.8 % forest cover and 35 % net sown area which are fast receding. Socioeconomically, it has a mix of both, traditional, and modern; cultural and livelihood practices; with the equations between the binaries fast changing.

Economy of the district is driven mainly by the industrial and service sectors with the industrial sector growing at a faster pace compared to the State industrial sector which is one of the fastest in the county. PCI in the district is higher compared to that in the State.

Agriculture, on the other hand is fast receding thanks to industrial and real estate excesses and rapid urbanization. This notwithstanding the proportion of unskilled labourers engaged in agricultural labour continues to be quite high. Lack of adequate skills and loss of traditional family based livelihood options such as agriculture and handloom weaving have resulted in this swelling unskilled workforce. Distress migration by the unskilled labourers outside the district is the order of the day. Some of the the unskilled labourers do get absorbed in industrial sector but only on contractual basis with poor and uncertain employment conditions.

Keeping with the State's record for superlative performance in social sector, district's performance pertaining to IMR, MMR, sex ratio, CSR, literacy, female literacy and enrolment ratios is not only impressive but better than the State averages. Being close to Chennai metropolitan city, people of the district have the benefit of access to 24 hours high tech medical facilities. Infrastructure for school education as well as higher studies is adequate. Access to basic amenities however is not equitable in all blocks.

Key recommendations

1. Organizing small and marginal farmers into cooperatives could turn farming into a sustainable livelihood option.
2. A fillip to the handloom and other family based enterprises through training, market linkages and micro-credits could empower the economically disadvantaged entrepreneurs.
3. A facility for trade related skill development directed at strengthening or creating microenterprises could benefit many unskilled or semiskilled workers.
4. Building infrastructure such as roads for last mile connectivity could make schools and health facilities more accessible in remote locations.
5. Quality of health facilities in some blocks needs improvements.
6. District needs to deploy innovative methods to raise the quality of education.

Status of Human Development

Four indices, namely, HDI, GII, CDI and MPI were calculated for the present DHDR. Overall HDI and CDI in the district are higher with majority of the blocks clocking HDI and CDI values above 0.500. Performance for GII which is a negative index is also high with decent women employment ratios, high sex ratio and women's participation in the governance more than one third. It is the MPI, which is also a negative index, is a cause of concern with 9 of the 14 blocks faring poorly.

Wider inter-block variations are observed in indices for HDI because of low access to health facilities and services in some of the very backward blocks adversely impacting IMR, MMR and under-five-mortality there. Blocks of Tiruvalangadu, Gummidipoondi and Poondi are the most backward blocks in this regard. But for the uniformly high enrolment rates in primary and upper primary schools, the variation in HDI would have been much higher.

All blocks in the district have uniformly low GII values. This is result of adequate economic and political participation of the women, which are the first step towards women's empowerment. When the wage rates among women and men would be on par and when participation in governance actually translates into participation in decision making, the low GII will be more meaningful.

The district fares well both in terms of education and health parameters considered for calculating CDI. The CSR, however, indicates downward slide in majority of the blocks which not only indicates a regressive trend in male child preference and women's inability to make personal decision; let alone decisions in social and political spheres; it could also have a severe impact on overall sex ratio in the future.

MPI, more than any other index, brazenly underlines the critical issues faced by the people of Tiruvallur district. It suggests that successful school enrolment drive tells you only part of the story. How far, the school and family environment is successful in retaining the children in schools till they complete 10th grade is vitally important. Specifically drop out in secondary school is very high, surprisingly, in Poonamallee and Villivakkam blocks. Continuous in and out migration by families, as well as, ample opportunities for unskilled labour and early entry of the youth in labour market prove to be the nemesis for successful completion of schooling by all. Lack of infrastructure and services to the poor, coupled with social backwardness is responsible for high MPI in the backward blocks.

Employment, income and poverty

Tiruvallur district presents a typical pattern of industrial growth and economic development, but not without events of distress migration, loss of traditional employment, and persistent poverty for nearly one fourth of its population.

Unlike the State economy, which is predominantly agrarian, economy in Tiruvallur district is led by the industry sectors. Within the district, however, Sholavaram, Poondi, Ellapuram, R. K. Pet, Pallipet, Tiruvalangadu and Kadambathur as industrially are declared to be backward blocks, and in order to develop industries there, GoTN has made provision of 15 % capital investment subsidy on the fixed assets for prospective companies in these blocks. Two industrial parks are also set up in Gummidipoondi. Despite efforts to promote uniform industrial development across the blocks, the district is witnessing unprecedented inter district and intra district labour movement. Key reasons being; excess availability of unskilled labour in the district, because of setbacks in small, traditional, family based businesses and receding agricultural activities; industry preferences for non-local labourers in some sectors like construction; and low employability among the skilled workers, professionals pointing to quality deficit in the education system.

From the equity and poverty reduction perspective, economic empowerment of poor women by through SHG movement and its outcomes are impressive in this district. This also speaks volumes about the dedicated work by the Mahalir Thittam and other Self-Help Group Promoting Institutions (SHPI) such as NGOs, MFIs and the banks which function as social change agents in the district.

Urban poor contribute significantly to the city economies. The State has been implementing NSJSRY for over a decade to address their needs. There are also programmes providing protective cover around the poor such as PDS and housing schemes. However, housing for the urban poor is one of the most pressing issues for the district administration. There are wide inter-block, and urban rural disparities not just in term of poverty per se but in terms of basic amenities, including housing, water and sanitation. These services being of primary importance for human development, their inadequacy casts a shadow over the glorious tradition of Tiruvallur and over the spectacular economic progress.

Key recommendations

1. Localized inter phase between educational institutes and industries need to be introduced to enable development of adequate skill sets among the youth to match employment opportunities in the district.
2. Creation of and support to small family based enterprises need to be promoted.
3. Considering the low women work participation in the district, success of SHG model in imparting skill training to women need to be replicated particularly in relatively backward areas. In this regard, convergence among Mahalir Thittam, VKP, and local NGOs needs to be realized for maximum outreach among women.
4. Self-employment among men too needs to be encouraged in urban as well rural areas by forming Joint Liability Groups through the TNULM schemes.
5. Considering the small size of land holdings in the district, and tendency of distress sale of land among small and marginal farmers, farmers groups could be formed, and farmers could be oriented in type of crops to be cultivated, organic farming and dairy related activities to make agriculture a sustainable activity.
6. Agriculture based enterprises such as food processing, could be initiated with facilitation of appropriate value chains. Proactive and experienced local NGOs and research institutes could be involved in these initiatives.

Demography, Health and Nutrition

Health Infrastructure and Services

District as a whole has performed well in terms of CBR, CDR, institutional deliveries, immunization, growth among children, nutrition and anemia prevention services, and delivery of services to the pregnant and lactating mothers. The State initiated CEmONC services have helped shrinking of the MMR and IMR. However, district administration needs to be alert to any gaps in the infrastructure and human resources. Tiruttani, Villivakkam blocks are able to sustain their excellent performance in the previous years. However, Gummidipoondi, Kadambathur, Puzhal, R.K. Pet, Sholavaram and Tiruttani still show a very high MMR. Poor pregnancy outcomes often result in repeat pregnancies and deterioration of women's health in addition to the financial and social burden. Stillbirths, taking place despite presence of health infrastructure, point to need for last mile outreach among the pregnant mothers and ANC coverage, and need for addressing high-risk pregnancies and problems associated with them. The women and their family members also need to be intimated about their high-risk status and periodic follow up to

be ensured. Shortage of staff and lack of crucial facilities such as incubator for the new-born should be addressed on priority.

Adequate healthcare delivery infrastructure, particularly the buildings, health personnel and medicine, road and transport facilities, are essential prerequisites for sustaining the positive trends in institutional services. Some villages in Gummidipoondi are 25 to 45 kilometers away from the nearest GH. As some of the Panchayat Presidents and community members report, some of the PHCs are housed in rented dilapidated buildings. They also highlighted the need to have buildings on a permanent basis for some PHCs which are currently housed in temporary rented buildings in the villages at the moment.

The district makes concerted efforts to treat people with illnesses such as HIV/AIDS and TB and provides services to transgender community that is known to be a high risk group when it comes to HIV/AIDS management and control. DDHS intervention involves sensitizing people against stigma and fears associated with these diseases, and encouraging them to access health services. Management of diseases like leprosy, however, is made difficult due to lack of adequate data and information.

Drinking Water

While, 100 % urban wards have the drinking water facility, 3.13 % habitations accounting for 131 habitations in the rural areas do not have potable water. This means that people there have to depend upon unprotected, open water sources like rivers, tanks, ponds, lake or open wells; and rural women and adolescent girls have to bear the additional burden of fetching water from sources far away from their homes, sacrificing their time and energy that could be better spent on for productive and recreational activities.

Sanitation

Various studies on sanitation in India paint a sorry picture after nearly two decades of total sanitation campaign. The improvements that can be traced in the situation during past two three years are exasperatingly slow. Rural areas of Tamil Nadu have 55 % households without toilets, and 30 % of the available toilets are defunct as per a study in 2013.⁴⁰ Proportion of households with toilets in Tiruvallur district (65.97 %) is slightly better than India and Tamil Nadu, but still miles to go before goals of TSC are achieved. In Gummidipoondi and Sholavaram barely one

⁴⁰B. Aravind Kumar, *State of Sanitation: Poor, (as per baseline conducted in 2013)*, *The Hindu*, August 2, 2014

third of the households have toilets. Data on village wise community sanitary complexes, separately for men and women; that are the next best options to household sanitary units; are not available. We are not even in a position to discuss sanitation needs of households without house sites, because of stark absence of any data.

Key recommendations

1. Health infrastructure and services
 - 1.1. A strategy needs to be evolved to cover, the children and pregnant women from migrant families, under various health and nutrition schemes.
 - 1.2. Lacuna in the anganwadi services, for the population living on the outskirts of the villages, needs to be addressed on priority.
 - 1.3. Outreach among sexual minorities needs to be stepped up.
 - 1.4. District may take initiative to identify and treat the leprosy patients, and give them protection and cover them under schemes for vulnerable and differently-abled people.
2. Drinking water
 - 2.1. District administration may implement innovative projects such as, water resource management and RO plants in hamlets that do not have adequate sources for drinking water.
 - 2.2. SHGs could be motivated, trained and empowered to operate and maintain RO plants as well as take up water distribution as income generating activities.
 - 2.3. People could also be taught indigenous ways to purify water.
 - 2.4. MGNREGA schemes could be used for water shed development.
3. Sanitation
 - 3.1. District administration in coordination with PRIs could achieve a lot by a single point programme to facilitate making every existing toilet function.
 - 3.2. Community sanitary complexes separately for men and women for every village could increase the sanitation coverage to a possible maximum.
 - 3.3. Toilet subsidies could be facilitated with components such as revolving funds for construction

Literacy and Education

Quality of Education

Education system currently in practice goes easy on students' performance to enable playful activity based learning, and to prevent school dropout possibly triggered by performance related mal-adjustment, if it is evaluated. While children are retained in the school till they reach high school, and drop-outs are minimized successfully, the quality of learning takes a back seat, not just in terms of poor basic linguistic and arithmetic skills but also in terms of poor capacity to absorption of teaching in higher classes and thereafter.

Teacher shortage and teachers' involvement in non-teaching responsibilities; migration, illiteracy, economic backwardness and lack of awareness among parents; non-availability of upper primary schools, multilingual schools, weak monitoring and supervision linkages, adequate fund or logistics support, infrastructure deficit in some backward areas and inadequate school environment in urban schools in slum areas need immediate attention.⁴¹

School Infrastructure and Sanitation

Basic infrastructure such as water, electricity and sanitation is available in all schools. Infrastructure deficit is seen mainly in terms of unavailability of sufficient classrooms in half of the schools, need for compound walls in about one fourth of the schools and inadequate school environment in urban schools in slum areas. This is not to take away the creditable efforts by the District School Education Department and SSA's district chapter to ensure adequate infrastructure and facilities to the most backward areas.

It is not sufficient to have toilets in the school premises. There is also need to know the status of toilets in use. Besides, usability of toilets is not just a maintenance issue, but also involves cultural practices by the families of the children, and their awareness about importance of sanitation. Proportion of time spent in schools teaching hygiene, sanitation and other important life skills; and time spent on academic activities is rather skewed towards academic subjects. At an early age children take long to learn numbers and alphabets, but could learn life skills very easily, and learnings could last for life.

