District Human Development Report - 2017

Vellore District

VELLORE

DISTRICT HUMAN DEVELOPMENT REPORT 2017

**District Administration, Vellore and
State Planning Commission, Tamil Nadu
in association with
VIT University**

Contents

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MESSAGE

Tamil Nadu is a pioneer in implementing welfare programmes. The State's Twelfth Five Year Plan insists upon the betterment of Human Development status. Tamil Nadu is on the path of development for achieving accelerated, innovative and inclusive growth.

The State Planning Commission had earlier published Human Development Reports for the State and 8 districts. The analysis on the inter district and intra district disparities has led to policy recommendations and formulation of specific schemes like State Balanced Growth Fund to address backwardness. As a sequel, State Planning Commission has taken up the preparation of Human Development Reports for all districts.

This report is prepared with an objective to address Human Development concerns at the block level. An in-depth analysis on the Human Development status through Health, Education, Standard of living, Gender, Demography, Social Security sectors has been made to study the performance of blocks at the sub-district level. This could play as an effective tool for grassroots level planning.

I take this opportunity to place on record my sincere appreciation to the District Collector and Line Department Officials for sharing data on various parameters for the preparation of District Human Development Report. I thank all the stakeholders for their contributions to this report.

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FOREWORD

I acknowledge the effort taken by the State Planning Commission and VIT University, Vellore for preparing District Human Development Report (DHDR). Human development is an alternative development thinking which puts the people at the centre of development, by expanding their choices and enhancing their capabilities. The objective of the preparation of DHDR is to assess the human development status within a district and identify the key challenges in achieving inclusive growth. This document will prove to be an important tool for planners and social scientists engaged in planning and policy analysis at the grass root level.

Human Development measured by the three basic parameters, health, education and income which reflect the three basic choices. The parameters and measurement have undergone changes from time to time so as to depict the recent trends. The standard indices in measuring human development are Human Development Index, Gender Development Index, Gender Empowerment Measure, Gender Inequality Index, Human Poverty Index, Multi Poverty Index etc.

This report reflects the strength and weakness of our district. This guide the officials to prepare the micro as well as macro level planning for departments to bring about socio-economic development of the district. This provides basic ideas to improve economic development of this district in leather industries, food processing industries and agricultural based allied industries. We have improved the health status of the people and reduced IMR, MMR etc. An analysis of the decennial growth of population from 2001 to 2011 shows that total population of Vellore District grew by 13.2%. There is a change with the increase of literacy rate in the district by 11.44 percent during the period between 2001 and 2011. The infrastructure front the district had fared well in the case of roads and electrification of the villages.

This report will guide the officials to concentrate the area where the attention is needed. I appreciate the researchers of Centre for Sustainable Rural Development and Research Studies (CSRD&RS), VIT University for the systematic collection of data and analysis thereof.

28/12/16

Dr.R.Nanthagopal
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Vellore – A Profile

Introduction

Vellore District, formerly known as North Arcot District, came into being on 30th September 1987 with bifurcation of the composite North Arcot District in to Vellore and Tiruvannamalai Districts. The Geographical area of Vellore District is 5,92,018sq. and it is endowed with high mountains like Javathu and Yelagiri Hills in Tirupattur Taluk. The District has a forest coverage of 27% and predominantly found in the areas of Vellore, Tirupattur and Gudiyatham Taluks.

Location

Vellore District lies between 12°15′ to 13°15′ north latitudes and 78° 20 to 78° 50 east longitudes in Tamil Nadu State. Kancheepuram district lies to the East of the district and to the West, lies Dharmapuri District and Andhra Pradesh is to the North and to the South is Tiruvannamalai district.

Vellore is 140 km from Chennai and it is well connected with other cities by road and railways. The main railway station for Vellore is at Katpadi (5 km north of Vellore). This is a junction on the broad-gauge Chennai-Bangalore line. A strategically located town, Vellore is well connected by Rail and bus routes to major towns of the neighboring states like Andra Pradesh, Karnataka and Kerala.

Buses are available from Chennai (140 km); Bengaluru (220km) Vellore has Nearest Airport is the Chennai International Airport (140 km) The Vellore town lies on the banks of the Palar River on the site of Vellore Fort. Today, with its cosmopolitan look, Vellore stands as one of the fastest growing cities in Tamil Nadu.

Vellore district is one of the 32 districts in the Tamil Nadu. Vellore Town is the headquarters of this district. As of 2011, the district had a population of 3,936,331 with a sex-ratio of 1,005 females for 1,000 males.

Topography

The highest mountain in the district is the Javadhu Hills, which covers the eastern part of TirupatturTaluk. The elevation of the Javadhu Hills is 2500 feet above mean sea level with peaks rising up to 4200 feet. The Yelagiri Hills lie in the central part of Tirupathurtaluk with an altitude of 3200 feet. There are two major rivers in the district - the Palar and the Ponnai. Both are rain fed seasonal rivers and so scope of irrigation led agriculture is limited. Black soil is found in the tank and the river beds and the other areas have red loamy soil.

History

A look at the History of the district reveals a great and glorious past. Various dynasties and rulers like the Pallavas, Cholas of Uraiyur, the Rashtrakutaa dynasty of Malkhed, Sambuvarayar, the rulers of Vijayanagarm, Mamathas, the Nawabs of the Carnatic and the British have all in the course of their rule influenced the historical and cultural richness of this district. One of the monuments of Vellore is the fort whose stone inscriptions are indicative that the fort was probably built during the rule of ChinnaBommiNayak (1526 to 1595A. D). The fort is one of the most perfect specimens of Military architecture in South India. The Monuments found in the district give a vivid picture of the town through the ages. In the 18th Century, Vellore District was the scene of some of the decisive battles between the English and the French for Supremacy that were fought in Ambur (1749 A.D), Arcot (1751 A.D) and Vandavasi (1760A.D) as a result of their continuous struggle to establish their dominance in India.

Language

Languages spoken in the Vellore district are Tamil, Telugu, Urdu, Hindhi, Kannada, Sowrastra and Malayalam. Tamil is the language spoken by most of the people in Vellore district, although other Indian languages are also commonly heard in Vellore.

Art, Architecture and Culture

One of India's ancient cities, Vellore is considered one of South India's oldest cities and is known for the rich historic legacy it that makes it an interesting getaway. The Vellore fort was constructed in granite from the nearby quarries in Arcot and Chittor districts. It spreads over an area of 133 acres (0.54 km2) and is located at an altitude of 220 m (720 ft) within a broken mountain range. The fort is surrounded by a moat which was once used as an additional line of defense in case of an invasion. The fort is considered to be among the best of military architecture in Southern India The fort houses a Temple, a Mosque and a Church, the renowned Vellore Christian Hospital, and many other buildings that are now used as public offices. The Jalagandeeswarar Temple, dedicated to Jalagandeeswar, is noted for its sculptures, and speaks volumes of the exquisite craftsmanship of the highly skilled artisans of that period. The sculpture in the porch on the left of the entrance is a masterpiece appreciated by the connoisseurs of art and architecture.

The Mosque inside the fort was constructed during the last Arcot Nawab's period. The Church inside the fort was constructed during the early British period (Robert Clive, East Indian Company). MuthuMandapam is a memorial built around the tombstone of Sri VikramaRajasinha, the last ruler of Sri Lanka.

In 1981, the Post and Telegraph Department of India released a stamp commemorating the Fort, and in July 2006 a stamp marking the 200th anniversary of the Mutiny was released by the Tamilnadu Chief Minister. This 13th-century fort was opened up to tourists and is now maintained by the Archaeological Survey of India.A climb of 150 steps or a drive up a winding road will take you to

the Rathnagiri temple; a hilltop temple dedicated to Lord Balamurugan. While the original structure was built in the 14th century over the passage of time the structure was converted into a stone shrine.

Another temple located atop a hill is the VallimalaiMurugan Temple, located in Vallimalai in the Vellore District. Dedicated to Lord Murugan, and his consort Valli and Devayanai, a climb of 444 steps will give magnificent view of the city and is one of Vellore's most beautiful tourist spots. Besides the many water streams here, one can also find the Subramaniyaswamy Cave Temple here which is maintained by the Architecture Society. Also referred to as Siddha Boomi", Vallimalai was an important Jain centre during medieval period.

Dating back to 150 years, The Church of South India in the district is one of the oldest churches and houses the graves of the British soldiers killed during the Sepoy Mutiny. A little away from Vellore towards the north of the city on the banks of the River Palar, is MuthuMandapam or the 'Pearl Palace', a memorial built around the tombstone of the last Kandy Tamil ruler, Vikramraja.

Another memorial here is the Clock Tower erected in memory of the coronation of King George V and also the 14 English soldiers who left from this town to fight for the 1st World War. The Government Museum near the main bus stand in Lakshmanaswamy Town Hall is an interesting museum known for its artifacts from fields such as anthropology, archeology, history, and geology, botany, and art departments. Other unique exhibits here include stone sculptures that date back to the Pallava dynasty and Vijayanagar period, Ivory chess board set used by the last Kandian King of Sri Lanka and other relics that date back to as far as 400 BC.

The Kavalur Observatory located in the Javadu Hills in Alangayam Vellore District is an important Observatory for its location being closer to the Earth's. Also of interest here is the telescope; as it is Asia's largest telescope. A wonderful tourist spot that covers over 25 hectares of land, the Amirthi Zoological Park is located under the Javadu Hills of Tellai across the Amirthi river; approx 25 km away from Vellore. Besides the numerous waterfalls, it shelters large variety of birds and animals as and nurtures numerous varieties of herbal plants, and sandalwood trees.

Population Trends

In 2011, Vellore had apopulation of 3,936,331 of which male and female were 1,961,688 and 1,974,643 respectively. The district population showed the district had 50.14 per cent females as per the census. In 2001 census, Vellore had a population of 3,477,317 of which males were 1,741,083 and remaining 1,736,234 were females. Vellore District population constituted 5.46 percent of total Tamil Nadu population. In 2001 census, this figure for Vellore District was at 5.57 percent of Tamil Nadu population. This indicates that the share of the district's population to the total population has declined. The rate of urban population in the district has increased in the inter-census period which is more or less a similar pattern that is observed across the State.

TABLE 1.1—BASIC DEMOGRAPHIC INDICATORS

S.No	Indicators	2001	2011
1	Population	3477367	3936331
2	Decennial Growth	14.90	13.20
3	Density of population per sq. km	572	648
4	Urban population (%)	37.61	43.24
5	Sex ratio	997	1005
6	Percentage of 0–14 years old	12.43	10.99

Source: Census documents 2001 and 2011

Economy

There exists an inverse relationship between economic progress and the extent of dependence of the workforce on the primary sector[1] (Kuznets, 1974). The shift in occupational pattern from the primary sector to the secondary and tertiary sectors or a shift in the income source from agriculture to industry and the tertiary sector is considered to be a natural process of economic development. This sort of shift is visible in the district and there is a spread of industries and growth of the tertiary sector too in a major way.

Agriculture

Vellore district's agriculture depends on rainfall only and drought is rather frequent in nature. There is only one river flowing through the district which is not perennial and remains dry almost throughout the year. During the period of drought, there is migration of labourers from this district to the neighbouring districts of Karnataka and Andhra Pradesh. Also, the growth of leather industries and the consequent pollution have affected ground water in the district. This has adversely affected agriculture. So the declining agricultural opportunities are a major reason for the poor rural employment in Vellore district.