⁴¹*Evaluation report on SSA, Programme Evaluation Organization, planning commission GOI, 2010*

Higher Education and Skill Development Infrastructure

The youth in Tiruvallur have access to a wide range of educational institutions for higher education within the district, as well as in Chennai and Sriperumbudur. However, the district does not have sufficient and adequately distributed learning options throughout the district for those who wish to opt for a professional diploma or a vocational training after high school.⁴² The polytechnic and other vocational training colleges in the district are concentrated in Tiruvallur, Poonamallee and Ellapuram blocks. There are a few polytechnic colleges located in western blocks of Pallipet, R. K. Pet, Tiruttani, Tiruvalangadu, and Gummidipoondi also. Coastal block of Minjur or backward block of Sholavaram have none.

Key Recommendations

1. Quality education
 - 1.1. Reasons for quality deficit in school education need to be identified, including those in implementing ABL in SSA and communicated at the State level considering education is a State subject.
 - 1.2. Present school education system also needs to be revisited in a State level consultation, not so much for looking for alternative to ABL method but in order to tweak it to suit available facilities and resources.
2. School infrastructure and sanitation
 - 2.1. School authorities need to ensure that all toilets in the school are functional and accessible to the students rather than kept under lock and key.
 - 2.2. Sanitation campaign, information and advocacy on sanitation need to be intensified.
 - 2.3. More focus needs to be given on learning life skills in schools. The district could identify few schools where state of sanitation is not up to expectations and initiate a focused intervention there on the life skills with assistance from SSA, on a pilot basis.
3. Skill development infrastructure
 - 3.1. Recommendations in the District wise Skill Gap Assessment by NSDC may be considered while planning for training infrastructure for broadening and deepening availability of skill base as per industry and market requirement.
 - 3.2. Industries and other key employers may be persuaded to absorb local youth on priority.

⁴²Tamil Nadu Skill Gap Assessment, National Skill Development Corporation, 2012

Gender and Social Development

Gender is an overarching perspective, and the entire range of social, political and economic aspects of development need to be informed by the factors that impact empowerment of women. While political empowerment facilitates ownership of the problems and social inclusion helps participation in the implementation process, economic empowerment ensures a tangible growth in women's financial status in terms of enhanced income, financial inclusion and access to credit.

Status of Women

Tiruvallur district's performance towards gender relevant indicators, such as sex ratio, IMR, MMR is better than the national averages but lower than the State averages. The sex ratio however is improving at a faster rate than the State Sex Ratio. Gender equations among ST are not as encouraging. Sex ratio has also declined among the STs during the period from 2001 to 2011 with 9 out of 14 blocks indicating a negative growth. CSR in the district as a whole has significantly declined.

Access to and Control over Resources

Economic growth per se does not ensure gender equality. Work participation, participation in the governance and access to and control over resources, complemented with changes in socio-cultural practices alone can improve the status of women. While WPR among women is 23.5 % in the districts, it is better in rural areas (33.6 %) compared to urban areas (18 %). Higher women participation in the rural areas is attributed to MGNREGA which does not necessarily result in higher incomes for the women. Blocks with high proportion of BPL families are seen to have high female work participation.

Subsidy linked bank loans, entrepreneurial development programme and capacity development programme for women, assume a very important role in addressing the low level absorption of women in organized sector. TCDW, Mahalir Thittam, Pudhu Vaazhvu Project and non-government organizations have been working towards social and financial inclusion of the poor women. These programmes have demonstrated that increased financial access has amplified the empowerment process in Tiruvallur district.

Economic empowerment of poor women by the means of SHG system and its functioning is impressive in the district. Formation of federations has allowed the SHGs to access credit much

more easily resulting in PLFs assuming great powers and influencing decision-making particularly during elections and other political processes.

Local bodies, and Assembly, have 39 % elected women representatives among the representatives from Tiruvallur district which is certainly a welcome situation. It will be even better if women do actually participate in governance, and do not let men call the shots over their shoulders. Women are empowered only when they exercise their political rights independently and freely. However, election to various governing bodies; no matter, only in compliance to the gender participation norm; is a welcome step in that direction.

Key Recommendations

1. Status of women
 - 1.1. In the light of declining CSR, there is a need for advocacy in all blocks, administrative alerts could be sent to to prevent potential events of infanticide or foeticide, and specifically among ST community members.
 - 1.2. Access to healthcare services in remote areas of the district to be stepped up and coverage of children and pregnant and lactating mothers from remote areas, on the outskirts of the panchayat and among migrant population in urban areas to be enhanced.
2. Access to and control over resources
 - 2.1. Poor women in backward blocks where there is a lot more potential to mobilize women into SHGs to be covered through the Mahalir Thittam programme.
 - 2.2. Appropriate political procedures need to be devised so that economic equations do not translate into undemocratic power equations between SHGs and PLFs.
3. Political participation
 - 3.1. Elected representatives must be given training in soft skills and all members of the local bodies and assemblies could be given gender training to create enabling atmosphere for active participation by women members.

Social Security

GoTN has been proactive and pioneering in caring for the State's vulnerable through gender budgeting, pro-poor programmes, and recognizing and supporting sexual minorities.

Population of aged is on the rise. Number and proportion of aged women is also on the rise as compared to elderly men. In Tiruvallur district it is estimated that more than half of the elderly are covered by the safety net of various pension schemes for the old, handicapped persons,

destitute and deserted wives, widows and single women. Pension amount that is given to the elderly elsewhere in India has been doubled in Tamil Nadu through the Chief Minister's Pension Scheme.

The district administration makes every effort to reach the persons with disability, makes them aware of the schemes and ensures that the eligible do apply for the assistance. However, only 40 % of the persons with disability who hold a disability cards have the membership of the welfare board and can actually access the schemes. The persons with disability also benefit from State's poverty reduction programme, Pudhu Vazhvu, as well as from MGNREGA schemes.

Special schools and a large number of regular schools enroll children with disability, conforming to the norm of inclusive education. SSA, Tiruvallur, systematically identifies school drop-outs, including those from migrant families and mainstreams them in the school system.

GoTN is the first State to have initiated Transgender Welfare Board to address their specific health, housing, employment and food security related concerns. Tiruvallur district participates in these special programs for the sexual minorities.

With the overall pro-women environment, and successful initiatives empowering women, the crime against women have reduced during 2014. Increased visibility of the crimes in public domain needs to be credited for successful curtailing of crimes against women.

Key Recommendations

1. The elderly have healthcare needs and need for social protection. People need to be sensitized about care for the elderly.
2. Efforts to reach out to the disabled need to be stepped up
3. A card system for the children of the migrant who can get admitted in a government school in the place where their parents have migrated could be introduced, so that those children do not need to discontinue schooling.
4. The district would do good to continue to ensure social and economic empowerment of sexual minorities through health services and employment opportunities
5. Women need to be encouraged to come forward to report crimes. To create such an atmosphere is the collective responsibility of administration, legal systems, social sector organizations, and families of the women themselves.

Infrastructure

Economic Infrastructure and Services

Economic infrastructure and services in this district are well developed to match with the industrial growth and increased urbanization.

Roads -The district has pretty good network of roads enabling convenient connectivity with all blocks and relatively low percentage of mud road. However, more than 90 % of the mud roads are in the rural areas, which are concentrated in Villivakkam, Gummidipoondi, Tiruttani, Tiruvalangadu and R K Pet blocks making the access to various basic amenities very difficult. Difficulties in reaching hospitals and schools or reporting to work on time due to the poor condition of the mud roads during rainy days are the key concerns for people living in the rural areas.

Electricity -All the households in the 14 blocks, 10 town panchayats and 5 municipalities have been covered with electricity connection. However, Tamil Nadu faces acute shortage of electricity. Life in the villages is particularly paralyzed because of the scheduled and unscheduled power cuts. Energy is a Statesubject.

Communication- Like the rest of the country, Tiruvallur district too is provided with public telephone network by BSNL and private services by Airtel, Aircel, Vodafone, idea etc. While telephones are great facilitators of long distance communication, their overuse among children and among some adults leads to unproductivity. For working population, it turns out to be a cause of stress.

Financial services– The district has fairly good network of public sector, commercial and commercial banks. Financial institutes participate in the government's drive towards financial inclusion to a great extent. However, in the process of expanding their business, banks do not always practice socially responsible financing.

Social Infrastructure and Services

Social infrastructure includes utilities such as educational and healthcare facilities, homes to care for children and elderly, housing, water supply and sanitation, training institutes to enhance livelihood opportunities, and banking and insurance institutes for financial inclusion, etc.

Housing - Overall, about 30 % households do not have pucca houses. Gummidipoondi, Villivakkam and Ellapuram block have comparatively larger sections people without pucca houses. There is no official assessment of number of households without house sites; however, it could be assumed that proportion of such households is comparatively more in urban pockets. IHSDP programme has extended financial assistance to upgrade the standards of the living conditions of the urban poor in the slum areas of Arani Town Panchayat and BSUP is being implemented in Minjur Town Panchayat⁴³

Sanitation - Gummidipoondi, Poondi, Kadambathur, Ellapuram, Tiruvalangadu and R. K. Pet blocks have largest share of households without toilets. Households without sites mostly in urban areas do have acute sanitation needs.

Healthcare - Health infrastructure and its accessibility, need to be enhanced in certain remote areas in backward blocks such as Sholavaram, Gummidipoondi, R. K. Pet and Pallipet, where not just health infrastructure is underdeveloped but even the Medical professionals are unwilling to shift base there because of lower living standards.

Educational facilities - Similarly in Tiruvallur, Poondi, Ellapuram and Sholavaram blocks as many as 65 to 98 % schools do not have sufficient number of class room. If we go by what the Panchayat Presidents say, the condition of school buildings is not very encouraging. Ellapuram, Minjur, Sholavaram, Gummidipoondi and Tiruttani blocks have more than one third of the schools without compound walls.

Key Recommendations

1. Economic infrastructure

- 1.1. **Roads** - In remote rural areas, Water Bound Macadam (WBM) roads need to be laid in all the villages for better utility of other facilities and services by the public and for better management of rainwater during the monsoons.
- 1.2. **Electricity** - Considering shortage of electricity in the State, district can conduct advocacy on renewable energy, encouraging people, institutions and industries to use solar, energy, biogas, biomass pellets etc. as a substitute source of energy. The citizens also need to be educated towards a careful, responsible and sustainable use of energy.
- 1.3. **Communication** - School and college students and even general population need to be dissuaded from use of gadgets during learning hours and sensitized to use of social

⁴³Source : DRDA, Town panchayats, Municipalities

media sites judiciously and more productively. Considering hazards of mobile towers, the guidelines about installation of these towers in residential areas need to be strictly observed.

- 1.4. **Banking** - The banks need to observe more restraint as well as sensitivity while providing credit, and should not provide credit without judicious assessment of the client. District administration could orient the bank managers in precautions to be taken while giving credit to poor and illiterate. Bank managers could also be sensitized about inclusive financing, particularly when it comes to providing banking services to the disabled and people with other vulnerabilities

2. Social infrastructure

- 2.1. **Housing** - Implementation of IHSDP and BSUP programmes need to be extended to other Municipal areas, and also to Poonamallee, which harbours 30 % of the poor households in the district.
- 2.2. **Sanitation** – Sanitation for households in backward rural areas and for poor urban households needs priority attention. A functioning community sanitary complex in every village and paid toilets in certain pockets could take the TSC forward.
- 2.3. **Health and education facilities** - Participation of village panchayat presidents and other key local stakeholders should be sought for improvement in equitable distribution and quality of facilities and services, in not just planning process but also during monitoring of the execution of infrastructure development schemes.

Closing comments

Present Section makes an attempt to place the interconnections and overlaps among key features of the human development in the district in a perspective. The fact that, industry and service sectors are the key contributors to the district's kitty, and that, Tiruvallur district is growing economically at a fast pace, needs to be appropriated by creating a skill-opportunity balance for the local youth. Improving quality of school education for enhanced capacity for the students to absorb higher educational inputs and creating skill-training opportunities post school is necessary to enhance employability among the youth.

At the same time, support to traditional occupations including agriculture and small enterprises is vital for the families who currently face the threat of being pushed out of business with very little bargaining power in the market dominated by the industrial sector.

Economic and political participation of the women is crucial not just for their own empowerment, but also for their respective families and for the community as a whole. Empowered women in a leadership positions have the power and freedom and are seen to prioritize social welfare initiatives in health and education to greater degrees than their male counterparts.