District Map

Vellore District
Blocks

Gudiyattam
Katpadi
Sholinghur
Arakkonam
Kaveripakkam
Nemili
Peranambattu
Vellore
Arcot
Kaniyambadi
Madhanur
Anaicut
Timiri
Natrampalli
Alangayan
Jolarpet
Tiruppathur
Kandili

(Map Not to Scale)
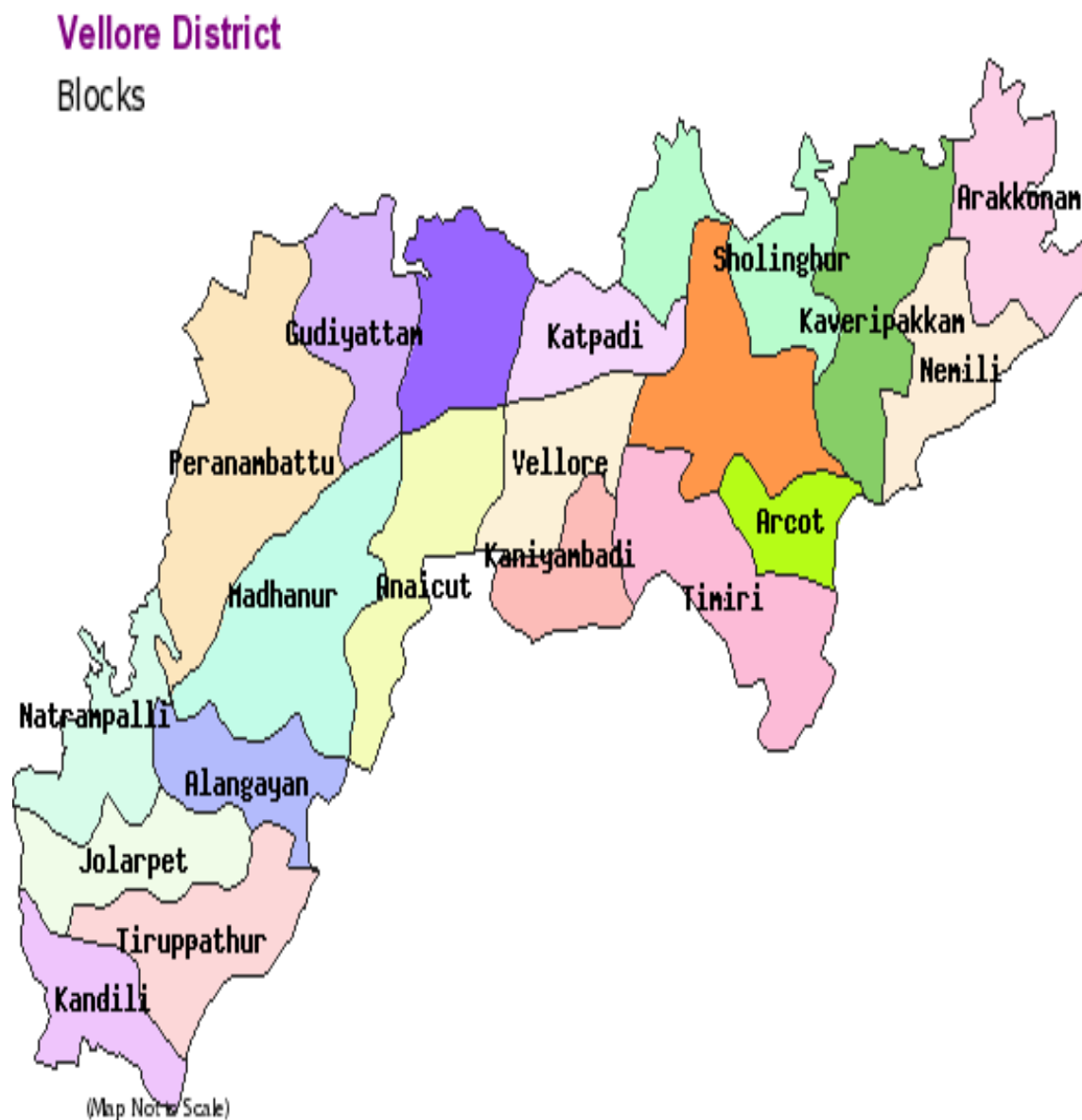
Vellore District is one of the few districts which has varied agricultural potential and also is rich in Bio – diversity. A variety of crops is grown in the hills and plains. Paddy, Goundnut, Red gram and Sugarcane are the crops that are grown predominantly in the district. Food crops (Cereals, Millets & Pulses) Paddy, Cholam, Cumbu, Ragi, Maize, Thenai, Varagu, Samai, Red gram, Black gram, Green gram, Horse Gram, Cowpea are grown extensively throughout the length and breadth of the district. The non food crops that are grown in the district include Groundnut, Gingelly, Castor, Sunflower, and Cotton Sugarcane.

TABLE 1.2 - SECTORAL DISTRIBUTION OF CROSS DISTRICT DOMESTIC PRODUCT (Rs. in Lakhs)

Year	Primary	Secondary	Tertiary\Service	Cross District Domestic Product	Population	Per Capita Income in Rupees
2009-10	113059	599187	1060405	1772651	3811617	46507
2010-11	124908	702382	1207293	2034583	3846061	52900
2011-12	147026	893106	1411371	2451503	3879882	63185

Source: DD, Economics & Statistics – Vellore, 2012

The Cross District Domestic Product of the district during the year 2011-12 shows that the contribution of tertiary sectors (57.57%) to NDDP is higher than that of the secondary (36.43%) and primary sector (5.99%). The tertiary services of 2011-12 have declined to (57.57%) when compared to the year 2009-10 (59.82%) and 2010-11 (59.33%). The secondary sector services of 2011-12 have increased to (36.43%) when compared to the year 2009-10 (33.80%) and 2010-11 (34.52%). The primary sector services of 2011-12 have declined to (5.99%) when compared to the year 2009-10 (6.37%) and 2010-11 (6.13%). It is imperative to note that the contribution of primary sector when compared to secondary and tertiary is very less for the Cross District Domestic Product.

Industry

Vellore District is one of the most vibrant Districts in terms of industrial development in the State. It has a dominant presence in the leather based industries and accounts for more than 37% of the county's export. The Government of Tamil Nadu has provided all possible investment subsidies and infrastructural support in the form of setting up industrial estates and common effluent treatment plants to encourage these industries.

The district provides enough scope for the development and growth of industries engaged in Chemicals, Food processing, Sugar/Jaggery manufacturing, Synthetic Fibers, Fertilizers manufacturing, textiles, Garments, Steel Castings and Auto Bearing Manufacturing. The district also has several medium and large scale industries like, BHEL, EID Parry, Tirumalai Chemicals and Greaves, SAME-DEUTZ, TVS–Brakes India, Mitsubishi, Greaves Cotton, MRF, Kramski Stamping and Molding India Pvt Ltd., RSL Industries Ltd, Farida Shoes Ltd, etc.

Income

Per Capita Income of a district is indicative of the economic prosperity of the district and the standard of living of the population. An increase in the per capita income indicates a rise in the availability of higher disposable income for the purchase of goods and services and it is for this reason, it is often considered to be an index of welfare of the people.

TABLE 1.3 GROWTH RATE OF PER CAPITA INCOME

Years	Vellore	Tamil Nadu
2008-09	41659	43193
2009-10	46507	47394
2010-11	52900	53507
2011-12	63185	63996

Sources: Commissionar of Statistical, 2012, Chennai

The Per capita income of Vellore district was Rs. 63,185 at constant prices in 2011-12, lower as compared to a state per capita income of Rs. 63,996 at constant price. The district occupies 4thplace out of 32 districts in terms of per capita income. The reasons for the better performance in terms of per capita income are furnished in Chapter 3.

Social Sector

Health

Health is an important component in the calculation of Human Development Index. The district of Vellore has shown improvement in the vital health indicators, however, there is scope for improvement in the reduction of IMR and MMR in the district. The State is committed to building a healthy society not only by making quality Medical facilities available and accessible to the people but also by focusing on preventive health care and adoption of healthy life styles. Based on vital health indicators, Tamil Nadu is a fore runner when compared to various States of India.

Crude Birth Rate (CBR)
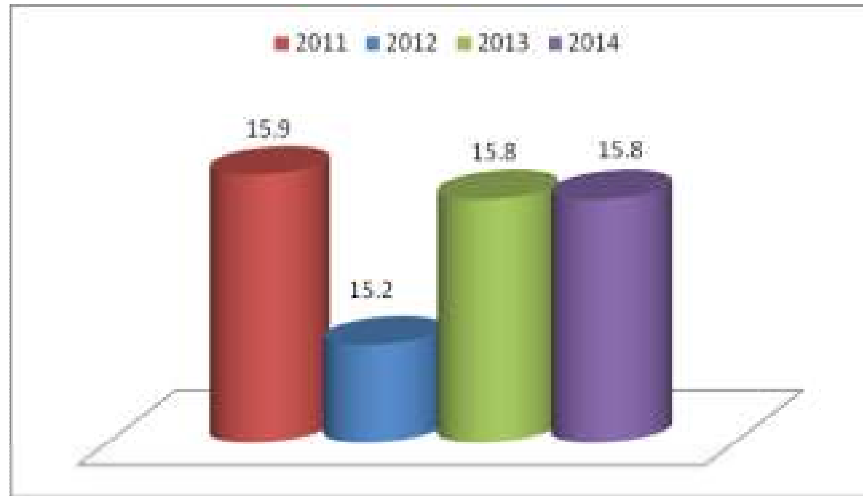
The graph indicates that the district's CBR for the year 2014 was less than the state average (15.9%). When compared to 2011 district average of CBR there is decline of 0.1 % in the year 2014. Natrampalli (17.5%), Pernambut (16.9%) and Kandhili (16.6%) are the blocks that top in the Crude Birth Rate.

Infant Mortality Rate (IMR)
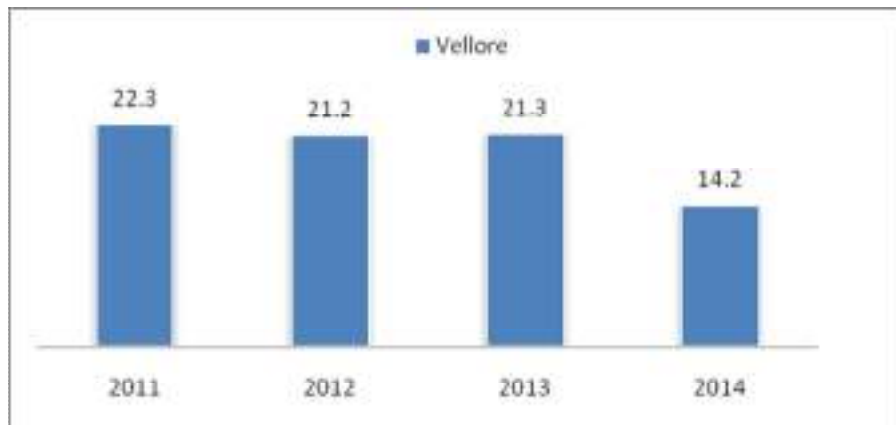
Infant Mortality Rate is a crucial factor in analyzing human development. The IMR of the district, 14.2 percent in 2014. When compared to 2011 district average of IMR there is decline of 8.1 % in the year 2014. Madhanur (31.5), Alangayam (25.6) and Pernambut (25.4) blocks show higher range of IMR than the district average. Reason behind this is situation furnished in Chapter 4.

Literacy and Education

Literacy is one of the fundamental human rights for every citizen of a country. Empowerment of people is elicited by the level of literacy and education. Literacy is an instrument to improve health, employment, income, and relationship with the society. The literacy rate of the district has been increasing over the years. The average literacy rate of Vellore as per the 2011 Census was 79.17 percentage when compared to 72.36 percentage in 2001. On studying gender wise - male and female literacy, it was 86.50 percentages and 71.95 percentages respectively. It has improved from 81.99 and 62.79 from the 2001 census. The district administration as part of its endeavor for 'Universalization of Primary Education' has invested considerably in educational infrastructure, especially in rural areas.

Conclusion

Vellore District came to functioning on 30th September 1987 with bifurcation of the composite North Arcot District in to Vellore and Tiruvannamalai Districts.Vellore City is the headquarters of this district. As of 2011, the district had a population of 3,936,331 with a sex-ratio of 1,005 females for 1,000 males. There are two major rivers in the district - the Palar and the Ponnai. Both these are rain fed seasonal rivers and so scope of irrigation led agriculture is limited. Black soil is found in the tank and the river beds and the other areas have red loamy soil. Vellore exhibits Dravidian traditions with a hint of modernity. Better social indicators for Vellore do indicate steady development, although a few low performing indicators require attention. The leather industry of Ambur, Vellore, accounts for about 80 percent of total leather production in Tamil Nadu.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

Chapter

2

Status of Human Development in Vellore District

Introduction

Human Development Index is a composite index measuring average achievement in three basic dimensions of human development: - a long and healthy life, knowledge and a decent standard of living. Human development concepts place people at the core of the development and emphasis that peoples' development is an end itself and not a means of development. It is about people and the process of increasing opportunities related to leading a long and healthy life, knowledge and a decent standard of living.

The HDI is a relative index in which countries or States are ranked under the different aspects of health, education and standard of living which reflects human development. As per the directions of the State Planning Commission, Tamil Nadu, HDI is calculated in three dimensions such as standard of living, Health and Education. There are 11 indicators for calculating the indices for these three dimensions. The HDI has been calculated for 20 blocks of Vellore District. The HDI is used with gender perspective to understand the gender gaps in accessing and utilizing resources for improving gender equality.

HDI – Inter block variations

HDI is a composite index measuring average achievement in 3 basic dimensions and 11 indicators of human development. The dimensions are standard of living, health and education. These three dimensions are crucial in contributing to the human development which can be classified into block and district. Details of the indicators have been furnished in the following table.

SECTOR/DIMENSION WISE INDICATORS USED FOR HRD

Dimension	Sl. No.	Indicator
Living standards	1	Percentage of HHs having access to Cooking fuel
	2	Percentage of HHs having access to Toilet
	3	Percentage of HHs having access to Water
	4	Percentage of HHs having access to Electricity
	5	Percentage of HHs having access to Pucca house
Health	7	Child Mortality RateU5MR
	8	Maternal Mortality Rate
	9	Infant Mortality Rate
Education	10	Literacy Rate
	11	Gross Enrolment Rate (Primary+ secondary) Schools

Index value falls between 0 to 1. The human development index is the positive index. Here (closer to the 1), highest the index value shows higher human development and the value shows (closer to the 0), lowest the index value shows lower human development. Vellore Corporation (0.90), Walajah (0.74), Arcot (0.67), Sholinghur (0.67) are the blocks ranked as top three for their HDI. Kandhili (0.36), Madhanur (0.43), and Natrampali (0.45) are the blocks graded with lowest three ranks. The range between the higher value and lower value is 0.54 (Vellore Corporation (0.90) to Kandhili (0.36)). It shows the remarkable variation by the blocks which are high in terms of human development.

TABLE 2.1 TOP AND BOTTOM FIVE BLOCKS IN HUMAN DEVELOPMENT INDEX

Top 5 blocks	Value	Bottom 5 blocks	Value
Vellore Corporation	0.90	Kandhili	0.36
Walaja	0.74	Madhanur	0.43
Sholinghur	0.67	Natrampalli	0.45
Arcot	0.67	Arakkonam	0.49
Katpadi	0.66	Anaicut	0.49

Vellore district has 20 blocks and one corporation, for which the human development index has been constructed. The blocks that have more urban population and are close to the district headquarters have better index value when compared to the blocks that are farther away and have a larger rural population.

HDI scores range from 0.90 to 0.36, with Vellore Corporation taking the top position while Kandhili block is placed at the bottom. Vellore Corporation– highly urbanized block stands in the top position due to the lesser number of malnourished children, more accessibility to health care facilities and high rate of enrollment in secondary education. The Vellore Corporation stands first in literacy and Katpadi block which has a considerable urban population stands next to it in terms of literacy. The Kandhili block has got a low literacy level.

The Vellore Corporation stands high in the standard of living, which is due to the 100% percent access to drinking water, adequate cooking fuel and toilet facilities. The standard of living is lower in Kandhili block, due to less access to cooking fuel, water, sanitation facilities and pacca houses. Though Katpadi area has greater urban features, it stands to the next bottom level because of access to drinking water and toilet facilities.

With regard to health dimensions three indictors are considered namely IMR, MMR and U5MR. The data reveals that IMR is high in Timiri (26.4), Arakkonam (23.3) and Alangayam (18.8) which is less than the state average (IMR: 24). Whereas, it is very low in Natrampalli (8.1). The MMR is found to be very high in Tirupattur (139.3), Madhanur (135.2) and Natarampalli (115.4), which is more than the state average (97). Over 18 blocks of Vellore District have MMR below the state average. The U5MR is very high in Timiri (141), Arcot (114) and Vellore (102), which is more than the state average (20.42). There are 19 blocks above the state average, which needs more attention towards reduction U5MR.

Education dimensions include literacy rate and Gross Enrollment rate and primary and secondary level. The performance of the block shows the lowest literacy rate in Natrampalli (63.69), highest rate in Vellore Corporation (77.15). The Gross Enrollment Ratio in primary level is very high in Katpadi (103.60) and Tirupattur (101.50) is low, Tirupattur stands very high in upper primary level (161.61) and Kandhili (48.61) stands bottom.

Gender Inequality Index

Promoting gender equality is another dimension of human development. Along with HDI, UNDP constructed the gender related development index (GDI) to analyze the gender disparities across the member countries. Tamil Nadu Human Development Report also made attempts to construct GDIs at the district level. GDI, mainly, captures achievements in basic human development adjusted for gender inequality in the three basic parameters. In the 2010 Human Development Report of the UNDP used new index for evaluation of gender disparity and same replicated in Vellore District Human Development Report.

Gender inequality in Vellore – Inter – Block Variations

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

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

The gender inequality index is a negative index. Here, the value closer to the 0 shows lower gender inequality and value closer to the 1, shows higher inequality. Overall 10 blocks show lower gender equality. In Vellore District, Vellore (0.01), Katpadi (0.01), Madanur (0.02) stands first three ranks in Gender Inequality Index. Kaniyampadi (0.18), Walajah (0.18), Gudiyatham (0.8), Pernambut (0.08), Kaveripakkam (0.08) stands bottom three places in GII.

TABLE 2.2 TOP AND BOTTOM FIVE BLOCKS IN GENDER INEQUALITY INDICATORS

Top 5 blocks	Value	Bottom 5 blocks	Value
Kandhili	0.01	Kaniyambadi	0.14
Gudiyatham	0.02	Katpadi	0.13
Vellore Block	0.03	Tirupattur	0.11
Vellore Corporation	0.03	Madhanur	0.10
Kaveripakkam	0.04	Natrampalli	0.09

If the GII rank is less than the HDI rank in a Block, it shows that women in the block suffer lower achievement than men. If the HDI and GII ranks are the same in a Block, it is indicative of gender equality in human development. This is the appreciable stage and the disparity within the blocks and between the block should be overcome through implementing human and gender development measures. While comparing the three dimensions, Kandhili block stands the first rank than other blocks. Other blocks show undulated nature in these three GII dimensions.

Vellore, Pernambut, K.V.Kuppam, Arcot, Arakkonam, Tirupattur, Kandhili, Jolarpet, Natrampalli blocks and Vellore Corporation achieved hundred percentage institutional deliveries. Then last one is Labour Market in which male and female worker participation rate and agricultural wages are considered. Natrampalli block has high female workforce participation and wage rates too. Nemili block has the highest Labour market index with regard to women. The component of labour participation was found to be lowest in Timiri. In analyzing the indicators of the GII under the different components of health, empowerment and labor market, there were noted variations in terms of the Health, Walajah block seems to be lowest with Arcot being the highest; empowerment indicator shows the five top blocks as Katpadi, Vellore, Vellore Corporation, Kaniyamapadi and Arakkonam. In these blocks, literacy rates - Male and female was above 90 percent. Enrolment of male and female children was above 55 percent.

Child Development Index:

The child development index (CDI) is an index merging performance measures, particularly to children's education, health and nutrition. Index value falls between 0 to 1. The higher the index value, i.e. closer to 1 would be better place for child in human development. The lower the index value, i.e. closer to zero, the worse the children faring. The child development index for Vellore district computed based on eight indicators.

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

In terms of the overall Child Development Index, K.V Kuppam block have the highest index at 0.80 and Katpadi (0.77), the lowest at Jolarpet (0.39). Considering the subcomponents of Child Development index under health and education, it was found that K.V Kuppam, Katpadi, Vellore Corporation, Pernambut and Tirupattur is the top five blocks while Jolarpet, Kaveripakkam, Arakkonam, Arcot and Anaicut is the bottom five blocks. The bottom five blocks with respect to education is Kaniyambadi, Vellore corporation, Arrakonam, Alangayam and Anaicut. This implies that the district administration has to take up concerted efforts to ensure that children who constitute the most vulnerable population receive equitable resource for their development across blocks.

TABLE 2.3 TOP AND BOTTOM FIVE BLOCKS IN CHILD DEVELOPMENT INDEX

Top 5 blocks	Value	Bottom 5 blocks	Value
K. V. Kuppam	0.80	Jolarpet	0.39
Katpadi	0.77	Kavripakkam	0.41
Vellore Corporation	0.70	Arakkonam	0.41
Pernampet	0.66	Arcot	0.42
Tirupattur	0.66	Anaicut	0.46

The Table above indicates that Vellore district needs specific attention with respect to Education sector even at the Primary level. Lower educational inputs on children could have long term impact on their labour market participation and standard of living.

Multidimensional Poverty Index

The MPI is an index of multidimensional poverty. It assesses the nature and intensity of poverty at the individual level, indicating people living in poverty within and across blocks, districts and regions. The MPI has three dimensions: Health, education, and living standards. The MPI can be used as an analytical tool to identify multidimensionally poor people, show areas in which they are deprived and help to reveal interconnections among deprivations. It also helps to identify the poorest among the poor, reveal poverty patterns within countries by province or social group, and track changes over a period of time.

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

The end result of MPI in Vellore district exhibits the higher range of disparity among the blocks. While comparing to other indices like HDI, GII and CDI, the MPI range is elevated to 0.48. The range starts from Vellore Corporation (0.11) to Arakkonam (0.59).

TABLE 2.4 TOP AND BOTTOM FIVE BLOCKS IN MULTIDIMENSIONAL POVERTY INDEX

Top 5 blocks	Value	Bottom 5 blocks	Value
Vellore Corp	0.11	Kandhili	0.66
Vellore	0.24	Timiri	0.62
Solinghur	0.30	Anaicut	0.62
Walajah	0.39	Natrampalli	0.59
Madhanur	0.39	Arakkonam	0.59

Vellore Corporation has the lowest multidimensional poverty index due to the large extent of urbanization and greater access to facilities.

Conclusion

Equity in Human development in terms of the social classes, gender and location would indicate that there is an overall development in the district. A look at the different indices reveals that there is huge potential to improve the educational component of the indices. Improving access and ensuring higher enrolment in educational institutions could improve the educational standards of the district. The Standard of living indices of the blocks also show definite scope for improvement particularly with regard to the access to cooking fuel.

TABLE 2.4 Overall Index Ranking in Vellore District

S. No	Name of the block	HDI		GII		CDI		MDPI	
		Value	Rank	Value	Rank	Value	Rank	Value	Rank
1	Vellore	0.64	6	0.03	3	0.58	6	0.24	2
2	Kaniyambadi	0.55	10	0.14	21	0.47	16	0.55	16
3	Katpadi	0.66	5	0.13	20	0.77	2	0.42	6
4	Anaicut	0.49	17	0.07	16	0.46	17	0.62	19
5	Gudiyatham	0.59	8	0.02	2	0.53	10	0.44	7
6	Pernampet	0.52	14	0.04	7	0.66	4	0.48	10
7	K.V.Kuppam	0.57	9	0.06	14	0.80	1	0.49	12
8	Walajah	0.74	2	0.04	10	0.56	9	0.39	4
9	Sholinghur	0.67	3	0.04	9	0.57	7	0.30	3
10	Arcot	0.67	4	0.06	13	0.42	18	0.46	8
11	Timiri	0.52	12	0.04	6	0.52	12	0.62	20
12	Arakkonam	0.49	18	0.05	11	0.41	19	0.59	17
13	Nemili	0.53	11	0.06	12	0.56	8	0.50	14
14	Kaveripakkam	0.52	13	0.04	5	0.41	20	0.55	15
15	Thirupattur	0.50	16	0.11	19	0.66	5	0.47	9
16	Kandhili	0.36	21	0.01	1	0.48	15	0.66	21
17	Jolarpet	0.60	7	0.04	8	0.39	21	0.51	13
18	Natrampalli	0.45	19	0.09	17	0.49	14	0.59	18
19	Madhanur	0.43	20	0.10	18	0.51	13	0.39	5
20	Alangayam	0.51	15	0.07	15	0.51	11	0.49	11
21	Vellore Corp	0.90	1	0.03	4	0.70	3	0.11	1

The table presented above of the blocks indicates the most backward blocks in the indices, which indicates the immediate necessity for intervention so that the inter-block disparity is addressed. In the district, it is quite clear that there are certain blocks that require special focused attention to help them overcome these developmental problems.

Vellore Corporation which is a highly urbanized area, has high human development index, but does not fare that well in terms of caring for the children and women. It indicates that development is skewed and there is need to focus on the development of the vulnerable sections of the society. Kaniyambadi, Katpadi and Tirupattur are the blocks that have better Gender Inequality Index than the Human Development Index. In terms of Child development index, K.V.Kuppam block has good indices but poor HDI and GII. It is the fact that CDI is low with respect to Jolarpet and Kaveripakkam blocks indicating that has failed to address the child development in the district. If there are larger proportions of children not enrolled in schools, it is quite possible that these children may be employed as child labour particularly in the unorganized sector.

CHAPTER 3
EMPLOYMENT, INCOME AND POVERTY

Chapter
3
Employment, Income and Poverty

Introduction

The proportion of population engaged in productive work, the quality of employment and the income received by the working population are contributing to human development. Insufficient opportunities for profitable employment result in lowering of income levels which in turn impoverish people. Thus, there is a close relationship between employment, income and poverty.

Productive employment provides a way out of poverty. In rural areas, the challenge is greater due to inadequate opportunities that provide decent remuneration. The rural labour market is characterized by low pay and poor-quality jobs, which are mostly in the unrecognized sector and is often unprotected by law. Rural areas witness widespread underemployment, the absence of rights at work, inadequate social protection, and lack of collective bargaining strength. Poverty can be measured either consumption of expenditure or standard of living.