Economic infrastructure such as roads and public transport need to reach the last mile, not just to facilitate the market economy but also to make the social infrastructure and services more accessible to people. Ensuring that schools, toilets, potable water, and healthcare services are available and accessible to all is crucial for quality of life and wellbeing of the people, as well as, for boosting their productive participation in the district's economy.

Inclusive and enabling atmosphere for work participation by the vulnerable population, particularly the differently abled and mentally challenged, allows them to exercise their right to suitable productive employment and gives them respectability.

Economic growth in the country, State and district is more meaningful if the respective administrations respect and care for the vulnerable; the chronically ill, differently-abled, orphan and the elderly; irrespective of their potential to contribute to the economy whatsoever.

The world is aging so fast that most countries are not prepared to support their swelling numbers of elderly people, according to a global study by the United Nations. In developing countries, the proportion of the elderly is increasing even faster.⁴⁴ Present endeavour to understand human development in the district could be considered successful if the elderly; every *Tatha*⁴⁵ and *Patti*⁴⁶ in the district are respected and cared for.

⁴⁴<http://www.ndtv.com/article/world/india-no-country-for-old-men-un-report-426545>

⁴⁵Tamil word for grandfather.

⁴⁶Tamil word for grandmother.

ANNEXURES

Annexures

Tables

TABLE A2.1 HUMAN DEVELOPMENT INDEX

Data											
	Standard of Living					Health			Education		
Block	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
Year	2011	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14
Source	Census	BDOs, Town Panchayats, Municipalities, & Zones	mdws.gov.in, Town Panchayats, Municipalities, & Zones	Census	BDOs, Town Panchayats, Municipalities, & Zones	Health Department			Census	Education Department	
Unit	%	%	%	%	%	Rate	Rate	Rate	%	Rate	Rate
Ellapuram	40.70	38.68	96.94	93.95	61.38	12.40	111	12.40	70.33	102.50	98.79
Gummidipoondi	39.64	37.98	96.98	95.16	55.49	18.70	118	18.70	71.86	102.99	98.62
Kadambathur	54.19	24.60	95.94	95.28	71.48	12.90	58	14.10	79.83	103.03	98.75
Minjur	55.94	49.77	97.05	96.72	69.01	17.10	30	18.30	78.79	102.75	98.87
Pallipet	44.46	53.56	97.13	92.63	85.35	15.60	64	16.20	73.27	103.08	99.69
Poonamallee	78.50	76.03	95.72	98.28	82.00	5.10	60	5.10	88.83	102.44	99.56
Poondi	40.82	26.95	96.26	94.11	70.59	15.70	148	17.20	69.87	102.91	97.91
Puzhal	72.08	88.08	99.10	98.37	77.72	9.10	43	9.10	88.35	101.86	99.40
R.K.Pet	35.20	30.51	97.99	91.93	71.08	15.10	68	15.10	75.95	102.71	98.59
Sholavaram	56.48	57.59	94.53	97.06	71.01	17.50	40	18.30	80.45	102.56	98.72
Tiruttani	52.41	63.82	96.96	92.56	92.86	16.20	247	16.20	74.80	102.56	99.35
Tiruvalangadu	33.88	30.31	96.10	90.47	72.83	20.20	229	23.30	72.39	102.68	99.92
Tiruvallur	63.64	58.36	98.52	95.64	71.10	10.30	29	14.30	84.13	103.09	99.32
Villivakkam	83.37	81.02	98.42	98.62	59.75	7.30	87	8.80	91.01	102.65	99.86

TABLE A2.1 HUMAN DEVELOPMENT INDEX (Contd.)

Block	Indices										
	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
Ellapuram	0.19	0.25	0.85	0.73	0.27	0.57	0.66	0.64	0.26	0.95	0.90
Gummidipoondi	0.17	0.24	0.85	0.80	0.13	0.21	0.63	0.34	0.32	0.99	0.89
Kadambathur	0.45	0.04	0.77	0.81	0.50	0.54	0.88	0.56	0.60	0.99	0.90
Minjur	0.48	0.42	0.85	0.89	0.44	0.30	1.00	0.36	0.57	0.97	0.91
Pallipet	0.26	0.48	0.86	0.65	0.82	0.39	0.86	0.46	0.37	1.00	0.98
Poonamallee	0.91	0.82	0.76	0.98	0.75	1.00	0.87	1.00	0.92	0.94	0.97
Poondi	0.20	0.07	0.80	0.74	0.48	0.38	0.51	0.41	0.25	0.98	0.83
Puzhal	0.79	1.00	1.00	0.99	0.65	0.77	0.94	0.81	0.91	0.89	0.96
R.K.Pet	0.09	0.13	0.92	0.61	0.49	0.42	0.84	0.51	0.46	0.97	0.89
Sholavaram	0.49	0.54	0.67	0.91	0.49	0.28	0.95	0.36	0.62	0.95	0.90
Tiruttani	0.41	0.63	0.85	0.65	1.00	0.35	0.10	0.46	0.42	0.95	0.95
Tiruvalangadu	0.06	0.12	0.79	0.53	0.53	0.12	0.18	0.11	0.34	0.96	1.00
Tiruvallur	0.63	0.55	0.96	0.83	0.49	0.70	1.00	0.55	0.76	1.00	0.95
Villivakkam	1.00	0.89	0.95	1.00	0.23	0.87	0.76	0.82	1.00	0.96	0.99

TABLE A2.1 HUMAN DEVELOPMENT INDEX (Contd.)

Block	Standard of Living Index	Health Index	Education Index	Overall Index	Rank
Ellapuram	0.380	0.626	0.610	0.525	9
Gummidipoondi	0.325	0.353	0.655	0.422	13
Kadambathur	0.350	0.646	0.814	0.569	8
Minjur	0.584	0.474	0.794	0.603	6
Pallipet	0.566	0.534	0.713	0.599	7
Poonamallee	0.838	0.955	0.945	0.911	1
Poondi	0.332	0.430	0.588	0.438	12
Puzhal	0.871	0.835	0.917	0.874	2
R.K.Pet	0.316	0.564	0.736	0.508	10
Sholavaram	0.603	0.454	0.812	0.606	5
Tiruttani	0.678	0.254	0.727	0.501	11
Tiruvalangadu	0.281	0.133	0.688	0.295	14
Tiruvallur	0.670	0.727	0.895	0.758	4
Villivakkam	0.721	0.816	0.985	0.834	3

TABLE A2.2 GENDER INEQUALITY INDEX

Data															
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 Work 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
Year	2013-14	2013-14	2013-14	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2013-14	2013-14
Source	Health Department			Census				BDOs, Town Panchayats, Municipalities, & Zones		Census				Dept. of Economics & Statistics	
Unit	Rate	%	%	%	%	%	%	%	%	%	%	%	%	Rs.	Rs.
Ellapuram	111	99.92	102	61.9	78.9	49.2	50.8	38	62	36.74	60.68	30.26	47.00	130	300
Gummidipoondi	118	99.92	104	63.6	80.0	49.3	50.7	39	61	29.28	60.19	34.53	55.79	110	400
Kadambathur	58	100.00	101	72.5	87.1	48.0	52.0	38	62	30.16	59.21	49.97	68.61	110	300
Minjur	30	99.92	100	72.2	85.5	48.7	51.3	39	61	22.85	60.10	60.38	76.29	120	400
Pallipet	64	99.95	101	63.6	83.0	48.1	51.9	42	58	36.77	55.36	45.14	56.04	140	350
Poonamallee	60	99.97	97	84.2	93.3	49.0	51.0	36	64	17.35	58.04	93.84	96.30	120	300
Poondi	148	99.96	99	61.0	78.8	48.5	51.5	41	59	40.13	60.10	18.16	34.65	110	300
Puzhal	43	99.97	102	84.0	92.6	48.3	51.7	34	66	15.51	58.83	95.77	98.10	120	400
R.K.Pet	68	100.00	97	66.0	85.8	47.1	52.9	39	61	41.04	56.70	37.06	51.92	110	350
Sholavaram	40	99.93	112	73.9	87.0	49.1	50.9	38	62	24.91	60.91	60.67	73.63	110	400
Tiruttani	247	100.00	100	66.0	83.7	48.4	51.6	40	60	31.98	57.75	42.18	63.82	100	350
Tiruvalangadu	229	100.00	102	63.4	81.5	47.3	52.7	38	62	44.70	61.51	24.19	41.01	100	350
Tiruvallur	29	99.94	102	78.2	90.2	48.6	51.4	39	61	23.31	58.94	67.59	81.15	110	300
Villivakkam	87	99.96	102	87.4	94.6	48.7	51.3	34	66	20.01	58.46	94.68	96.82	120	400

TABLE A2.2 GENDER INEQUALITY INDEX (CONTINUED)

Indices															
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 Work Participation Rate	Male Work 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
Ellapuram	0.09	1.00	1.02	0.62	0.79	0.49	0.51	0.38	0.62	0.37	0.61	0.30	0.47	0.80	0.23
Gummidipoondi	0.09	1.00	1.04	0.64	0.80	0.49	0.51	0.39	0.61	0.29	0.60	0.35	0.56	0.40	1.00
Kadambathur	0.17	1.00	1.01	0.72	0.87	0.48	0.52	0.38	0.62	0.30	0.59	0.50	0.69	0.40	0.23
Minjur	0.34	1.00	1.00	0.72	0.85	0.49	0.51	0.39	0.61	0.23	0.60	0.60	0.76	0.60	1.00
Pallipet	0.16	1.00	1.01	0.64	0.83	0.48	0.52	0.42	0.58	0.37	0.55	0.45	0.56	1.00	0.62
Poonamallee	0.17	1.00	0.97	0.84	0.93	0.49	0.51	0.36	0.64	0.17	0.58	0.94	0.96	0.60	0.23
Poondi	0.07	1.00	0.99	0.61	0.79	0.49	0.51	0.41	0.59	0.40	0.60	0.18	0.35	0.40	0.23
Puzhal	0.23	1.00	1.02	0.84	0.93	0.48	0.52	0.34	0.66	0.16	0.59	0.96	0.98	0.60	1.00
R.K.Pet	0.15	1.00	0.97	0.66	0.86	0.47	0.53	0.39	0.61	0.41	0.57	0.37	0.52	0.40	0.62
Sholavaram	0.25	1.00	1.12	0.74	0.87	0.49	0.51	0.38	0.62	0.25	0.61	0.61	0.74	0.40	1.00
Tiruttani	0.04	1.00	1.00	0.66	0.84	0.48	0.52	0.40	0.60	0.32	0.58	0.42	0.64	0.20	0.62
Tiruvalangadu	0.04	1.00	1.02	0.63	0.82	0.47	0.53	0.38	0.62	0.45	0.62	0.24	0.41	0.20	0.62
Tiruvallur	0.34	1.00	1.02	0.78	0.90	0.49	0.51	0.39	0.61	0.23	0.59	0.68	0.81	0.40	0.23
Villivakkam	0.12	1.00	1.02	0.87	0.95	0.49	0.51	0.34	0.66	0.20	0.58	0.95	0.97	0.60	1.00

TABLE A2.2 GENDER INEQUALITY INDEX (CONTINUED)

Indices (Continued)															
Block	Female Health Indices	Male Health Indices	Female Empowerment Indices	Male Empowerment Indices	Female LF Indices	Male LF Indices	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
Ellapuram	0.45	1	0.49	0.63	0.45	0.40	0.46	0.63	0.53	0.726	0.558	0.425	0.556	0.040	6
Gummidipoondi	0.45	1	0.50	0.63	0.34	0.70	0.42	0.76	0.54	0.723	0.562	0.519	0.595	0.087	12
Kadambathur	0.56	1	0.51	0.65	0.39	0.45	0.48	0.67	0.56	0.779	0.582	0.423	0.577	0.030	4
Minjur	0.70	1	0.51	0.65	0.44	0.77	0.54	0.79	0.64	0.849	0.580	0.603	0.667	0.039	5
Pallipet	0.54	1	0.51	0.63	0.55	0.58	0.53	0.71	0.61	0.771	0.567	0.563	0.627	0.028	2
Poonamallee	0.54	1	0.53	0.67	0.46	0.51	0.51	0.70	0.59	0.772	0.601	0.483	0.608	0.029	3
Poondi	0.41	1	0.49	0.62	0.31	0.36	0.40	0.61	0.48	0.703	0.558	0.336	0.509	0.058	10
Puzhal	0.62	1	0.52	0.68	0.45	0.83	0.52	0.83	0.64	0.810	0.599	0.640	0.677	0.053	9
R.K.Pet	0.52	1	0.50	0.65	0.39	0.57	0.47	0.72	0.57	0.762	0.573	0.480	0.594	0.047	7
Sholavaram	0.65	1	0.52	0.65	0.39	0.77	0.51	0.79	0.62	0.826	0.583	0.579	0.653	0.051	8
Tiruttani	0.34	1	0.50	0.64	0.30	0.61	0.37	0.73	0.49	0.672	0.571	0.455	0.559	0.117	14
Tiruvalangadu	0.35	1	0.49	0.64	0.28	0.54	0.36	0.70	0.48	0.677	0.564	0.408	0.538	0.110	13
Tiruvallur	0.71	1	0.53	0.66	0.40	0.48	0.53	0.68	0.60	0.853	0.593	0.439	0.605	0.016	1
Villivakkam	0.49	1	0.53	0.68	0.48	0.83	0.50	0.83	0.62	0.745	0.605	0.656	0.666	0.065	11