Employment

Vellore District is one of the most vital and vibrant districts in terms of industrial development in the State. Vellore District has a dominant presence in the leather and leather based industries. Vellore District accounts for more than 37% of the county's export leather and leather related products such as finished leather, shoe uppers, shoes, garments, gloves and so on.

The Government of Tamilnadu provides all possible investment subsidies and infrastructural support in the form of setting up industrial estates and common effluent treatment plant.Thus this District's share of the leather market in the years to come is ensured. In Vellore District SIDCO Industrial Estates are located at Katpadi, Ranipet, Mukundarayapuram, Vannivedu and Arakkonam. There are 12 large and 300 medium scale industries functioning in Vellore District. The district is the top exporter of finished leather goods in the country.

The District provides enough scope for the development and growth of industries engaged in chemicals, food processing, sugar/jaggery manufacturing, synthetic fibres, fertilizers manufacturing, textiles garments, steel castings and auto bearing manufacturing. The existing units are facing two main problems viz., poor marketing and financial problems. Textile mills and rice mills, leather and leather based products belongs more to the traditional category Vellore visit is a highly recommended industrial tour. Other industrial attractions of Vellore are numerous medium and large scale industries like, BHEL, EID Parry, Tirumalai Chemicals and Greaves, SAME-DEUTZ, TVS–Brakes India, Mitsubishi, Greaves

Cotton, MRF, Kramski Stamping and Molding India Pvt Ltd., RSL Industries Ltd, Farida Shoes Ltd etc. There are 8835 people employed in large and medium scale industries.

The current chapter deals the work participation rate, distribution of workers in various sectors, employment opportunity by government, growth in per capita income and net domestic products, the existence of poverty and contribution of public distribution system in human development.

Size of the Workforce and Work Participation Rate

The working population in Vellore District was 39, 36,331in 2011, an increase of working population from 34, 77,317in 2001 i.e, an increase by 4, 59,014 since 2001. The Table 3.1 shows that, the Work Participation Rate (WPR), which is the proportion of workers to the total population, has increased during the period 2001–2011 from 41.04 to 42.92 per cent. The increase in the proportion of marginal workers has been more when compared to the main workers. The district has shown an overall upward trend in terms of employment. There is declining of the non-working population and this is a positive sign when compared to the other districts in the State.

TABLE 3.1 TOTAL WORKERS AND NON-WORKERS IN VELLORE DISTRICT

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	Vellore	35.71	38.56	33.05	33.9	2.67	4.65	50.48	61.44	360780	409328
2	Kaniyambadi	40.97	41.71	31.6	32.61	9.37	9.10	59.03	58.29	110692	125666
3	Katpadi	41.26	43.96	31.82	31.07	9.43	12.89	70.85	56.04	167241	214673
4	Anaicut	45.17	40.40	35.67	34.45	9.51	5.95	54.83	59.60	144971	161116
5	Gudiyatham	45.27	44.12	38.58	36.77	6.69	7.35	55.29	55.88	250931	270093
6	Pernampet	38.68	41.47	31.13	34.20	7.56	7.27	60.66	58.53	213602	256428
7	K.V.Kuppam	44.83	43.94	30.86	32.46	13.97	11.48	58.84	56.06	118712	128679
8	Walajah	36.59	37.68	31.71	31.47	4.88	6.21	63.41	62.32	212237	258137
9	Sholinghur	41.76	40.84	32.93	35.78	8.83	5.06	58.24	59.16	134596	141745
10	Arcot	39.53	44.56	34.78	34.89	4.75	9.67	66.16	55.44	178975	200769
11	Timiri	48.44	41.11	40.08	35.71	8.36	5.40	51.63	58.89	131671	145515
12	Arakkonam	34.43	48.30	26.66	37.78	7.77	10.52	65.57	51.70	158159	171316
13	Nemili	46.7	39.52	33.56	30.01	13.14	9.51	53.3	60.48	141813	156037
14	Kaveripakkam	38.87	48.71	34.19	34.98	4.68	13.73	72.86	51.29	159671	176673
15	Thirupattur	42.67	47.34	36.09	35.45	6.58	11.89	57.33	52.66	197379	215044
16	Kandhili	48.4	44.65	36.88	36.25	11.52	8.40	51.6	55.35	130672	146890
17	Jolarpet	43.99	45.48	34.38	35.23	9.61	10.25	56.01	54.52	169326	207923
18	Natrampalli	49.34	49.19	43.2	39.26	6.14	9.92	50.66	50.81	94301	92241
19	Madhanur	36.62	41.16	33.69	33.04	2.93	8.12	63.38	58.84	193621	221900
20	Alangayam	37.78	50.82	28.36	36.36	9.41	14.45	60.4	49.18	207967	236158
	Vellore District	**41.04**	**42.92**	**33.72**	**34.55**	**7.32**	**8.36**	**58.96**	**57.08**	**3477317**	**3936331**

Source: DD Statistics – Vellore, 2011

It is evident from the table 3.1, that according to 2011 census, the number of marginal workers has gone up from 7.32 percentages in 2001 to 8.36 percentage in 2011. This shows that the increase in

working population ratio during this time period is accounted for by an increase in marginal workers as well as the increase in proportion of main workers.

Work Participation Rate

TABLE 3.2 WORKER PARTICIPATION RATE

Rural/Urban	2001	2011
Rural		
Male	65.70	66.50
Female	32.30	33.10
Persons	98.00	99.60
Urban		
Male	0	49.74
Female	0	50.26
Persons	0	100.00
Total		
Male	66.70	62.88
Female	33.30	37.12
Persons	100.00	100.00

Source: Census India, 2001 and 2011

Table 3.2 shows that, Work Participation Rates were higher in rural areas than in urban areas. Vellore District rural WPR increased from 98.00 per cent in 2001 to 99.60 per cent in 2011.WPR in urban was 49.74 per cent and 50.26 per cent in the 2011 census. Urban WPR was unavailable for 2001. However, the urban WPR accelerated at a faster rate compared to the rural WPR during this period. As a whole the male WPR has declined from 66.70 (2001) to 62.88 (2011) and female WPR has increased from 33.30 (2001) to 37.12 (2011).

Box 3.1 Child Labour – In Vellore District

Vellore district hopes to become the first child labour-free district in the State, as the rate of child labourers in the district came down drastically in the past few years. As many as 685 children were rescued in the district, from child labour up to 2014 under the National Child Labour Programme (NCLP). The NCLP was introduced in the district in 1995, after a survey in Vellore, which reported 15,241 child labourers in the district. Since then, an average of 16473 children, both child labourers and non-school going children were rescued. There are 61 training centers in the district. 190 personnel including teachers, vocational teachers, clerks, field officers and helpers work under the programme. As of now, 1,366 children are studying in 61 centers, while 16,473 children, and have been put in the mainstream schools, after class five. Some dropouts were rescued and admitted to the same schools. 40 students, who were rescued in the early days of implementation, are now studying in various Engineering and Arts Colleges in Vellore and Kancheepuram districts. The rescued are given a monthly stipend of Rs 150. Besides this, the government, gives Rs 6,000 to each child, when he/she is rescued. This amount is being deposited in their names. A fund of Rs 85, 57,301.00 has been spent by the government on the rehabilitation of these helpless children. 105 raids have been conducted this year as part of the inspection process, in which 86 children have been rescued. The process of conducting a raid and rescuing a child, involves many departments such as labour, factories, education, health and revenue. The district administration is taking all efforts in making the district child labour-free. So far, Rs 2, 25,000 have been collected as fine from the owners of the shops including Rs 20,000 fines as per the court order in the year of 2009-10.

"Initiative to make the district child labour-free has led to success in Kaniyambadi area, as the then district collector announced the place as 'child-laborer-free' in the year 2009-2010. This was achieved after stringent action was taken on the parents of the children". "Even after sending several notices and advice to send children to school, the parents never listened to us. And so we seized around 54 ration cards and returned it after they sent their children to schools", Most of the children work in welding shops, brick kilns, matches factories and beedi-making factories. "Apart from Tamil children, we rescued children from the Northern states. They are taken to boarding school in Ariyur and kept there for few days before being sent to their native.

In 2007, Vellore district received an award for best performance in eradication of child labour in the district during 2007, at the Anti-Child Labour Day function held in Chennai. The award has been given for the excellent and innovative activities undertaken by the district administration and the Child Labour Abolition Support Scheme (CLASS). These included identification of child workers at the panchayat level through village level education committees headed by the village panchayat presidents and panchayat union-level committees headed by panchayat union chairpersons, and identification of child workers and out-of-school children in the school-going age and enrolling them in schools. The activities included punitive measures against parents of child workers and dropouts. As part of the measures, the parents will be allowed to draw their ration articles from fair price shops only when they produce certificates from the headmasters of the schools where their children study, to the effect that they are attending school regularly.

Details of Special Training conducted for Rescued Children

S.No	Years	Special Trainings	Enrolment new labour children	Total male/female	School going children (male/female)
1	2010-11	69	690	1811	874
2	2011-12	61	513	1565	720
3	2012-13	53	577	1363	690
4	2013-14	61	879	1366	834

Source: Project Officer Child Labour, Vellore, 2014

Sectoral Composition of Workers

District wise comparison of the structure of the workforce reveals that there has been an increase in the others category of workers. This normally signifies the tertiary and services sector including construction and real estate. Overall figures indicate that in the inter census period, there has been a sizeable increase in the workforce employed. There has however, been a decline in cultivators, agricultural labour and MSME sector indicating a shift in the sectoral composition of the workforce that is to be anticipated as the economy develops.

Workers are mainly classified as Agricultural workers and Non Agricultural workers. Agricultural workers are broadly classified as cultivators and Agricultural labourers. Likewise, nonagricultural workers are broadly classified as industrial workers and other workers.

TABLE 3.3 COMPOSITIONS OF WORKERS

Sl. No	Block wise/ District/ State	Total Workers		Cultivators		Agri. Labourers		HHI		Others	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Vellore	128844	152270	6098	3753	26907	17629	14880	10524	80959	117347
2	Kaniyambadi	45345	53590	8237	5069	10669	6990	1996	1308	24443	33880
3	Katpadi	68997	81542	7543	4642	14844	9725	15307	10029	31303	22478
4	Anaicut	65486	77393	20971	12905	18742	12279	4037	2645	21736	30281
5	Gudiyatham	113589	134242	11217	6903	19254	12615	21082	13812	62036	52805
6	Pernampet	82626	97649	8016	4933	19221	12593	10057	6589	45332	48057
7	K.V.Kuppam	53215	62890	10192	6272	19694	12903	18353	12024	4976	111761
8	Walajah	77661	94444	8659	5329	16484	10800	1938	1270	50580	60085
9	Sholinghur	56209	66429	17678	10879	23964	15701	3896	2553	10671	29682
10	Arcot	70742	83604	10960	6745	21410	14027	9832	6442	28540	38553
11	Timiri	63780	75376	18344	11289	26535	17385	3171	2078	15730	27909
12	Arakkonam	54455	64356	6344	3904	21135	13847	2193	1437	24783	27797
13	Nemili	66225	78266	15753	9694	23413	15340	5059	3315	22000	14427
14	Kaveripakkam	62062	73346	17626	9354	23825	14635	7407	4853	13204	36772
15	Thirupattur	84214	99526	17019	10473	18487	12112	4624	3030	44084	22450
16	Kandhili	63246	74745	16128	9925	20917	13704	4072	2668	22129	30184
17	Jolarpet	74487	88030	14297	8798	23005	15072	22173	14527	15012	22666
18	Natrampalli	46524	54983	13915	8563	17059	11177	6048	3962	9502	23000
19	Madhanur	70912	83805	5795	3566	12494	8166	2551	1671	50072	46916
20	Alangayam	78561	92844	16602	10215	12637	8299	3314	2169	46008	48019
Vellore District		**1427180**	**1689330**	**251394**	**153211**	**390696**	**254999**	**161990**	**106906**	**623100**	**845069**

Source: DD, Statistics, Vellore, 2011

The above data reveals a drastic decline trend in cultivators from 2001 to 2011. The district cultivators' percentage declined from 17.61 percent to 9.09 percent in 2001 and 2011 respectively. In terms of Agricultural labourers, the district data shows decreasing trend from 27.37 percent to 15.09 percent in 2001 and 2011 respectively. House hold industries (HHI) data also shows decreasing trend from 11.35 percent to 6.32 percent in 2001 and 2011 respectively. Other workers data shows increasing trend 43.65 percent to 50.09 percent in 2001 and 2011 respectively. The composition of workers in all three sectors the decreasing trend is more than 50 percentage except other workers sector shown increasing trend above 100 percentage.

Registration and Placement provided by the Employment Office

The Government of Tamil Nadu has introduced online registration facilities for the candidates. It simplifies the process of registration, renewal and record maintenance for the applicants and the government. A set of data has observed from 2009 to 2014, in this period, nearly, 242587 persons registered their qualification with the employment exchange office. Out of 242587, virtually, 3392 candidates got appointment through District Employment Office.

The numbers of people who registered in the employment exchange and have been placed are presented in the table 3.4. The table indicates that the percentage of placement has been decreasing since 2008.

TABLE 3.4 REGISTRATIONS AND PLACEMENT

Sl. No	Year	Registration	Placement	% of Placement
1	2009	54404	1011	1.90
2	2011	33124	581	1.75
3	2012	51633	816	0.63
4	2013	53818	764	0.70
5	2014	49608	220	2.25
Total		242587	3392	1.4

Source: District Employment Officer, Vellore. 2011

Box 3.2 MGNREGA –Employment and Income: Employment Generated the financial year 2013-14

Under MGNREGA, the entitlement of 100 days of guaranteed employment in the financial year is in terms of households. According to government of Tamil Nadu sources the scheme's – '100 days entitlement of a household can be shared among the members of that household'. This implies they must be residing within the village panchayat area and are willing to do unskilled manual work. The resident households may apply as an individual or a household to the local village panchayat's seeking employment. The benefits of the scheme would facilitate reduction of poverty in BPL households. The table presented below gives the beneficiaries under this scheme.

Percentage of HH provided employment under MGNREGA

District	Total No of HHs		HH Provided Jobs Under		% of HH Provided with Jobs	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Vellore	529479	529479	362040	378250	68	71

Source: Project Director, District Rural Development Agency. 2013-14, Vellore

Analysis of the table reveals that in the number of households who are working and registered under MGNREGS. Natrampalli particularly reports only 32 percent HH completing their 100 days. However, the gap between the number of people who demanded jobs and those provided with jobs has not been very high in any of the blocks. Only in Kaveripakkam block, the difference is substantial.

Source: District Rural Development Agency, Collector ate, Vellore, 2014.

Income

Income is one of the key dimensions to measure HDI. A decent standard of living depends on accessibility to resources. Five indicators of standard of living are taken as proxy indicators to measure human development at block level. Because, per capita income is calculated up to District unit.

Per capita Income

TABLE 3.5 Per-Capita Income

S. No	District/ State	At Constant Prices (In Rupees)			
		2008-09	2009-10	2010-11	2011-12
1	Vellore	41659	46507	52900	63185
2	Tamil Nadu	43193	47394	53507	63996

Source: State Planning Commission, Chennai, 2011

The study of the PCI reveals from 2008-09 to 2011-2012; there has been an increasing trend in both the district and State level. The percentage of PCI increase for the year 2011 – 2012 for the Vellore District (16.27%) when it is compared with the state average (16.39%) for the year 2011-12 and the variation between the district and growing par with state.

The share of tertiary sector (57.57%) in terms of NDDP is high, followed by the secondary sector (36.43%) and growth in three sector`. The contribution of primary sector is very low to NDDP

(These are industries that produce goods using resources in the location). But, nearly one fourth (24.16%) of the labour force mainly depends on primary sector, specifically Agriculture and allied activities.

Poverty and Inequality

Poverty and inequality has higher implications with human development. Unequal distribution of resources causes poverty. It includes multidimensional factors that are economic, social and political. The recent measure being introduced for assessing the poverty is Multidimensional Poverty Index which is used in PUDHU VAAZHVU PROJECT and Tamil Nadu State Livelihood Mission with participatory method. It helps to understand the deprivation of the family in three dimensions such as health, education and quality of life / standard of living.

TABLE 3.6 LEVELS OF POVERTY

Sl. No.	Block wise / District	Total No. of HHs	Total No. of BPL HHs	% of BPL families
1	Thirupathur	34166	13536	40
2	Jolarpet	40498	13289	33
3	Kandhili	37926	14122	37
4	Natrampalli	22662	8064	36
5	Alangayam	22027	10366	47.1
6	Vellore	17147	5761	34
7	Kaniyambadi	19426	6452	33
8	Anaicut	33876	10345	31
9	Madhanur	24198	9453	39.1
10	Katpadi	20295	6456	32
11	K.V.Kuppam	32995	10639	32
12	Gudiyatham	44081	17842	40.5
13	Pernampet	34420	15302	44.5
14	Wallajah	35691	11020	31
15	Sholinghur	30053	9775	33
16	Arakonam	20142	5935	29
17	Nemili	32292	11616	36
18	Kaveripakkam	40242	12679	32
19	Arcot	26524	9195	35
20	Thimiri	27433	10742	39.2
Vellore District		**596094**	**212589**	**35.6**

Source: Mahalir Thittam and PudhuVazhvu Project, Vellore 2013-14**.**

About one third (35.6%) of the district's total population was below the poverty line in 2013. The poverty range starts from Alangayam (47.1%), Pernambut (44.5%) and Gudiyatham (40.5%) and the variation is 18.1 percentages. It clearly indicates the disparity within the districts, 9 blocks have BPL households more than the district average (35.6%), which indicates that the district need to improve better education and skill training opportunities for the families and reduce the marginal workers by increasing the main workers' share to the total workers.

Public Distribution System

Tamil Nadu Government is implementing Universal Public Distribution System (UPDS) and no exclusion is made based on the income criteria. The Hon'ble Chief Minister has made the universal public distribution system 'poor friendly' by ordering rice at free of cost under public distribution system to all eligible card holders from 01.06.2011. Tamil Nadu Civil Supplies Corporation procures rice and other essential commodities required for public distribution system from Food Corporation of India and through tenders. Distribution of commodities through fair price shops is being carried out by Tamil Nadu Civil Supplies Corporation and the Cooperative Societies.

TABLE 3.7 FAMILY CARD HOLDERS

Sl. No	Taluk Wise	HH provided Family cards	
		2011-12	2013-14
1	Vellore	173132	174211
2	Walajah	104199	105912
3	Arakonam	122486	123573
4	Arcot	60855	61426
5	Gudiyatham	100112	100537
6	Thirupathur	127234	95953
7	Vaniyambadi	76472	108996
8	Ambur	73611	73321
9	Katpadi	96274	96994
District Total		**934375**	**940923**

Source: District Supply Officer, 2013-14, Vellore.

As expenditure on food constitutes a considerable amount for families, the PDS is an essential element of the government's safety net for the sudden inflation. The BPL card holders get 35 kg of rice per month. The block wise family card holder status has been furnished above and overall 940923 cards have been distributed in the Vellore District in the year 2013-14.

Conclusion

This chapter depicts that the Work Force Participation Rate (WPR), which is the proportion of workers to the total population, has increased. The district has shown an overall upward trend in terms of employment. There is lowering of the non-working population and this is a positive sign when compared to the other districts in the State. The Work Participation Rates was higher in rural areas than in urban areas. The male WPR has declined and female WPR has increased between 2001 and 2011. A drastic declining trend found in cultivators from 2001 to 2011. Small industries and manufacturing data shows decreasing trend in 2001 and 2011. The percentage of placement has been decreasing since 2008.

The percentage of PCI increased for the year 2011 – 2012 for the Vellore District than the state average for the year 2011-12.The contribution of primary sector is very low in NDDP. Agriculture is a primary sector, enhancement in agriculture production through new technology adoption is the need of the hour to promote rural livelihood as backbone of our country. One third of the district's total population was below the poverty line in 2011.

As a whole, this chapter indicates that the district needs to improve employment opportunities for the BBL families and reduce the marginal workers by increasing the main workers' share to the total workers. More emphasis should be placed on employment generating schemes. Block specific interventions are required to overcome the inequality. Improvements in the physical infrastructure, access to facilities like education and health only will be able to change the situation for the better.

CHAPTER 4
DEMOGRAPHY, HEALTH AND NUTRITION

Chapter

4

Demography, Health and Nutrition

Introduction

The Human Development Index includes Life Expectancy at Birth as an indicator that attempt captures the overall health status of the population. But life expectancy is an outcome of nutrition, health, sanitation and availability of basic services like sanitation and drinking water facilities. One can notice that fertility, morbidity and mortality have significant influence on life expectancy and on demographic trends of population. Health, nutrition, sanitation and availability of basic services are closely linked to the wellbeing of an individual, family and society. Although Tamil Nadu has been consistently performing better in most of the health parameters than the country as a whole, there are huge inter and intra district disparities. This chapter focuses on critical factors: Demography, Health and nutrition of with human development focus at block level.

Health is more than just life expectancy and it includes questions of richness, morbidity, humanity and sustenance. In this chapter, the population and Demographic transition, Crude Birth Rate and Crude Death Rate, sex ratio, child sex ratio, life expectancy at birth, maternal mortality rate, place of delivery, still birth rate, nutritional status, provision of IFA tablets, water supply, sanitation and Special programme of AIDS control are the parameters discussed at length.

Demographic Trends and Health Indicators

Population and Demographic Transition

Demographic transition indicates changes that are happening in the population characteristics which is likely to either have a positive or a negative influence over human development. For example, the phase of demographic transition witnessed in the district indicate on the one hand, the challenges to be met for sustaining the level of human development and on other hand the general wellbeing of the population. An analysis of the decennial growth of population from 2001 to 2011 shows that total population of Vellore District grew by 13.2% from 34,77,367 to 39,36,331 as per the 2011 Census, which is higher than the state ratio.

TABLE 4.1 DEMOGRAPHIC PROFILES

Sl. No	Name of the Blocks	Population		Sex ratio		Density	
		2001	2011	2001	2011	2001	2011
1	Vellore	360780	133525	1003	1042	2738	1338
2	Kaniyambadi	110692	69437	1013	1029	812	572
3	Anicut	144971	161116	997	1013	265	295
4	Gudiyattam	250931	270093	1002	1013	748	850
5	Pernambut	213602	256428	1005	1028	382	458
6	K.V.Kuppam	118712	128679	1007	1018	524	568
7	Katpadi	167241	51376	1013	1015	810	300
8	Wallajah	212237	258137	1008	1024	898	1092
9	Sholingur	134596	141745	995	1000	473	499
10	Arcot	178975	200769	1004	1009	668	750
11	Thimiri	131671	145515	1012	1005	374	413
12	Arakkonam	158159	171316	974	997	801	867
13	Nemili	141813	156037	998	1009	475	523
14	Kaveripakkam	159671	176673	998	997	450	497
15	Tiruapttur	197379	215044	977	982	521	568
16	Kandili	130672	146890	965	961	455	511
17	Natrampalli	94301	92241	980	987	411	402
18	Jolarpet	169376	207923	978	986	582	714
19	Alangayam	207967	236158	985	998	473.00	538
20	Madanur	193621	221900	1015	1024	826	947
21	Vellore Corporation	Nil	495329	Nil	1011	Nil	6041
	Vellore District	**3477367**	**3936331**	**997**	**1005**	**684**	**893**
	Tamil Nadu	**62,405,679**	**72,147,030**	**986**	**996**	**480**	**555**

Source: Census Report, India, 2011

Out of 20 blocks and one corporation at Vellore district, five blocks have higher growth rate when compared with the district growth rate. Comparatively the growth rate average of Pernambut, Wallajah, Jolarpet, Madhanur and Alangayam are more than the district average. The population growth of the district 13.19 percent, which is lower than the state average.

As per the 2011 census results, Vellore UA has a population of above 8 lakhs. City Population grew from 423,425 in 2001 to 502,000 in 2011.Vellore City consists of Sathuvachari, Vallalar, Dharapadavedu, Shenbakkam, Allapuram, Fort, Kaspa, Vasanthapuram, Thiyagarajapuram, Thottapalayam, Saidapet, Thorapadi, Hazrath makkan, Otteri, Velapadi, Salavanpet, Rangapuram, Bagayam, Kazhinjur, Gandhi Nagar, Katpadi, Palavansaathu, Virupakshipuram, Konavattam, Virudampet, Kangeyanallur, Idaynsaathu, sripuram, Alamelumangapuram(A.M.Puram) and Chitheri.

As per census 2001, Vellore had a total population of 360780 and it was reduced to 133525 covering only Vellore city. Similarly katpadi had 167241 population as per 2001 census and reduced to 51376 in 2011. This is due to redistribution of population among added areas by making Vellore as a Municipal Corporation in 2008.

Crude Birth Rate and Crude Death Rate

The crude birth rate is the number of live births occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year. The crude death rate is the number of deaths occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year. The CBR of Vellore District and Tamilnadu is same (15.9%).