TABLE A2.3 CHILD DEVELOPMENT INDEX

Data								
Block	Health			Education				
	U5MR	Child Sex Ratio (0-6)	Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children never enrolled	Transition from primary to Upper primary	Transition from Upper primary to secondary
Year	2013-14	2011	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14
Source	Health Department	Census	ICDS	Education Department				
Unit	Rate	Rate	%	Rate	Rate	%	Rate	Rate
Ellapuram	12.40	967	6.00	102.50	98.79	0.00	98.84	96.33
Gummidipoondi	18.70	971	21.00	102.99	98.62	0.06	98.86	97.75
Kadambathur	14.10	922	6.00	103.03	98.75	0.34	98.92	98.50
Minjur	18.30	949	12.00	102.75	98.87	0.00	98.94	98.82
Pallipet	16.20	926	4.00	103.08	99.69	0.01	98.93	96.41
Poonamallee	5.10	962	18.00	102.44	99.56	0.01	98.92	99.09
Poondi	17.20	943	13.00	102.91	97.91	0.00	98.85	98.05
Puzhal	9.10	934	4.00	101.86	99.40	0.05	97.86	97.92
R.K.Pet	15.10	891	18.00	102.71	98.59	0.00	98.76	96.43
Sholavaram	18.30	966	14.00	102.56	98.72	0.28	98.89	98.01
Tiruttani	16.20	936	15.00	102.56	99.35	0.00	98.80	98.36
Tiruvalangadu	23.30	899	11.00	102.68	99.92	0.00	98.86	97.28
Tiruvallur	14.30	944	7.00	103.09	99.32	0.36	98.89	98.68
Villivakkam	8.80	950	11.00	102.65	99.86	0.10	98.85	99.65

TABLE A2.3 CHILD DEVELOPMENT INDEX DATA (Contd.)

Indices										
Block	Health			Education					Average index	Rank
	U5MR	Child sex ratio (0-6)	Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children never enrolled	Transition from primary to Upper primary	Transition from Upper primary to secondary		
Ellapuram	0.599	0.953	0.882	0.516	0.438	1.000	0.907	0.000	0.662	6
Gummidipoondi	0.253	1.000	0.000	0.919	0.353	0.845	0.926	0.428	0.590	10
Kadambathur	0.505	0.388	0.882	0.951	0.418	0.065	0.981	0.654	0.606	8
Minjur	0.275	0.727	0.529	0.724	0.478	1.000	1.000	0.750	0.685	4
Pallipet	0.390	0.444	1.000	0.988	0.886	0.977	0.991	0.024	0.712	3
Poonamallee	1.000	0.888	0.176	0.472	0.821	0.976	0.981	0.831	0.768	2
Poondi	0.335	0.651	0.471	0.854	0.000	1.000	0.917	0.518	0.593	9
Puzhal	0.780	0.543	1.000	0.000	0.741	0.850	0.000	0.479	0.549	12
R.K.Pet	0.451	0.000	0.176	0.691	0.338	1.000	0.833	0.030	0.440	14
Sholavaram	0.275	0.943	0.412	0.569	0.403	0.235	0.954	0.506	0.537	13
Tiruttani	0.390	0.568	0.353	0.569	0.716	1.000	0.870	0.611	0.635	7
Tiruvalangadu	0.000	0.105	0.588	0.663	1.000	1.000	0.926	0.286	0.571	11
Tiruvallur	0.495	0.665	0.824	1.000	0.701	0.000	0.954	0.708	0.668	5
Villivakkam	0.797	0.742	0.588	0.642	0.970	0.730	0.917	1.000	0.798	1

TABLE A2.4 MULTIDIMENSIONAL POVERTY INDEX DATA

	Data									
	Health			Education		Living Standards				
Block	IMR	HOB	Malnourished Children	Drop out in primary	Drop out secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Pucca house	Access to Electricity
Year	2013-14	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2011
Source	Health Department		ICDS	Education Department		Census	BDOs, Town Panchayats, Municipalities, & Zones	mdws.gov.in, Town Panchayats, Municipalities, & Zones	BDOs, Town Panchayats, Municipalities, & Zones	Census
Unit	Rate	Rate	%	Rate	Rate	%	%	%	%	%
Ellapuram	12.40	7.20	6.00	1.00	3.92	40.70	38.68	96.94	61.38	93.95
Gummidipoondi	18.70	10.30	21.00	1.58	10.70	39.64	37.98	96.98	55.49	95.16
Kadambathur	12.90	4.80	6.00	1.09	9.99	54.19	24.60	95.94	71.48	95.28
Minjur	17.10	6.60	12.00	1.90	9.39	55.94	49.77	97.05	69.01	96.72
Pallipet	15.60	15.70	4.00	1.31	5.60	44.46	53.56	97.13	85.35	92.63
Poonamallee	5.10	3.00	18.00	0.68	11.42	78.50	76.03	95.72	82.00	98.28
Poondi	15.70	8.20	13.00	1.08	2.55	40.82	26.95	96.26	70.59	94.11
Puzhal	9.10	4.80	4.00	1.16	9.42	72.08	88.08	99.10	77.72	98.37
R.K.Pet	15.10	15.10	18.00	1.76	3.27	35.20	30.51	97.99	71.08	91.93
Sholavaram	17.50	7.10	14.00	1.19	6.14	56.48	57.59	94.53	71.01	97.06
Tiruttani	16.20	11.50	15.00	1.37	4.53	52.41	63.82	96.96	92.86	92.56
Tiruvalangadu	20.20	9.50	11.00	1.37	2.60	33.88	30.31	96.10	72.83	90.47
Tiruvallur	10.30	4.70	7.00	0.98	7.99	63.64	58.36	98.52	71.10	95.64
Villivakkam	7.30	3.80	11.00	1.44	12.48	83.37	81.02	98.42	59.75	98.62

TABLE A2.4 MULTIDIMENSIONAL POVERTY INDEX DATA (Contd.)

Indices												
Block	Health			Education		Living Standards					Average Index	Rank
	IMR	HOB	Malnourished Children	Drop out in primary	Drop out in secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Pucca house	Access to Electricity		
Ellapuram	0.52	0.67	0.88	0.74	0.86	0.138	0.222	0.527	0.157	0.426	0.486	5
Gummidipoondi	0.10	0.43	0.00	0.26	0.18	0.116	0.211	0.536	0.000	0.575	0.760	14
Kadambathur	0.48	0.86	0.88	0.66	0.25	0.410	0.000	0.308	0.428	0.590	0.512	7
Minjur	0.21	0.72	0.53	0.00	0.31	0.446	0.397	0.551	0.362	0.766	0.572	11
Pallipet	0.30	0.00	1.00	0.48	0.69	0.214	0.456	0.570	0.799	0.265	0.522	8
Poonamallee	1.00	1.00	0.18	1.00	0.11	0.902	0.810	0.261	0.709	0.958	0.308	2
Poondi	0.30	0.59	0.47	0.67	1.00	0.140	0.037	0.379	0.404	0.447	0.556	10
Puzhal	0.74	0.86	1.00	0.61	0.31	0.772	1.000	1.000	0.595	0.969	0.216	1
R.K.Pet	0.34	0.05	0.18	0.11	0.93	0.027	0.093	0.757	0.417	0.179	0.692	13
Sholavaram	0.18	0.68	0.41	0.58	0.64	0.457	0.520	0.000	0.415	0.808	0.531	9
Tiruttani	0.26	0.33	0.35	0.43	0.80	0.375	0.618	0.531	1.000	0.256	0.504	6
Tiruvalangadu	0.00	0.49	0.59	0.43	0.99	0.000	0.090	0.343	0.464	0.000	0.660	12
Tiruvallur	0.66	0.87	0.82	0.75	0.45	0.601	0.532	0.873	0.418	0.634	0.339	4
Villivakkam	0.85	0.94	0.59	0.38	0.00	1.000	0.889	0.852	0.114	1.000	0.339	3

TABLE A1.1 LAND UTILIZATION PATTERN 2012-2013

Sl. No	Category	Area in Ha
1	Forest	19736
2	Barren & Unculturable Land	13637
3	Land put to non-agriculture uses	109592
4	Culturable waste	7582
5	Permanent pasture and other grazing land	8143
6	Misc. tree crops and groves not included in the Net Area Sown	7458
7	Current Fallow Land	36340
8	Other Fallow Land	34857
9	Net area sown	104899
10	Area sown more than once	26274
11	Gross Area Sown	131173
	Total geographical area	342243

Source: Season and Crop Report, 2012-13

TABLE A1.2 SOURCES OF WATER

Sl. No.	Sources of water	Government	Private	Total
	Canals	17	0	17
	Tanks - Ayacut above 40 Ha	-	-	573
	Tanks – Ayacut below 40 Ha	-	-	1322
	Total tanks			1895
	Tube wells	0	19043	19043
	Bore wells	0	2469	2469
	Dug cum bore wells	15	1312	1327
	Open wells	9	6681	6690
	Total well	24	29505	29529

Source: Season and Crop Report, 2012-13

TABLE A1.3 PUBLIC HEALTH AND MEDICAL SERVICES IN THE DISTRICT (2011-12)

Sl. No	Item	Numbers
1	Hospitals	14
2	PHC	44
3	Health Sub Centre	303
4	Nursing Home Private	53
5	Maternity & Child Welfare Clinic	42
6	Allopathic Hospital/Clinic(Private)	405
7	Ayurvedic Hospital/Clinic (Private)	3
8	Homeopathy Hospital/Clinic/(Private)	64
9	Unani Hospital /Clinic	Nil

Source: Joint Director of Health Services, Tiruvallur, 2011-12

TABLE A1.4 HEALTH INDICATORS STATE VS DISTRICT (2013-14)

Sl. No.	Details	State	District
1	MMR	68	79.5
2	IMR	21	11.7
3	CBR	15.9	14.2

Source: *Directorate of Public Health

TABLE A1.5 INFANT MORTALITY RATE

Sl. No.	Block / District	2012-2013	2013-2014
1	Ellapuram	10.7	12.4
2	Gummidipoondi	20.1	18.7
3	Kadambathur	7.3	12.9
4	Minjur	14.7	17.1
5	Pallipet	17.6	15.6
6	Poonamallee	6.9	5.1
7	Poondi	25.5	15.7
8	Puzhal	4.7	9.1
9	R.K. Pet	10.8	15.1
10	Sholavaram	17.9	17.5
11	Tiruttani	9.0	16.2
12	Tiruvallur	5.9	10.3
13	Tiruvalangadu	23.7	20.2
14	Villivakkam	4.5	7.3
Tiruvallur District		13.0	11.7

Source: Deputy Director of Health services, Tiruvallur & IPH, Poonamallee 2013-14

TABLE A1.6 PERCENTAGE OF LITERACY

State				District			
2001		2011		2001		2011	
Male	Female	Male	Female	Male	Female	Male	Female
82.4%	64.4%	86.8%	73.4%	85.3%	68.4%	89.7%	78.3%

Source: Population Census 2001 & 2011

TABLE A3.1 TOTAL WORKERS AND NON-WORKERS (IN PERCENTAGE)