Figure 4.1 Trends in CBR and CDR
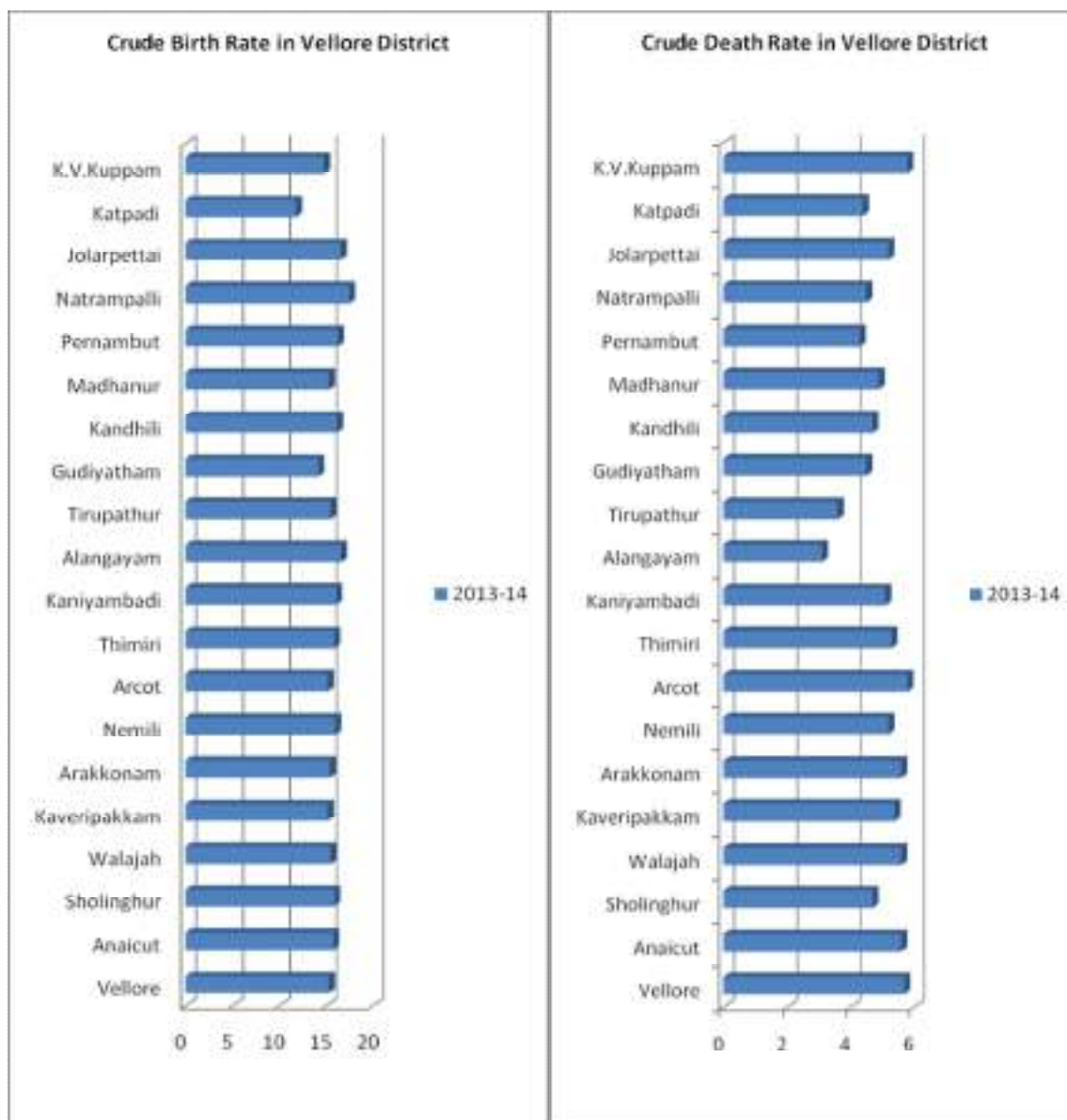
Source: DD Health Vellore & Tirupattur, 2013-14

It indicates declining trend between 2011 and 2014 in both CBR and CDR in the district which is also responsible for upward demographic transition in the district during the reference period. As a

consequence of family planning drive, birth rate has registered a declining trend consistently in the three years from 15.9 percent in 2011 to 15.7 percent in 2014. Block wise data shows about CBR increased in Nemili, Thimiri, Kaniyambadi, Kandhili, Pernambut, Natrampalli and Jolarpet blocks. The CDR of Vellore District showed a small decrease from 5.4 percent in 2014 to 5 percent in 2014. K.V. Kuppam (6.1%), Arcot (5.8%) and Vellore (5.7) have the higher rate of CDR. The variation between the blocks are 2.3 percentage. The variation could be because of improved civic amenities in terms of better diet, safe drinking water, better sanitation facilities, life saving drugs and awareness programs to rural and urban areas through mobile clinics and medical camps.

Sex Ratio

Sex ratio is a widely used indicator to capture the various facts of discrimination and inequalities against women and girl children. A patriarchal society with traditional myths, believe and value system is responsible for lack of decision making power and social participation in the community.

TABLE 4.2 SEX RATIO

Sl. No	Block	General		+ / -
		2001	2011	
1	Vellore	1003	1042	39
2	Kaniyambadi	1013	1029	16
3	Anicut	997	1013	16
4	Gudiyattam	1002	1013	11
5	Pernambut	1005	1028	23
6	K.V.Kuppam	1007	1018	11
7	Katpadi	1013	1015	2
8	Wallajah	1008	1024	16
9	Sholingur	995	1000	5
10	Arcot	1004	1009	5
11	Thimiri	1012	1005	-7
12	Arakkonam	974	997	23
13	Nemili	998	1009	11
14	Kaveripakkam	998	997	-1
15	Tiruapttur	977	982	5
16	Kandili	965	961	-4
17	Natrampalli	980	987	7
18	Jolarpet	978	986	8
19	Alangayam	985	998	13
20	Madanur	1015	1024	9
21	Vellore Corp	NA	1011	1011
Vellore District		**997**	**1005**	**8**

Source: Census of India, 2011

The above table describes the block wise sex ratio of the Vellore district. The sex ratio for the Vellore district was 1005 females for 1000 male population. While it is higher than the state average (995).

In Vellore district, 17 blocks show better sex ratio, which is a good sign with regard to women status and gender balance. Vellore block, Peranambut and Arakkonam stand first three positions in sex ratio in the district level.

Child Sex Ratio

Child sex ratio is defined as the number of females per 1000 males in the age group 0 to 6 years in the population. The Child sex ratio at birth in the district reveals a ratio favorable to boys. This means that more boys are born like compared to girls. The sex ratio at birth is considered normal if it is between 940-950 girls per 1000 boys. The child sex ratio is calculated as number of girls per 1000 boys in the 0-6 year's age group. In Vellore, however, the 2001 Census reported a child sex ratio of 937 and 2011 census reported 944. The child sex ratio has shown an improvement in the inter-census period

TABLE 4.3 CHILD SEX RATIO

Sl. No	Block wise/District /State	Population in the age group of 0-6		Sex-ratio
		Male	Female	
1	Vellore Block	11511	11209	974
2	Kaniyampadi	4359	4045	928
3	Anaicut	9362	8842	944
4	Madhanur	12762	12248	960
5	Gudiyatham	14729	14014	951
6	Pernambut	15627	14937	956
7	K.V.Kuppam	6820	6525	957
8	Katpadi	3053	2891	947
9	Walajah	14077	13248	941
10	Sholingur	7819	7248	927
11	Arcot	11336	10644	939
12	Timiri	7849	7458	950
13	Arakkonam	9102	8656	951
14	Nemili	8744	8360	956
15	Kaveripakkam	10084	9552	947
16	Tirupathur	12893	11827	917
17	Jolarpet	12474	11542	925
18	Kandili	9035	8163	903
19	Alangayam	15348	14276	930
20	Natarampalli	5424	5040	929
21	Vellore Corp	25288	24352	963
Vellore District		**227696**	**215077**	**945**
Tamil Nadu		**72,35,160**	**68,94,821**	**946**

Source: DD Statistics, Vellore, 2011

The status on the child sex ratio is found to be less as per the above table. The district average is slightly lesser than the state average (945) in terms of child sex ratio (946). Vellore block has the highest

rate of child sex ratio (974) and the lowest in Kandhili (903). It is found that the prevalence of better sex ratio in urban areas and lower in rural areas. It shows the possibility of female infanticide, poor health care service for girl children, inadequate immunization and cultural practices.

Life Expectancy at Birth

The Life Expectancy is defined by World Bank as the birth indicates the number of years a newborn infant would life if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. LEB is a composite indicator and outcome of morality pattern of different age groups. The increase in life span is the outcome of the improved survival of young and old aged people. The average life expectancy of Vellore District for the year 2011 is 75.3 years, which is higher than the state average (70.9). The LEB showed an increase from 68.3 to 75.3 years.

TABLE 4.4 LIFE EXPECTANCY AT BIRTH

Sl. No	District /State	2001	2011
1	Vellore District	68.3	75.3
2	Tamil Nadu	64.8	70.9

Source: Census of India, 2011.

Infant Mortality Rate

IMR is one of the components of the human development. The lower the IMR, higher will be the quality of life in terms of general wellbeing in relation to the higher accessibility and availability of health related inputs. Infant mortality is noted as the death of a child less than one year of age. Infant mortality takes away society's human capital.

Figure 4.2 - Infant Mortality Rate
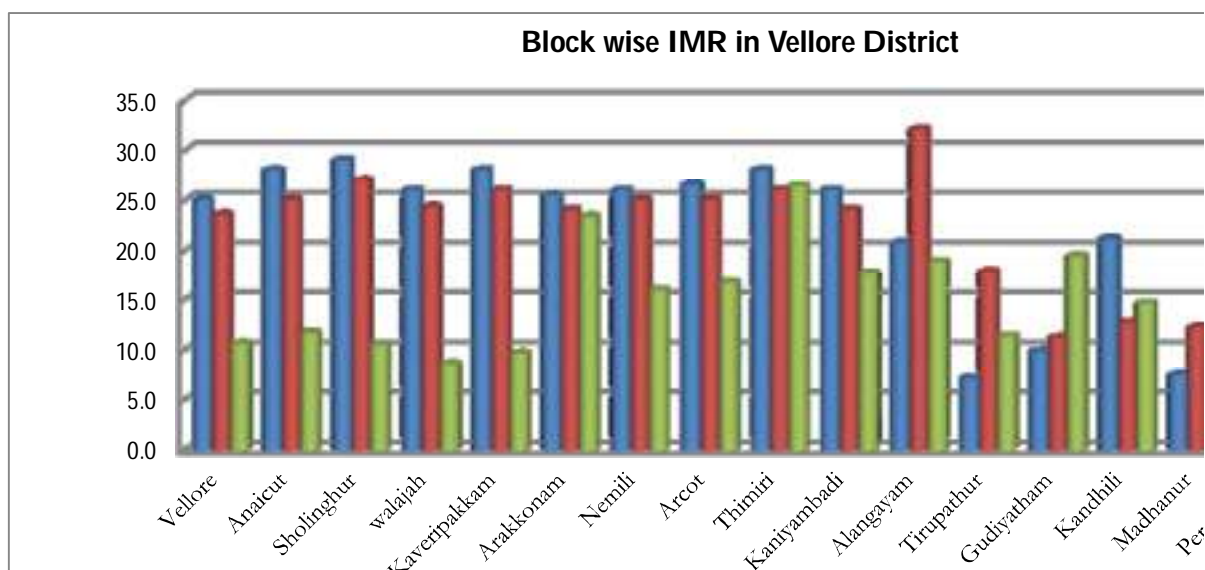
Source: DD Health Vellore & Thirupathur, 2014

Thimiri (26.4%), Arakkonam (23.3%) and Gudiyatham (19.4%) are the top three blocks with highest IMR in 2014. As the socio economic status of the community is low and there is lack of

awareness in the community, the health outcomes are also poor. There are also more habitations with fewer facilities. There is increasing need to educate mothers about proper child care, disease prevention, management through community sensitization and mobilization. Natrampalli (8.1%), Katpadi (8.2%) and Walajah (8.5%) blocks reported with least IMR, which could be due to the higher access to health facilities and environmental conditions being good in the urban areas along with greater awareness among mothers. The variation in the IMR at block level between the highest and lowest is 18.3 percentage, which could be due to limitation of inter block accessibility to poor road and transportation facilities.

Maternal Mortality Ratio

According to WHO, Maternal deaths is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. Children whose mothers have died during child birth have greater chance of dying in their first year than those whose mothers remain alive. Majority of maternal deaths are caused by direct obstetric causes such as haemorrhage, infection, hypertensive disorders of pregnancy and complications of unsafe abortion. Govt. has ensured better health care services which include establishment and certification of comprehensive emergency obstetric and newborn-care centres, 24-hour x 7 day's delivery services at Primary Health Care centres.