Sl. No	Block wise	Total workers		Main Workers		Marginal Workers		Non-Workers		Total Population	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ellapuram	47.06	48.59	84.59	81.16	15.41	18.84	52.94	51.41	111786	127920
2	Gummidipoondi	42.76	44.82	75.49	76.60	24.51	23.40	57.24	55.18	159598	190541
3	Kadambathur	40.13	44.76	67.23	72.41	32.77	27.59	59.87	55.24	107557	127964
4	Minjur	37.54	41.47	79.25	76.71	20.75	23.29	62.46	58.53	200655	233320
5	Pallipet	43.61	46.08	80.70	74.89	19.30	25.11	56.39	53.92	93562	109577
6	Poonamallee	33.58	37.90	86.76	88.39	13.24	11.61	66.42	62.10	431758	659922
7	Poondi	50.04	50.12	73.91	65.23	26.09	34.77	49.96	49.88	90962	108253
8	Puzhal	32.92	37.41	85.04	85.11	14.96	14.89	67.08	62.59	449350	596156
9	R.K.Pet	47.74	48.96	79.78	69.90	20.22	30.10	52.26	51.04	89799	104496
10	Sholavaram	38.26	42.98	76.92	78.37	23.08	21.63	61.74	57.02	130751	156542
11	Tiruttani	41.54	44.86	81.11	70.65	18.89	29.35	58.46	55.14	103939	119011
12	Tiruvalangadu	45.19	53.09	72.03	67.85	27.97	32.15	54.81	46.91	81843	92280
13	Tiruvallur	35.80	41.10	73.80	77.14	26.20	22.86	64.20	58.90	145648	195542
14	Villivakkam	34.68	39.43	90.66	86.97	9.34	13.03	65.32	60.57	557548	906580
Tiruvallur District		37.65	41.26	82.06	81.14	17.94	18.86	62.35	58.74	2754756	3728104

Source: Population Census 2011

TABLE A3.2 FEMALE WORK PARTICIPATION RATE

Sl. No.	Block wise / District	Female Population	Female Workers	Female Work Participation Rate
1	Ellapuram	64614	23737	36.74
2	Gummidipoondi	94742	27744	29.28
3	Kadambathur	63632	19190	30.16
4	Minjur	116711	26669	22.85
5	Pallipet	54723	20121	36.77
6	Poonamallee	326615	56657	17.35
7	Poondi	54136	21727	40.13
8	Puzhal	294853	45727	15.51
9	R.K.Pet	51652	21197	41.04
10	Sholavaram	77970	19424	24.91
11	Tiruttani	59534	19040	31.98
12	Tiruvalangadu	46189	20645	44.70
13	Tiruvallur	97911	22825	23.31
14	Villivakkam	448760	89788	20.01
Tiruvallur District		1852042	434491	23.46

Source: Population Census 2011

TABLE A3.3 PERCENTAGE OF HOUSEHOLDS PROVIDED EMPLOYMENT UNDER MGNREGA

Sl. No	Block wise	Total No. of rural HHs	HH provided jobs under MGNREGA	% of HH provided with jobs
1	Ellapuram	20457	10839	52.98
2	Gummidipoondi	29081	14400	49.52
3	Kadambathur	25424	9232	36.31
4	Minjur	34585	13114	37.92
5	Pallipet	16939	9310	54.96
6	Poonamallee	20754	3952	19.04
7	Poondi	21736	8105	37.29
8	Puzhal	5779	925	16.01
9	R.K.Pet	18737	13052	69.66
10	Sholavaram	30665	6348	20.70
11	Tiruttani	19838	11382	57.37
12	Tiruvalangadu	18728	10450	55.80
13	Tiruvallur	22385	8706	38.89
14	Villivakkam	13829	2802	20.26
	District	298937	122617	41.02

Source : DRDA Report received for the period as on July 2013

TABLE A3.4 NUMBER OF HOUSEHOLD WITH PUCCA HOUSES

Sl. No	Block	Total Number of HHs	Total Number of HHs with pucca houses		Total Number of HHs with pucca houses	
			2012-2013	Percentage	2013-2014	Percentage
1	Ellapuram	33880	20794	61.38	20794	61.38
2	Gummidipoondi	50144	27629	55.10	27826	55.49
3	Kadambathur	32392	23155	71.48	23155	71.48
4	Minjur	60698	41433	68.26	41885	69.01
5	Pallipet	24876	18824	75.67	21231	85.35
6	Poonamallee	168063	132386	78.77	137814	82.00
7	Poondi	27807	19628	70.59	19628	70.59
8	Puzhal	150990	116718	77.30	117352	77.72
9	R.K.Pet	24441	17372	71.08	17372	71.08
10	Sholavaram	40168	28231	70.28	28524	71.01
11	Tiruttani	29301	26930	91.91	27210	92.86
12	Tiruvalangadu	23189	16888	72.83	16888	72.83
13	Tiruvallur	49475	33242	67.19	35178	71.10
14	Villivakkam	231525	138339	59.75	138339	59.75
	DISTRICT	946949	661569	69.86	673196	71.09

Source: BDOs, Town panchayats, Municipalities, Zones

TABLE A3.5 HOUSEHOLD POVERTY (YEAR: 2003)

Sl. No	Block	Total No. of HHs	Total No. of BPL HHs	% of BPL families
1	Ellapuram	33880	6633	19.58
2	Gummidipoondi	50144	14604	29.12
3	Kadambathur	32392	8496	26.23
4	Minjur	60698	14079	23.20
5	Pallipet	24876	15694	63.09
6	Poonamallee	168063	33611	20.00
7	Poondi	27807	8562	30.79
8	Puzhal	150990	28722	19.02
9	R.K.Pet	24441	10305	42.16
10	Sholavaram	40168	9450	23.53
11	Tiruttani	29301	8618	29.41
12	Tiruvalangadu	23189	8614	37.15
13	Tiruvallur	49475	8602	17.39
14	Villivakkam	231525	40118	17.33
	DISTRICT	946949	216108	22.82

Source : DRDA, Town panchayats, Municipalities, Zones

TABLE A4.1 TRENDS IN CRUDE BIRTH RATE AND CRUDE DEATH RATE

S. No	Block	CBR		CDR	
		2013	2014	2013	2014
1	Ellapuram	14	11.5	5.7	4.8
2	Gummidipoondi	13.1	13.7	4.9	4.9
3	Kadambathur	13.6	12.9	3.5	4.3
4	Minjur	13.9	14.4	5.2	5.4
5	Pallipet	15.4	15.4	5.1	5.4
6	Poonamallee	15.3	14.4	1.7	1.7
7	Poondi	14.1	13.6	6.6	5.7
8	Puzhal	14.0	13.7	3.0	3.4
9	R.K.Pet	15.9	14.6	5.7	6.8
10	Sholavaram	14.2	14.9	4.2	4.3
11	Tiruttani	13.9	14.2	4.6	4.6
12	Tiruvalangadu	14.7	14.3	7.8	7.1
13	Tiruvallur	13.5	15.1	3.4	4.3
14	Villivakkam	12.2	12.9	2.4	3.3
	DISTRICT	14.1	14.0	4.6	4.7

Source: Source: Deputy Director of Health Services, Tiruvallur & IPH, Poonamallee

TABLE A4.2 PERCENTAGE OF INSTITUTIONAL DELIVERIES , 2013- 14

Sl. No	Block	Domiciliary Deliveries		HSC		PHC		GH		Private Hospitals	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	Ellapuram	2	0.1	0	0.0	897	35.0	1330	51.0	369	14.0
2	Gummidipoondi	2	0.1	0	0.0	914	35.0	1298	50.0	395	15.0
3	Kadambathur	0	0.0	0	0.0	668	38.0	822	47.0	247	14.0
4	Minjur	2	0.1	0	0.0	981	41.0	1082	45.0	347	14.0
5	Pallipet	1	0.0	0	0.0	676	33.0	1149	55.0	250	12.0
6	Poonamallee	0	0.0	0	0.05	1509	18.2	4127	44.5	3565	37.3
7	Poondi	1	0.0	0	0.0	799	33.0	1315	55.0	293	12.0
8	Puzhal	1	0.0	0	0.0	1420	47.0	1119	37.0	479	16.0
9	R.K.Pet	0	0.0	0	0.0	648	39.0	845	51.0	154	9.0
10	Sholavaram	2	0.1	0	0.0	1183	43.0	1132	41.0	411	15.0
11	Tiruttani	0	0.0	0	0.0	647	38.0	855	51.0	191	11.0
12	Tiruvalangadu	0	0.0	0	0.0	649	37.0	884	51.0	212	12.0
13	Tiruvallur	3	0.1	0	4.6	1917	35.1	2328	47.5	646	13.5
14	Villivakkam	1	0.0	0	0.0	1178	47.0	945	38.0	363	15.0
DISTRICT		15	0.0	0	0.3	14086	37.1	19231	47.4	7922	15.0

Source: Deputy Director of Health services, Tiruvallur & IPH, Poonamallee

TABLE A 4.3 ANTE NETAL COVERAGE

Sl. No	Block	Status of Antenatal coverage (%)	
		2012-2013	2013-2014
1	Ellapuram	99.22	102
2	Gummidipoondi	93.39	104
3	Kadambathur	99.41	101
4	Minjur	93.99	100
5	Pallipet	96.62	101
6	Poonamallee	98.50	97
7	Poondi	104.84	99
8	Puzhal	104.10	102
9	R.K.Pet	94.33	97
10	Sholavaram	96.96	112
11	Tiruttani	98.48	100
12	Tiruvalangadu	99.88	102
13	Tiruvallur	101.75	102
14	Villivakkam	103.92	102

Source: Deputy Director of Health services, Tiruvallur & IPH, Poonamallee

TABLE A4.4 IMMUNIZATION STATUS

Sl. No	Block	Total Number of children below 1 year	Total number of children immunized	% of children immunized
2013-2014				
1	Ellapuram	1816	2111	116
2	Gummidipoondi	2500	2796	112
3	Kadambathur	1735	1915	110
4	Minjur	3211	3577	111
5	Pallipet	1552	1630	105
6	Poonamallee	9463	9240	98
7	Poondi	1379	1445	105
8	Puzhal	2292	2544	111
9	R.K.Pet	1566	1548	99
10	Sholavaram	2288	2358	103
11	Tiruttani	1591	1765	111
12	Tiruvalangadu	1336	1440	108
13	Tiruvallur	2421	2427	100
14	Villivakkam	4430	4771	108
DISTRICT		37580	39567	105

Source: Deputy Director of Health services, Tiruvallur & IPH, Poonamallee

TABLE A4.5 NUTRITIONAL STATUS OF CHILDREN BELOW 5 YEARS (2013-14)

Sl.No.	Block	No. of AWCs	Weighed Children of 0-5 yr.	Normal Children		SUW Children		MUW Children		% of under weight (MUW+SUW)
				0-5 yr.	%	0-5 yr.	%	0-5 yr.	%	
1	Ellapuram	125	9437	8872	94	0	0.00	565	6	6
2	Gummidipoondi	189	13441	10617	79	0	0.00	2824	21	21
3	Kadambathur	106	8491	7999	94	2	0.02	490	6	6
4	Puzhal	269	34202	32826	96	1	0.01	1375	4	4
5	Minjur	211	13732	12019	88	1	0.01	1712	12	12
6	Pallipet	108	7546	7278	96	1	0.01	267	4	4
7	Poonamallee	211	19925	16300	82	4	0.02	3621	18	18
8	Poondi	128	6615	5735	87	1	0.02	879	13	13
9	R.K.Pet	126	7321	5986	82	2	0.03	1333	18	18
10	Sholavaram	109	9247	7916	86	0	0.00	1331	14	14
11	Tiruttani	124	7602	6444	85	1	0.01	1157	15	15
12	Tiruvalangadu	126	6762	5991	89	0	0.00	771	11	11
13	Tiruvallur	108	9560	8871	93	3	0.03	686	7	7
14	Villivakkam	145	14905	13198	89	1	0.01	1706	11	11
District Total		2085	168786	150052	89	17	0.01	18717	11	11

Source : District Project Officer, ICDS 2013-2014

TABLE A4.6 PREGNANT WOMEN WITH ANEMIA

Sl. No.	Block	AN Registered	No. of mothers found Anemic (HB <9 grams)	%	ANC Registered	No. of mothers found Anemic (HB <9 grams)	%
		2011-2012			2013-2014		
1	Ellapuram	2180	325	15	2051	330	16
2	Gummidipoondi	3049	367	12	2882	196	7
3	Kadambathur	2191	99	5	1946	280	14
4	Minjur	3869	315	8	3551	269	8
5	Pallipet	1796	253	14	1737	352	20
6	Poonamallee	10098	2712	27	9820	1955	20
7	Poondi	1651	123	7	1523	230	15
8	Puzhal	9704	1053	11	2608	172	7
9	R.K.Pet	1811	488	27	1690	243	14
10	Sholavaram	2858	709	25	2852	335	12
11	Tiruttani	1973	338	17	1773	157	9
12	Tiruvalangadu	1592	248	16	1517	225	15
13	Tiruvallur	2828	798	28	2735	117	4
14	Villivakkam	12474	687	6	5046	474	9
	District	58074	8515	15	41731	5335	13

Source: Deputy Director of Health services, Tiruvallur & IPH, Poonamallee

TABLE A4.7 PERCENTAGE OF HABITATIONS PROVIDED WITH SAFE DRINKING WATER

Sl. No	Block	Total No. of Habitations / Wards	Habitations / Wards provided with drinking water	% of HHs provided with safe Drinking water	Habitations / Wards provided with drinking water	% of HHs provided with safe Drinking water
			2012-2013		2013-2014	
1	Ellapuram	294	285	96.94	285	96.94
2	Gummidipoondi	397	378	95.21	385	96.98
3	Kadambathur	320	303	94.69	307	95.94
4	Minjur	508	469	92.32	493	97.05
5	Pallipet	279	271	97.13	271	97.13
6	Poonamallee	304	291	95.72	291	95.72
7	Poondi	321	300	93.46	309	96.26
8	Puzhal	111	103	92.79	110	99.10
9	R.K.Pet	298	292	97.99	292	97.99
10	Sholavaram	329	304	92.40	311	94.53
11	Tiruttani	230	223	96.96	223	96.96
12	Tiruvalangadu	205	196	95.61	197	96.10
13	Tiruvallur	405	388	95.80	399	98.52
14	Villivakkam	190	165	86.84	187	98.42
	District	4191	3968	94.68	4060	96.87

Source: mdws.gov.in, Town panchayats, Municipalities, Zones

TABLE A4.8 PEOPLE LIVING WITH HIV/AIDS (REGISTERED FOR HIV CARE)
AT TIRUVALLUR GH ART CENTRE MAY 2015

Indicator	Adults			Children		Total
	Male	Female	TS/TG	Male <15 Years	Female <15 Years	
Total Registered Clients	1080	985	8	34	42	2149
Cumulative number of persons in Active HIV Care	737	830	7	30	36	1640
Enrolment in ART treatment						
cumulative number In PRE ART	129	181	3	7	13	333
Cumulative number on ART	608	649	4	23	23	1307
Treatment Status of Patients on ART						
Cumulative number who died since the beginning of the programme	212	93	0	2	5	312
Cumulative Number who are lost to follow-up (LFU)	104	48	1	1	1	155
Stopped Treatment	0	0	0	0	0	0
Opted out	27	14	0	1	0	42

Source: District AIDS Prevention Control Unit

TABLE A5.1 PERCENTAGE OF LITERACY

Sl. No	Block wise/ District /State	2001						2011					
		Male		Female		Total		Male		Female		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	Ellapuram	35920	74.1	25589	51.9	61583	62.9	44182	78.9	35631	61.9	79813	70.3
2	Gummidipoondi	52296	74.5	36344	52.5	88715	63.6	67899	80.0	53511	63.6	121410	71.8
3	Kadambathur	38882	78.9	29284	59.4	68245	69.1	49921	87.1	41413	72.4	91334	79.8
4	Minjur	71040	80.5	55090	62.5	126210	71.5	88618	85.4	75394	72.1	164012	78.7
5	Pallipet	31463	78.3	20243	50.5	51784	64.4	40241	83.0	31021	63.6	71262	73.3
6	Poonamallee	176898	90.6	144522	77.2	321511	84.1	277354	93.3	245900	84.2	523254	88.8
7	Poondi	28990	72.9	19925	49.6	48988	61.2	38141	78.7	29750	61.0	67891	69.8
8	Puzhal	182877	90.0	149773	77.3	332740	83.8	247563	92.6	221198	84.0	468761	88.3
9	R.K.Pet	31619	80.3	20751	53.5	52450	67.0	39971	85.8	30428	66.0	70399	76.0
10	Sholavaram	46002	79.9	34923	61.1	81005	70.5	60523	86.9	51201	73.9	111724	80.4
11	Tiruttani	36380	79.9	25503	56.6	61963	68.3	44113	83.7	35108	66.0	79221	74.8
12	Tiruvalangadu	26652	74.5	18063	50.3	44790	62.4	33243	81.5	26256	63.4	59499	72.4
13	Tiruvallur	55275	89.6	44486	72.0	99851	80.8	78931	90.1	69084	78.1	148015	84.1
14	Villivakkam	233469	91.7	193448	80.6	427009	86.3	385011	94.6	350115	87.4	735126	91.0
Tiruvallur District		1047763	85.3	817944	68.4	1865707	76.9	1495711	89.7	1296010	78.3	2791721	84.0
State			83.3		64.9		73.5		86.8		73.1		80.0

Source: Population Census, 2001, 2011

TABLE A5.2 CHILDREN NEVER ENROLLED IN SCHOOLS YEAR : 2013-2014

Sl, No	Block	Children 6-14			Not enrolled in school			Children never enrolled
		Girls	Boys	Total	Girls	Boys	Total	
1	Ellapuram	5265	5034	10299	0	0	0	0.00
2	Gummidipoondi	7075	7067	14142	5	3	8	0.06
3	Kadambathur	5411	5142	10553	20	16	36	0.34
4	Minjur	8083	7700	15783	0	0	0	0.00
5	Pallipet	6001	5871	11872	1	0	1	0.01
6	Poonamallee	17767	16992	34759	1	2	3	0.01
7	Poondi	3653	3447	7100	0	0	0	0.00
8	Puzhal	8259	8181	16440	5	4	9	0.05
9	R.K.Pet	3499	3200	6699	0	0	0	0.00
10	Sholavaram	6759	6867	13626	24	14	38	0.28
11	Tiruttani	5026	4854	9880	0	0	0	0.00
12	Tiruvalangadu	3320	3133	6453	0	0	0	0.00
13	Tiruvallur	5590	5376	10966	18	22	40	0.36
14	Villivakkam	18673	17929	36602	17	19	36	0.10
	District Total	104381	100793	205174	91	80	171	0.08

Source : CEO, S.S.A

TABLE A5.3 HIGHER EDUCATIONS IN THE DISTRICT

Sl. No	Name of the Institutions	Art/Science		Engineering		Polytechnics		Other Institutions	
		No	Students	No	Students	No	Students	No	Students
1	Tamil Nadu Vet. Animal Sciences University, Madhavaram							1	1585
2	Dr. MGR University, Maduravoyal							1	7230
3	Tamil Nadu MGR University, Guindy							1	10564
4	Saveetha University, Poonamallee							1	343
5	Sri Ramachandra Medical University, Porur							1	1167
6	Vels University, Avadi							1	2766
7	Sri Sastha University, Poonamallee							1	1677
8	Arts and Science Colleges	23	207628						
9	Engineering Colleges (Private)			43	17452				
10	Polytechnic Colleges					21	5497		
11	Hotel Management & Catering Technology Institutes							4	181
12	Medical College							1	400
13	Pharmacy							3	85
14	Nursing							2	295
15	Dental							1	459
16	Physiotherapy							2	85
	Total	23	207628	43	17452	21	5497	20	26837

Source: District Statistical Handbook 2013-14

TABLE A5.4 TIRUVALLUR DISTRICT SKILL REQUIREMENTS, AVAILABILITY AND GAP- A GLANCE
(IN THOUSAND)

Period	2012-2017				2017-2022			
Skill level	Unskilled	Semi-Skilled	Skilled	Total	Unskilled	Semi-Skilled	Skilled	Total
Incremental Human Resource Requirement	147	105	130	351	243	166	185	564
Incremental Human Resource Availability	-	-	-	340	-	-	-	391
Quantitative Skill Gap	-55	8	1	-46	-32	16	5	-11

Source: Tamil Nadu Skill Gap Assessment, National Skill Development Corporation, 2012

TABLE A6.1 POPULATION

Rural / Urban	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
Male (No.)	629052	650462	768355	1225600	1397407	1876062
Female	625622	649247	731727	1202795	1357349	1852042
Persons	1254674	1299709	1500082	2428395	2754756	3728104

Source: Census, 2001 & 2011

TABLE A6.2 NUMBER OF WORKERS

Rural / Urban	Rural		Urban		Total	
	2001	2011	2001	2011	2001	2011
Male	354775	389017	413942	714546	768717	1103563
Female	178689	218216	89691	216275	268380	434491
Persons	533464	607233	503633	930821	1037097	1538054

Source: Census, 2001 & 2011

TABLE A6.3 FEMALE WORK PARTICIPATION RATE - 2011

Sl. No.	Block /District	Female Population	Female Workers	Female Work Participation Rate
1	Ellapuram	64614	23737	36.74
2	Gummidipoondi	94742	27744	29.28
3	Kadambathur	63632	19190	30.16
4	Minjur	116711	26669	22.85
5	Pallipet	54723	20121	36.77
6	Poonamallee	326615	56657	17.35
7	Poondi	54136	21727	40.13
8	Puzhal	294853	45727	15.51
9	R.K.Pet	51652	21197	41.04
10	Sholavaram	77970	19424	24.91
11	Tiruttani	59534	19040	31.98
12	Tiruvalangadu	46189	20645	44.70
13	Tiruvallur	97911	22825	23.31
14	Villivakkam	448760	89788	20.01
Tiruvallur District		1852042	434491	23.46

Source: Population Census 2011

TABLE A6.4 FEMALE WORKERS IN NON – AGRICULTURAL SECTOR

Sl. No.	Block / District	Total Female Workers	Female Workers in Non-agri. Sector	% Female Workers in Non-agri. Sector
1	Ellapuram	23737	7183	30.26
2	Gummidipoondi	27744	9581	34.53
3	Kadambathur	19190	9590	49.97
4	Minjur	26669	16103	60.38
5	Pallipet	20121	9082	45.14
6	Poonamallee	56657	53165	93.84
7	Poondi	21727	3946	18.16
8	Puzhal	45727	43791	95.77
9	R.K.Pet	21197	7855	37.06
10	Sholavaram	19424	11785	60.67
11	Tiruttani	19040	8032	42.18
12	Tiruvalangadu	20645	4995	24.19
13	Tiruvallur	22825	15428	67.59
14	Villivakkam	89788	85007	94.68
Tiruvallur District		434491	285543	65.72

Source: Population Census 2011

TABLE A6.5 SELF HELP GROUPS - ACCESS OVER RESOURCE AND CREDIT in 2013-14

Sl. No	Name of the blocks	Number of Self Help Groups	Number of members	Credit availed (in lakhs)
1	Ellapuram	657	8541	1904
2	Gummidipoondi	687	8931	1358
3	Kadambathur	400	5200	915
4	Minjur	606	7878	1793
5	Pallipet	477	6201	1006
6	Poonamallee	703	9139	1147
7	Poondi	591	7683	1584
8	Puzhal	338	4394	674
9	R.K.Pet	296	3848	956
10	Sholavaram	212	2756	674
11	Tiruvalangadu	487	6331	756
12	Tiruttani	540	7020	987
13	Tiruvallur	532	6916	1608
14	Villivakkam	826	10738	1638
Total		7352	95576	17000

Source : Mahalir Thittam

TABLE A6.6 SELF HELP GROUPS-ACCESS OVER RESOURCE AND CREDIT in 2013-14

Sl. No	Name of the blocks	Number of Self Help Groups	Number of members	Credit availed (in lakhs)
1	Ellapuram	169	1635	387
2	Poondi	184	1940	417
3	Tiruttani	217	2115	537.5
4	Pallipet	276	2342	591
5	Tiruvalangadu	286	3120	844
	Total	1132	11152	2776.5