TABLE 4.5 MATERNAL MORTALITY RATIOS

Sl.No	Block/ District	2014
1	Vellore Block	10.0
2	Anaicut	41.0
3	Sholinghur	51.9
4	Walajah	41.6
5	Kaveripakkam	77.9
6	Arakkonam	83.2
7	Nemili	96.5
8	Arcot	45.9
9	Thimiri	57.5
10	Kaniyambadi	65.1
11	Alangayam	46.4
12	Tirupathur	139.3
13	Gudiyatham	46.1
14	Kandhili	10.0
15	Madhanur	135.2
16	Pernambut	71.2
17	Natrampalli	115.4
18	Jolarpettai	36.2
19	Katpadi	55.5
20	K.V.Kuppam	61.8
21	Vellore Corp	10.0
	Vellore District	**64.39**

Source: DD Health Vellore & Thirupathur, 2014

The MMR of Vellore district was 64.39 percent in the year 2013-14, which is less compared to previous year 2012-13. The IMR and MMR reflect the availability of quality of health care services to the

people. The highest MMR found in Tirupattur (139.3), Madhanur (135.2) and Natrampalli (115.4) blocks, which is due to poor antenatal care given to high risk mothers and also their referral on time. Pregnant women need to be given good care; there is need for awareness more at the community level regarding access and care available in the public health system. The lowest MMR found at Anaicut, Walajah, Arcot, Alangayam, Gudiyatham, Kandhili, Jolarpet and Vellore Corporation were less than 50 percent.

Place of Delivery

Institutional delivery prevents the risk of maternal death. The place of delivery and assistance add significant impact on the reduction of MMR and IMR. It helps to prevent unsafe delivery practices. In rural areas, the place of delivery differs depending on one's convenience and accessibility to safe and appropriate delivery places. It can be broadly classified into two categories; domiciliary and institutional deliveries.

Figure 4.3 Percentage of Institutional Delivery Overall District
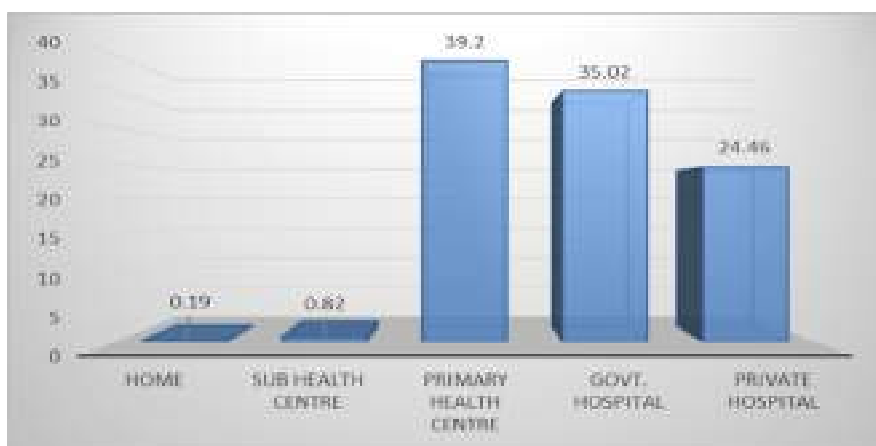
Source: DD Health Vellore & Thirupathur, 2011

It was found that Peranambut block (3997), Jolarpet (3066) and Kaveripakkam (2620) blocks stand high in number of deliveries in Vellore district. Vellore block has recorded highest in sub-health centre deliveries (10.83). No deliveries were recorded in Anaicut and Walajah block sub-health centres. Among the deliveries in Primary Health centres, Natrampalli block (66.6), Govt. hospitals, Gudiyatham block (67.18) and Private hospitals, Katpadi block (51.64) stand high. In Vellore district, most of the deliveries recorded in Primary Health Centres (39.2). No home deliveries recorded in Katpadi, Jolarpet, Peranambut, Thimiri and Arakkonam block, which shows that 100% institutional deliveries have been in practice. Institutional delivery has increased after the introduction of various schemes linked to institution based safe delivery. However, a less than 1 percent of deliveries are happening at home or classified as domiciliary deliveries. There is now greater awareness in the community and availability of ambulance in the health care system in Vellore district like 108 and 104 which has improved access to health greatly.

Still Birth Rate

Still Birth Rate is defined as the number of still birth per 1000 live birth during the year. Pre-partum still birth are those, which occur before labor, may reflect genetic or gestation conditions, including maternal nutritional status and exposure to infection and toxins during pregnancy. The SBR of Vellore district is 12.0 in 2012. Over a period of six years (2007-2012), the SBR decreased from 17.7 to 12.0. A poorly functioning placenta may be the direct cause of stillbirth, or it may contribute to it because the baby's growth has been held back. Other conditions that can cause stillbirth or may be associated with stillbirth include bleeding (haemorrhage) before or during labour, placental abruption, high blood pressure, a problem with the umbilical cord, intrahepatic cholestasis of pregnancy (ICP) or obstetric cholestasis and pre-existing diabetes.

TABLE 4.6 STILL BIRTH RATE

SL. No	Block	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Vellore	7.0	8.7	9.4	12.4	8.2	7.8	9.5
2	Anaicut	24.7	21.0	25.4	21.8	16.3	14.4	13.8
3	Sholinghur	16.8	12.5	5.7	9.8	8.4	7.7	7.8
4	Walajah	8.0	2.9	5.8	9.6	8.3	10.0	11.6
5	Kaveripakkam	22.0	18.3	11.1	10.4	17.4	9.3	13.7
6	Arakkonam	19.4	11.6	8.0	15.5	8.3	16.9	6.9
7	Nemili	19.7	15.7	17.9	12.8	12.2	9.8	13.4
8	Arcot	15.1	12.2	13.5	16.2	7.4	11.2	12.6
9	Thimiri	24.5	21.3	16.4	11.3	8.4	12.6	14.8
10	Kaniyambadi	13.5	8.4	10.2	5.6	11.2	7.7	9.9
11	Alangayam	15.0	15.4	12.2	16.2	17.8	12.1	15.1
12	Tirupathur	12.8	11.5	7.9	10.3	14.4	12.3	7.5
13	Gudiyatham	14.5	16.2	13.9	12.6	14.3	10.8	20.6
14	Kandhili	20.4	23.4	19.7	22.2	20.7	9.4	19.4
15	Madhanur	25.5	26.8	20.4	18.5	10.0	14.9	13.3
16	Pernambut	20.7	24.3	18.1	12.9	15.4	19.8	18.4
17	Natrampalli	26.1	25.0	16.4	14.5	6.1	10.3	11.3
18	Jolarpettai	15.5	17.6	21.8	20.0	12.5	21.6	14.0
19	Katpadi	13.4	8.1	17.3	18.6	16.5	14.2	13.1
20	K.V.Kuppam	18.4	15.5	14.0	12.1	11.2	7.7	12.9
	Vellore District	**17.7**	**15.8**	**14.3**	**14.2**	**12.3**	**12.0**	**13.1**

Source: DD Statistics, Vellore, 2013

SBR of Vellore district is found high in Gudiyatham (20.6), Kandhili (19.4) and Pernambut (18.4) blocks and the SBR is found lower in Arakkonam (6.9), Tirupattur (7.5) and Sholinghur (7.8). The variation between the highest and the lowest SBR among the blocks was 13.7 pecent. Despite similar disparities for maternal and neonatal deaths, which are currently being addressed under the Millennium Development Goals, stillbirths remain an invisible public health priority. Poor pregnancy outcomes often result in repeated pregnancies and deterioration in women's health in addition to financial and social

burden. But despite the presence of infrastructure for health services in terms availability of hospitals as seen earlier, SBR grabs the need for attention towards the health dimension.

Immunization

Vellore fares well in immunization. Vellore has the best record for immunization among the districts of Tamil Nadu. In Tamil Nadu practically, the 1.1 million infants born every year is covered. 1.2 million Pregnant women are also immunized against tetanus every year. The quality of the immunization programme has improved considerably over the past 15 years with cold chain maintenance and potency of vaccine being ensured, leading to a substantial reduction in vaccine preventable deaths. In Vellore District, an overall- 97.3 percent of the total children is immunized as per the DD health Vellore and Thirupattur reports. Particularly K.V.Kuppam, Madhanur, Kanthili, Gudiyatham, Thirupattur, Ranipet, Sholinghur, Walajah and Kaveripakkam are blocks where 100 percent immunity has been acheived.

Female Infanticide

The period of infant death includes early neo-natal (0 – 7 days), late neo-natal (8 – 28 days) and post neo-natal (29 days – one year) periods. If the IMR gender differential (IMR of male – IMR of female) is negative, it is an indicator to understand the incidence of female infanticide. If the IMR gender differential is higher, it is an indicator to understand the intensity of female infanticide. Thus, the analysis of early neo-natal deaths and late neo-natal deaths and the gender differential during this period will reveal the prevalence and intensity of female infanticide.

In Vellore district, Kandhili, Tirupattur, Jolarpet, Natrampalli, Alangayam, Kaveripakkam, Walajah and Arcot blocks have registered low female child sex ratio less than 950 per 1000 male children, which indicates that the female discrimination and infanticide is prevalent in these blocks. Majority of these blocks have rural socio-economic characterists. With regard to IMR, Alangayam, Madhanur, Peranampet stands top in Vellore district. In MMR, Kaniyambadi, Walajah, Gudiyatham blocks stand high and in U5MR, Vellore, Madhanur and Alangayam blocks stand high. Alangayam, Madhanur, Tirupattur and Nemili blocks show greater correlation among MMR, IMR, U5MR that would indicate the prevalence of female infanticide. These blocks need to be addressed for ensuring a balanced sex ratio.

Nutritional Status

Malnutrition is not uncommon in many under developed and developing countries because of the low capability of nutrition absorption and utilization by the body when it is exposed frequently to infectious episodes like diarrhea. There is wide variation in nutrient absorptive capacities due to different socio economic classes. The basic of weight of the children were classified in to three grades such as Children under normal, moderately nourished and Severely nourished grade. The prevalence of malnourishment was relatively higher among children 10-14 yrs. quantifying the nutritional needs of the

children in the developing age. The clinical assessment in determining the nutritional deficiencies is by physical examination. As the nutrition status deteriorates; under nutrition results which in turn decrease the resistance to infection and this is a synergistic relationship. Thus, the term nutritional status is used to describe an outcome of several biomedical processes, interacting over time. Even when mortality is controlled, the nutritional status may not improve. Education and communication regarding the importance of nutrition can go a long way in bringing about long-term changes in attitudes and recognition by parents about importance of nutrition for their children.

Nutrition level and Trend

A ranking of districts by nutritional grades has been attempted. Ranks were determined on the basis of monitoring data on participating children in the age group 6–36 months in 19 districts 7 from 1996 to 1999 where TINP (now World Bank (WB)-ICDS-III) is in operation. Of the top five districts overall in the normal plus grade I category (Kanniyakumari, Coimbatore, Vellore, Thoothukudi and Erode), as many as four, are also at the top in respect of low percentages in grades III plus IV (Kanniyakumari, Erode, Coimbatore, Dindigul and Vellore), showing remarkable congruence of the top ranks. The congruence among the bottom ranks also exists but it is less remarkable

Figure 4.4   Trend in Nutritional Status (0-5 years)
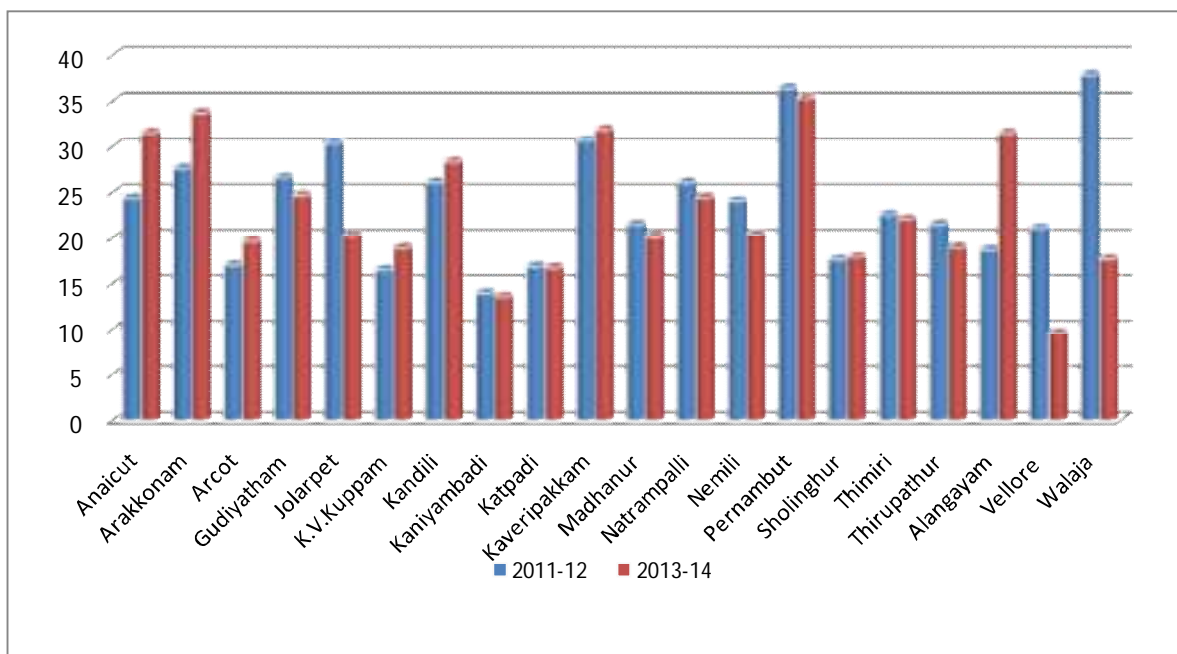
Source: ICDS, 2013-14. Vellore.