Source : Pudhu Vazhvu Project

TABLE A6.7 SHG BANK LINKAGE PROGRAMME - 2013-2014

Details	Target	Proportionate Target	Achievement			
			Up to Last Week	During the Week	Up to this Week	Repayment of Amount
a) RURAL	10200.00					
(i) MATHI / TNSRLM SHGs	6120.00	1020.00				
No. of SHGs under First Linkage (DL/Others)	4411		1547	46	1593	1593
Amount (INR. In Lakhs)			3301.25	69.00	3370.25	3370.25
No. of SHGs under Second Linkage (DL)			503	39	542	542
Amount (INR. In Lakhs)			838.90	58.50	897.40	897.40
No. of SHGs under Third & subsequent Linkages (DL)			312	26	338	338
Amount (INR. In Lakhs)			512.40	39.00	551.40	551.40
Total No. of SHGs Credit Linked			2362	111	2473	2473
Total Amt. of Credit (Rs.in Lakhs)			4652.55	166.50	4819.05	4819.05
(ii) TNPVP SHGs						
No. of SHGs under First Linkage (DL/Others)			80	0	80	80
Amount (INR. In Lakhs)			137.50	0.00	137.50	137.50
No. of SHGs under Second Linkage (DL)			34	0	34	34
Amount (INR. In Lakhs)			58.50	0.00	58.50	58.50
No. of SHGs under Third & subsequent Linkages (DL)			13	0	13	13
Amount (INR. In Lakhs)			80.25	0.00	80.25	80.25
Total No. of SHGs Credit Linked			127	0	127	127
Total Amt. of Credit (Rs.in Lakhs)			276.25	0.00	276.25	276.25
(iii) Non Mathi SHGs	4080.00	680				
No. of SHGs under DL			440	40	480	480
Amount (INR. In Lakhs)			702.75	60.00	762.75	762.75
URBAN	6800.00					
(i) Mathi / TNSRLM SHGs	4080.00	680.00				

Details	Target	Proportionate Target	Achievement			
			Up to Last Week	During the Week	Up to this Week	Repayment of Amount
No. of SHGs under First Linkage (RF / DL)	2941		1035	59	1094	1094
Amount (INR. In Lakhs)			1308.5	81.00	1389.5	1389.50
No. of SHGs under Second Linkage (DL)			505	36	541	541
Amount (INR. In Lakhs)			823.5	54.00	877.5	877.50
No. of SHGs under Third & subsequent Linkages (DL)			335	28	363	363
Amount (INR. In Lakhs)			543.21	42.00	585.21	585.21
Total No. of SHGs Credit Linked			1875	123	1998	1998
Total Amt. of Credit (Rs.in Lakhs)			2675.21	177.00	2852.21	2852.21
(ii) Non Mathi SHGs	2720.00	453.33				
No. of SHGs Credit Linked (DL)			526	55	581	581
Amt. of Credit (Rs.in Lakhs)			839.00	82.50	921.50	921.50
Grand Total	7352					
Total No. of SHGs Credit Linked	17000.00		5330	329	5659	5659
Total Amt. of Credit (Rs.in Lakhs)			9145.76	486.00	9631.76	9631.76
No of Bank Branches visited during the Week			260	0	260	
Out of which No. of Bank Branches collected data			120	6	126	

Source: Mahalir Thittam, 2013-14

- * Target of amount = INR. 170 crores
 * Achievement of amount = INR. 96.31 crores
 * Repayment of amount = INR. 96.31 crores

TABLE A7.1 SPECIAL ASSISTANCE GIVEN TO THE DIFFERENTLY ABLED

Sl. No	Name of the Scheme	2013-2014		
		Allotment	Achievement	Beneficiaries
1	Identification			
	a. Identity Card for Differently Abled	---	---	43825
2	Marriage Assistance			
	a) Blind Marrying Normal	1,00,000	1,00,000	2
	b) Ortho Marrying Normal	1,75,000	1,75,000	5
	c) Deaf Marrying Normal	1,00,000	1,00,000	3
	d) Differently Abled Marrying Differently Abled	1,00,000	1,00,000	2
3	Subsidy			
	a. Self-Employment Bank loan	2,50,000	2,50,000	25
	b. 5% UYEGP	62,500	62,500	5
4	Scholarship Assistance			
	a. Disabled Students	19,50,000	19,50,000	512

Sl. No	Name of the Scheme	2013-2014		
		Allotment	Achievement	Beneficiaries
	b. Blind Students (Readers allowance)	2,44,000	2,44,000	48
5	Maintenance Allowance			
	c. Severely Affected Persons	51,60,000	51,60,000	430
	d. Mentally Retreaded Persons	3,81,08,000	3,81,08,000	3327
	e. Persons Affected with Muscular Dystrophy	6,51,000	6,51,000	67
	f. Leprosy Affected Persons	12,00,000	12,00,000	100
6	Early Intervention Centre			
	g. Mentally Retarded	6,84,000	6,84,000	50
	h. Hearing Impaired	2,74,000	2,74,000	18
	i. NGO for EIC (Materials/Supplies / Transport)	11,000	11,000	80
	j. Establishment of EDC (HI)	4,85,000	4,85,000	--
7	Home for the Mentally Retarded above 14 years			
	Home for the Mentally Retarded above 14 years	8,90,800	8,90,800	40
8	Cash Award to Visually Impaired students			
	a. S.S.L.C	87,000	87,000	3
	b. H.S.C	1,35,000	1,35,000	3
	c. Higher Education Scholarship	13,500	13,500	6
9	Establishment of Mentally III			
	d. Home	9,14,800	9,14,800	50
	e. Rescue (Wandering in Road)	55,500	55,500	37
	Bus pass			
10	Bus Pass (Free Travel Concession)	45,08,902	45,08,902	1300
11	Salary Grant			
	a. Special Educator (HI/MR)/Physiotherapist for MR	65,000	65,000	3
12	MLA CDS			
	a. Petrol Scooter	9,71,820	9,71,820	18
	b. Behind Hearing Aid	1,56,600	1,56,600	36
	c. Aids & Appliances	14,78,300	14,78,300	295
13	Feeding Grant (HI)			
	Feeding Grant (HI)	4,09,500	4,09,500	63
14	Aids & Appliances			
	a. Tri Cycle	10	3	3
	b. Goggles	60	60	60
	c. Caliper (Plastic)	2	2	2
	d. Caliper (Metal)	6	6	6
	e. Crutches	10	10	10
	f. Petrol Scooter	36	36	36
	g. Braille Watch	20	20	20

Source: District Differently Abled Office, Tiruvallur, 2013-14

TABLE A7.2 DISABLED CHILDREN STUDYING IN SPECIAL SCHOOLS - 2012-13

Sl. No	School Name	Boys	Girls	Total
1	Faith Special School	22	14	36
2	Navajothi Trust	24	0	24
3	Jayam Special School	29	16	45
4	Anbalaya	68	17	85
5	LAC – MR	13	30	43
6	LAC – HI	42	38	80
7	RASS	25	18	43
8	Hope	29	26	55
9	Ajay	77	64	141
10	Sathyalok	98	40	138
11	Carmel	68	36	104
12	Balavikas	50	30	80
13	Manasa	37	60	97
14	Gracy	16	9	24
15	Anbumalar	24	13	37
16	Balavihar	66	54	120
17	Teresa	12	18	30
18	Kumaran School	15	22	37
19	Opportunity	29	4	33
Tiruvallur District		744	509	1252

Source: District Differently Abled Office, Tiruvallur, 2012-13

TABLE A7.3 CHILDREN STUDYING IN SPECIAL SCHOOLS (DDAWO) – 2012 -13

Sl. No	Block wise / District	Disability type										
		Low Vision	Totally Blind	Speech Impaired	Hearing Impaired	Orthopedically Impaired	Mental Retardation	Multiple Disability	Cerebral Palsy	Autism	Muscular Dystrophy	TOTAL
1	Ellapuram	0	0	0	3	0	3	0	1	0	0	7
2	Gummidipoondi	0	1		5	0	5	2	1	0	0	14
3	Kadambathur	0	0	0	63	1	9	0	1	0	0	74
4	Minjur	6	1	4	11	9	27	2	8	0	0	68
5	Pallipet	0	0	0	0	0	1	0	0	0	0	1
6	Poonamallee	2	0	0	0	4	48	10	10	0	0	74
7	Poondi	0	1	0	1	0	1	0	0	0	0	3
8	Puzhal			6	15	5	68	9	17	0	0	120
9	R k pet	0	0	0	0	0	0	0	0	0	0	0
10	Sholavaram	0	1	0	8	0	17	2	9	2	0	39
11	Tiruttani	1	0	0	4	1	8	1	1	0	0	16
12	Tiruvalangadu	0	0	0	3	0	0	0	0	0	0	3
13	Tiruvallur	0	1	0	7	0	36	0	0	0	0	44
14	Villivakkam		3	8	21	9	173	8	46	2	0	270
	TOTAL	9	8	18	141	29	396	34	94	4	0	733

Source: CEO SSA, 2012-13

TABLE A7.4 DISABLED CHILDREN STUDYING IN REGULAR SCHOOLS 2012 -13

Sl. No	Block wise / District	Type of disability										
		Low Vision	Totally Blind	Speech Impaired	Hearing Impaired	Orthopedically Impaired	Mental Retardation	Multiple Disability	Cerebral Palsy	Autism	Muscular Dystrophy	TOTAL
1	Ellapuram	15	1	0	34	19	100	10	9	1	2	191
2	Gummidipoondi	29	0	5	41	40	100	13	24	0	1	253
3	Kadambathur	29	0	0	28	12	84	1	10	1	0	165
4	Minjur	21	1	8	40	49	119	5	27	0	0	270
5	Pallipet	7	0	9	25	42	43	0	7	0	0	133
6	Poonamallee	8	0	31	0	59	49	1	10	0	0	158
7	Poondi	14	0	14	29	25	73	0	15	0	0	170
8	Puzhal	28		7	30	37	99	11	23	0	0	235
9	RK Pet	24	0	10	28	37	51	1	20	1	0	172
10	Sholavaram	11	1	4	31	21	99	2	22	3	2	196
11	Tiruttani	10	0	4	17	26	54	1	14	0	0	126
12	Tiruvallur	31	3	10	25	42	118	2	13	0	1	245
13	Tiruvalangadu	62	0	17	7	24	29	4	0	0	0	143
14	Villivakkam	27	5	42	29	51	124	8	6	1	2	295
District Total		316	11	161	364	484	1142	59	200	7	8	2752

Source: CEO - SSA, Tiruvallur District, 2012-13

TABLE A7.5 ASSISTANCE TO DIFFERENTLY ABLED UNDER VAZHANDHU KATTUVOM PROJECT

Phase	Blocks	No of VPRC	Total no of disabled identified	No of disabled received. National ID cards	Disabled received IA	Convergence			Total no of vulnerable identified	Vulnerable received IA
						A&A	MG	Nir. Ins		
I	Ellapuram	60	1846	1761	1846	361	230	205	2057	2057
II	Poondi	56	1090	986	1027	116	122	122	957	957
III	Tiruttani	33	972	902	732	77	78	1	795	592
	Pallipet	34	1019	933	835	96	52	0	626	428
IV	Tiruvalangadu	47	1261	1179	569	0	74	0	949	467
Grand total		230	6188	5761	5072	600	257	328	5384	4501

Source: District Differently Abled Office, Tiruvallur, 2013-14

TABLE A7.6 SCHEMES AND BENEFITS FOR TRANSGENDER PEOPLE IN TAMIL NADU

Schemes	Benefits and rationale	Eligibility Criteria
INCOME /JOBS		
Self -employment grants (INR 20,000) for small business entrepreneurs	Income generation	TGWB identity card Self –Help Group (SHG) member
Vocational training projects implemented by TG CBOs (e.g. Jewelry making, Tailoring)	Income generation	No specific criteria
Material support (e.g., sewing machines)	Income generation	TGWB identity card
Individual grants to TG people for starting small businesses	Income generation	Individual TG people (up to INR 20,000) A group of five TG people (up to 1 lakh INR)
Training by NGOs on formation and governance of TG SHGs	Income generation	Five to eight TG members from the same locality TGWB identity card
Vocational trainings to TG people (e.g., beautician, artist)	Income generation	TGWB identity card
Access to employment opportunities by registering in State government employment exchange	To provide Employment opportunity for literate TG people	TGWB identity card
HOUSING/SHELTER		
Short - stay home / Transit home	Shelter for TG people in crisis	Open for any self-identified transgender people
IAY (Indira Awaas Yojana)	Subsidies or Grants for constructing houses Free Housing	TGWB identity card
Free registered land	Housing	TGWB identity card
EDUCATION		
Education grants	To support higher education of TG youth	TGWB identity card Certificate/ document that states the total fees required to complete a course in government colleges
Government schools and colleges are open for transgender students	To support education of TG youth	TGWB identity card
HEALTH		
Free health insurance	To address emergency health needs	TGWB identity card
Free sex reassignment surgery (SRS) in select government hospitals	To support gender transition needs of transgender people	TGWB identity card (not mandatory) Support letter from a community representative of TGWB (not mandatory)

Source: The Case of TAMIL NADU TRANSGENDER WELFARE BOARD, *Insights for Developing Practical Models of Social Protection Programmes for Transgender People in India*, UNDP, 2012

TABLE A8.1 AVAILABILITY OF LPG CONNECTIONS

Sl. No	Name of the Block	No. of HHs	No. of HH with LPG connections	% of HHs with LPG
1	Ellapuram	31759	12926	40.70
2	Gummidipoondi	48509	19229	39.64
3	Kadambathur	35972	19493	54.19
4	Minjur	60346	33756	55.94
5	Pallipet	25599	11382	44.46
6	Poonamallee	160430	125938	78.50
7	Poondi	31010	12658	40.82
8	Puzhal	152718	110080	72.08
9	R.K.Pet	23900	8413	35.20
10	Sholavaram	39058	22059	56.48
11	Tiruttani	27208	14261	52.41
12	Tiruvalangadu	25139	8516	33.88
13	Tiruvallur	40007	25461	63.64
14	Villivakkam	237167	197735	83.37
	District Total	938822	621907	66.24

TABLE A8.2 BLOCK WISE CREDIT PLAN - 2013 -14 (in INR. CRORE)

Sl. No.	Block wise / District	Total credit outlay*			Government Programmes**		
		No of A/C	Amount	% to Total	No of a/c	Amount	% to Total
1	Ellapuram	29510	158	7.32	7144	16.7	6.45
2	Gummidipoondi	52354	184	8.53	11247	21.1	8.15
3	Kadambathur	36936	128	5.93	7248	12.4	4.79
4	Minjur	54612	126	5.84	14192	14.0	5.40
5	Pallipet	34444	129	5.98	8520	13.4	5.17
6	Poonamallee	42264	154	7.13	11940	19.7	7.61
7	Poondi	22312	120	5.56	4784	15.6	6.02
8	Puzhal	33129	182	8.43	6548	16.2	6.25
9	R.K.Pet	24354	182	8.43	3928	18.1	6.99
10	Sholavaram	24596	140	6.49	5746	14.7	5.60
11	Tiruttani	21706	156	7.23	2680	13.3	5.13
12	Tiruvalangadu	15362	108	5.00	2968	11.0	4.25
13	Tiruvallur	51288	235	10.89	104198	26.0	10.04
14	Villivakkam	39252	148	6.86	25600	45.8	17.69
	Total	482119	2157	100	126743	258.8	100

Source: *Annual Credit Plan and District Financial Services Plan 2013- 14 – Tiruvallur District Lead Bank - Indian Bank

**SGSY, SJSRY, RMEGP, TAHDCO, ISHUP, BLISS

Technical Notes

Construction of Human Development Index (HDI)

Introduction

The latest UNDP Report-2010 on HDI continues to adopt the same basic three indicators of education, health and standard of living/income for the calculation of HDI. Simultaneously, an effort was also made to arrive at Gender Inequality Index. To compute HDI, 11 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 considered for measuring HDI

Dimensions	Indicators
Living standard	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 Enrollment Rate in Primary Schools
	Gross Enrollment Rate 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 were followed:

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

As a first step, a minimum and maximum value is 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 is taken. Since the

Geometric Mean was to be calculated, in the case of a positive indicator, the minimum value is 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 is taken as 10 per cent more than the observed maximum value.

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

$$\text{Index Value} = (\text{Actual Value} - \text{Min. Value}) / (\text{Max. Value} - \text{Min. Value})$$

Highest ranking was assigned to highest index values for positive indicators

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

$$\text{Index Value} = (\text{Max. Value} - \text{Actual Value}) / (\text{Max. Value} - \text{Min. Value})$$

Highest ranking is assigned to lowest index values for negative indicators

For computing sectoral indices (health, education and standard of living) geometric mean is used and the method of calculation is as below. Thus there are three indices one each for Standard of living, Health and Education.

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

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

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

Construction of Gender Inequality Index (GII)

Introduction

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

Indicators considered for measuring GII

Dimensions	Indicators
Health	Maternal Mortality Rate (MMR)
	Share of Institutional Deliveries (ID)
	Ante-natal Coverage
Empowerment	Share of female and male elected representatives in Urban and Rural Local Bodies (PR _F and PR _M)
	Share of female and male literacy (LIT _F , LIT _M)
	Share of Female and Male Children (0-6) years
Labour market	Share of female and male Work Participation Rate (WPR _F , WPR _M)
	Share of female and male workers in the nonagricultural 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

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

For Males

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

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

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

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

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

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

- 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)

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

Construction of Child Development Index (CDI)

Introduction

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 is considered to be the best. The higher the score, the worse children are faring. 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.

Indicators considered for measuring CDI

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

Computation of CDI

- The indicators have been broadly categorised under the 2 parameters that influence the HDI.
- The above indicators have a mix of negative and positive indicators.

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

$$\text{Index Value} = (\text{Actual Value} - \text{Min. Value}) / (\text{Max. Value} - \text{Min. Value})$$

Highest ranking was assigned to highest index values for positive indicators

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

$$\text{Index Value} = (\text{Max. Value} - \text{Actual Value}) / (\text{Max.Value} - \text{Min.Value})$$

Highest ranking was assigned to lowest index values for negative indicators

- The index values for each of the indicators range between 0 and 1; with ‘0’ indicating the lowest ranking for the blocks and ‘1’ indicating highest ranking of the block
- The CDI is the average of the index values of the two 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 used to assign the ranks for the blocks within the district.

Multidimensional Poverty Index

Introduction

The Multidimensional Poverty Index (MPI) was developed in 2010 by Oxford Poverty and Human Development Initiative and the UNDP that uses different factors to determine poverty beyond income-based lists. It has now replaced the previous Human Poverty Index. The MPI is an index of acute multidimensional poverty. It shows the number of people who face multidimensional poverty and the number of deprivations with which poor households typically contend. Measurement of multidimensional poverty is a challenge. A person is identified as facing multidimensional poverty if and only if he or she is deprived in some combination of indicators whose weighted sum exceeds one third of all deprivations. The MPI combines two key pieces of information to measure acute poverty – the incidence of poverty or the proportion of people (within a given population) who experience multiple deprivations, and the intensity of their deprivation, the average proportion of (weighted) deprivations they experience. Indicators considered for MPI are given below.

Indicators considered for measuring

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
	Access to Pucca house

Computation of Multidimensional Poverty Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.
- The above indicators are a mix of negative and positive indicators.

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

$$\text{Index Value} = (\text{Actual Value} - \text{Min. Value}) / (\text{Max. Value} - \text{Min. Value})$$

Highest ranking was assigned to highest index values for positive indicators

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

$$\text{Index Value} = (\text{Max. Value} - \text{Actual Value}) / (\text{Max. Value} - \text{Min. Value})$$

Highest ranking was assigned to lowest index values for negative indicators.

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

Abbreviations

ABL	Activity Based Learning
ADW	Adi-Dravidar Welfare
AIDS	Acquired Immuno-deficiency Syndrome
ANC	Ante Natal Coverage
ART	Anti-Retroviral Therapy
ASER	Annual Status of Education Report
ATM	Automated Teller Machine
AWC	Anganwadi Centre
AWW	Anganwadi Workers
BC	Backward Caste
BCW	Backward Caste Welfare
BFSI	Banking, Financial Services and Insurance
BPL	Below Poverty Line
BSNL	Bharat Sanchar Nigam Limited
BSUP	Basic Services To Urban Poor
BT Road	Black Top Road
CBR	Crude Birth Rate
CBT	Children Book Trust
CC	Cement Concrete
CDI	Child Development Index
CDPO	Child Development Project Officer
DISC	District Information System for Education
ETC	Evening Tuition Centers
EPL	Ennore Port Limited
CDR	Crude Death Rate
CCE	Continuous and Comprehensive Education
CDS	Community Development Society
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CEO	Chief Educational Officer
CLEP	Child Labour Elimination Programme
CMDA	Chennai Metropolitan Development Authority

CRPC	Child Rights Protection Committee
CSR	Child Sex Ratio
CWSN	Children With Special Needs
DHDR	District Human Development Report
DPH	Directorate of Primary Health
DPO	District Project Officer
DRDA	District Rural Development Authority
EDD	Expected Date of Delivery
FSI	Food Security Index
FSW	Female Sex Worker
GII	Gender Inequality Index
GDDP	Gross District Domestic Product
GSDP	Gross State Domestic Product
GH	Government Hospital
GII	Gender Inequality Index
Ha	Hectare
HUD	Health Unit District
HDI	Human Development Index
HDR	Human Development Report
HH	Households
HMIS	Health Management Information System
MDR_TB	Multi drug – Resistant TB
MLA	Member of Legislative Assembly
HSC	Health Sub Center
NH	National Highway
ICDS	Integrated Child Development Services
L & T	Larsen & Tourbo
ID	Institutional Deliveries
IFA	Iron & Folic Acid
IHDI	Inequality – adjusted Human Development Index
IHSDP	Integrated Housing and Slum Development Programme
HIV	Human Immuno-deficiency Virus

IMR	Infant Mortality Rate
IT	Information Technology
ITES	Information Technology Enabled Service
ITI	Industrial Training Institutes
LPG	Liquefied Petroleum Gas
NSJSRY	National Swarna Jayanthi Shahari Rozgar Yojana
MATHI	Mahalir Thittam
MDG	Millennium Development Goals
MBC	Most Backward Caste
MCH	Maternal and Child Health
MFI	Micro Financial Institutions
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MIS	Management Information System
MMR	Maternal Mortality Rate
MPI	Multidimensional Poverty Index
MRF	Madras Rubber Factory
MRMBS	Dr. Muthulakshmi Reddy Maternity Benefit Scheme
MRTS	Mass Rapid Transit System
MSM	Men having Sex with Men
MUW	Moderately Under Weight
NABARD	National Bank for Agriculture and Rural Development
NACO	National AIDS Control Organisation
NBT	National Book Trust
NCLP	National Child Labour Project
NDP	Net Domestic Product
NGO	Non- Governmental Organisation
NHC	Neighborhood Committee
NHG	Neighborhood Group
NRHM	National Rural Health Mission
NRLM	National Rural Livelihood Mission
NRSTC	Non-Residential Special Training Centres

NSDC	National Skill Development Corporation
NSDP	National Slum Development Programme
NULM	National Urban Livelihood Mission
OAP	Old Age Pension
OBC	Other Backward Class
OSC	Out of School Children
PCI	Per Capita Income
PDS	Public Distribution System
PHC	Primary Health Center
PLF	Panchayat Level Federation
PLHA	People Living with HIV/AIDS
PRI	Panchayat Raj Institutions
PVP	Pudhu Vazhvu Project
R K Pet	Ramakrishnarajupeta
RLB	Rural Local Body
RMNCH+A	Reproductive, Maternal, Newborn, Child and Adolescent
RNTCP	Revised National Tuberculosis Control Programme
RSTC	Residential Special Training Centres
RTE Act	Right to Education Act
SABL	Simplified Activity Based Learning
SBR	Still Birth Rate
SOAS	School of Oriental and African Studies
SC	Schedule Caste
SGSY	Swarna Jayanti Gram Swarajgar Yojana
SIDCO	Small Industries Development Corporation
SHG	Self Help Group
RC	Residential Center
SHPI	Self Help group Promoting Institutions
VIP	Vaccine Preventive Diseases
SIPCOT	State Industries Promotion Corporation of Tamil Nadu Ltd
SPC	State Planning Commission
SRB	Sex Ratio at Birth

SSA	Sarva Shiksha Abhiyan
ST	Schedule Tribe
STEP-UP	Skill Training for Employment Promotion amongst Urban Poor
SUW	Severely Under Weight
TAHDCO	Tamil Nadu Adi Dravidar Housing Development Corporation
TANSIDCO	Tamil Nadu Small Industries Development Corporation Limited
TB	Tuberculosis
TCDW	Tamilnadu Corporation for Development of Women
TFR	Total Fertility Rate
TG	Transgender
TGWB	Transgender Welfare Board
TNSDM	Tamil Nadu Skill Development Mission
TNULM	Tamil Nadu Urban Livelihood Mission
TSC	Total Sanitation Campaign
U5MR	Under 5 Mortality Rate
UCDN	Urban Community Development Network
ULB	Urban Local Body
UNDP	United Nations Development Programme
USEP	Urban Self Employment Programme
UWEP	Urban Wage Employment Programme
UWSP	Urban Women Self-Help Programme
VAMBAY	Valmiki Ambedkar-AvasYojana
VHN	Village Health Nurse
VKP	Vazhndhu Kattuvom Project
VPRC	Village Poverty Reduction Committees
WBM	Water Bound Macadam
WCWC	Welfare Center for Women and Children
WHO	World Health Organisation
WPR	Work Participation Rate

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