In Vellore district, around 22.46 percent of children below five years are underweight children in 2013-14. There was 2998 AWC's functioning out of which Alangayam (286), Walajah (191) and Jolarpet (190) blocks holds high number of AWC's.

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Case Studies of AWC's that are not functioning well

To evaluate the functioning of Anganwadis in the Pernampet block, the researcher visited 6 Anganwadi centres and observed that 3 of those were not functioning successfully. The reasons for incompetency in the functioning of these 3 centers are explained below.

Lack of infrastructure is the main reason for dysfunction of these centers. Basic requirements such as electricity or proper water supply are unavailable. 2 of the centers have not constructed a building, and have rented a residential space on a meagre sum. The rented structure is however not suitable or convenient to run an Anganwadi centre. It is seen to have poor infrastructure and lack of facilities such as Drinking water and Electricity. There is not enough room to accommodate the children, no proper cooking space or play area or environment conducive for the children. The lack of Sanitation (toilet facilities) is also one of the major reasons that discourage parents from sending their children to these centers. Also the location is not central and accessible to all the villages.

Provision of IFA Tablets

Anaemia is a condition in which the number of red blood cells or their oxygen carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking and pregnancy status. It is the most prevalent nutritional problem and is mainly caused due to iron deficiency. Its prevalence is highest among young children and pregnant women. For pregnant women minimum of 100 tablets is essential otherwise it would affect both the pregnant women and her child's health.

TABLE 4.7 PROVISIONS OF IFA TABLETS

Sl. No	Block wise/ District	% of women took IFA tablets		% of children took IFA tablets		% of Adolescent girls took IFA tablets	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	Vellore	72.8	93.6	1.0	1.5	74.8	97.3
2	Anaicut	94.5	92.5	1.3	1.6	94.8	96.5
3	Sholinghur	94.9	94.5	1.3	1.8	39.5	94.5
4	Walajah	66.3	93.4	1.8	2.1	60.2	95.2
5	Kaveripakkam	89.0	90.5	0.8	2.2	92.1	96.2
6	Arakkonam	69.1	91.6	1.2	1.9	48.5	94.6
7	Nemili	95.7	90.2	1.3	1.8	83.1	95.6
8	Arcot	84.6	89.7	1.3	1.7	76.6	92.5
9	Thimiri	85.0	90.2	1.8	1.8	84.5	94.6
10	Kaniyambadi	83.3	89.8	3.5	2.1	90.0	95.3
11	Alangayam	88.0	91.0	1.60	1.7	73.8	87.0
12	Tirupathur	88.5	92.0	1.00	2.1	74.5	90.0
13	Gudiyatham	88.9	89.0	1.00	2.0	83.0	88.0
14	Kandhili	94.5	91.5	0.60	1.8	78.2	91.0
15	Madhanur	88.1	92.0	1.00	1.7	78.3	90.0
16	Pernambut	93.7	89.5	0.50	1.3	78.4	86.0
17	Natrampalli	96.7	93.0	1.30	2.2	89.0	88.0
18	Jolarpettai	92.5	92.0	1.45	2.1	82.1	84.5
19	Katpadi	95.2	93.0	3.00	2.2	88.5	89.5
20	K.V.Kuppam	96.2	92.5	1.60	1.9	90.2	91.0
Vellore District		**85.2**	**91.5**	**1.3**	**1.8**	**75.5**	**91.8**

Source: DD Health, 2013-14, Vellore & Thirupathur.

Block wise data on the provision of IFA tablets in the Vellore District presented in the table. It shows that in Vellore district 91.5 percentage of Women took IFA tablets, 1.8 percentage Children took IFA tables and 91.8 percentage Adolescent girls took IFA tablets. Block wise data revels that, Sholinghur (94.5), Walaja (93.4), Natrampalli (93), Katpadi (93) stands top in percentage women took IFA tablets in the year 2013-14. In percentage of children took tablets Kaveripakkam, Nattrampalli and Katpadi blocks (2.2) stands first and in percentage of adolescent girls took tablets Vellore block stands top among the blocks. This would reduce the incidence maternal deaths. Besides ensuring IFA tablets, the district has promoted shift in food habits and behavioral changes. Anganwadi Workers reported providing Iron Folic Acid tablets to adolescent girls once a week. AWWs also provide IFA tablets to pregnant women starting from the 5th month of pregnancy. Women are advised to take the tablet twice daily until the 7th month after which time, the dose is reduced to once daily until delivery. However, women who are diagnosed with anemia continue to take two tablets a day until delivery IFA tablets are also provided to pregnant women. AWWs reported that women complain of side effects including nausea, vomiting and a burning sensation in the stomach.

Box-4.1 Nutrition Programmes of Government

Puratchi Talaivar M.G.R Noon Meal Programme. The Puratchi Talaivar MGR noon meal program was introduced and commenced on 01.07.1982 with an aim to build a healthy future human resource of our children as literate and healthy citizens of our country. This scheme was first introduced to the primary school children (from 1st to 5th standard) and then this scheme was extended to the high school students (from 9th to 10th standard) of the government school and government aided schools. This scheme is being monitored by the Social Welfare Department. The State is the pioneer of this scheme in India.

Trend in distribution noon meal to the beneficiaries

No. of Schools	No. of Beneficiaries	Total amount expenditure (Rs.)
2351	294889	17,184,631

Availability: Total Noon Meal centers are 1981 in Vellore district, Building facilities are available for the all centers where EB and Kitchen-cum stores also have been provided to all the centers and 225 LPG connections have been provided. Manpower available per center is one organizer, two cook and three assistants. If the center consists of more than 500 beneficiaries, one more cook assistant is appointed and if the center consists of more than 150 beneficiaries one more cook is appointed. The beneficiaries are all provided meals with eggs on all school working days. All children are provided with potato weekly once, and also provided with Bengal gram or green gram weekly once. To increase protein contents, non-egg eating beneficiaries are provided with banana on all school working days. The Hon'ble Chief Minister made an announcement on the floor of the Assembly on 2.11.2012 that 13 varieties of rice and 4 types of Egg Masala will be introduced in the Puratchi Thalaivar MGR Nutritious Meal Programme.

Integrated Child Development Services (ICDS): Main objective is to improve the Health and Nutrition status of women and children. Beneficiaries are 0-5 year children, Adolescent girls, Pregnant and Lactating women, Services extended: Monthly growth monitoring of 0-5 years children, Supply nutrition. feeding i.e. weaning food for the 6 months to 36 months children, Pre School education and noon meal and weekly 3 eggs to the 2-5 children, Weekly one egg for 1-2 Year Children, Registration of AN mothers and providing weaning food from registration and up to 6 months during lactation period and Coordination with health department in providing immunization, IEC on desirable health and nutrition behavior at household level. There are about 62400 children who are enrolled in preschool in Anganwadi Centers.

State Nutrition Policy: The State Nutrition Policy aims to make TN State free from malnutrition by adopting various strategies which would reach child, adolescents, women and families. Now 362 Boys and 376 girls fall into severely underweight grade in Vellore District. Action is being taken by Child Development Project Officers/Supervisors to refer them to PHCs and other medical institutions for diagnosis and treatment, counseling the parents about providing nutritious food at home and follow up services of the children. The health checkup camps for about 2000 preschool children in the age group of 2-5 + year in Vellore Urban project area was held with the help of Community Health Dept. of CMC, Vellore.

Non –nutritional Factors and their Impact on Nutrition

Water Supply

Access to safe drinking water facility prevents health risk. Time and resources are required to access water from distant sources. During the summer months, the problem of scarce water is accentuated, involving long and frequent treks to the nearest accessible water source. Primarily the women of the household undertake the responsibility of fetching water due to this they are vulnerable to a number of unsafe practices. Thus, the development of basic services reduces the drinking water problem. The development of local water supply, sanitation, roads and rural energy programmes can do much to reduce women's' burden and improve the health condition of women and children. Households that have no water source within their premises need to be covered on a priority basis.

Figure 4.5 Accesses to Drinking Water
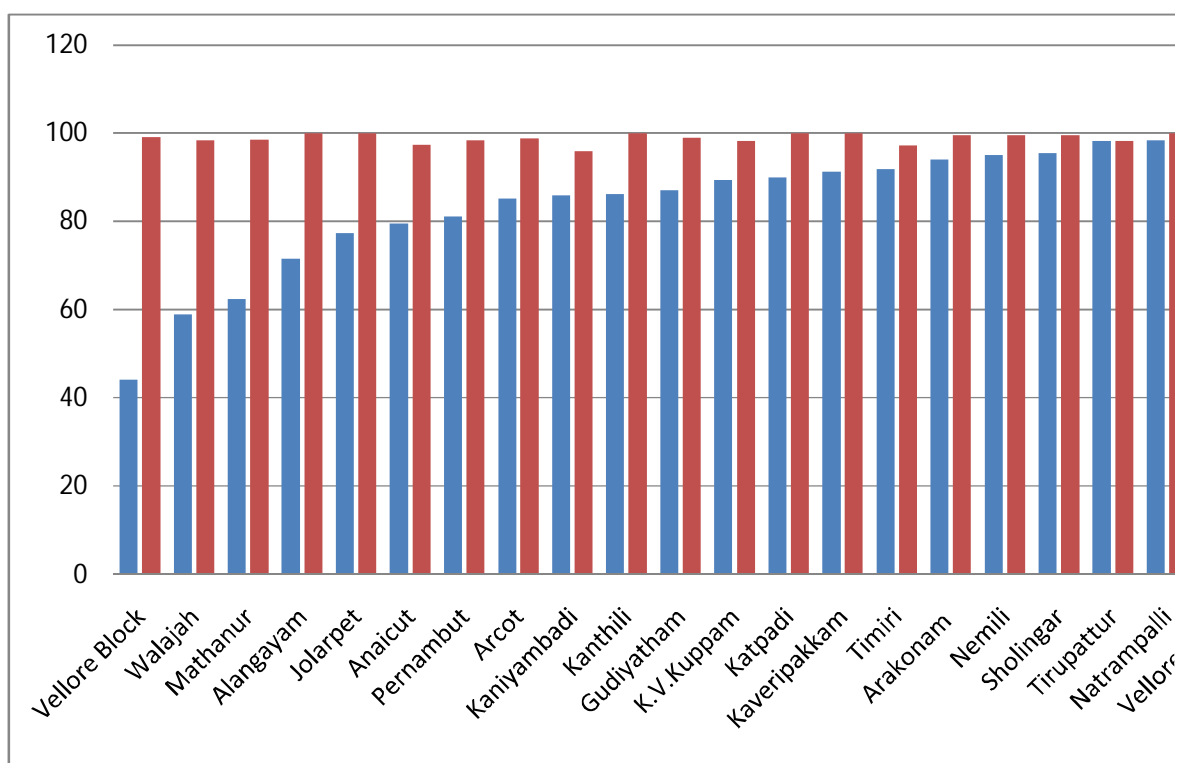
Source: www.mdws.gov.in   NRDWP, 2013

In Vellore district 99.01 percent of households have access to safe drinking water from improved source. Vellore Corporation, Natrampalli, Kaveripakam, Alangayam, Jolarpet, Katpadi and Vellore Corporations occupies in ensuring 100 percent improved water source at habitation level. Kaniyambadi, Thimiri and Anaicut blocks stand last three positions in the district in 2014. This is, however, slightly misleading as there are substantial distributional inequalities in the district, between rural and urban areas, between major towns as well as between local bodies.

Sanitation

Open defecation is an unsafe sanitation practice, which is one of the major causes for diarrhea. As the population increased as witnessed in both state and district, the demand for more housing and other related amenities for a decent and healthy living in terms of bath rooms, toilets and drainage facilities has also increased. Further from individual right perspective, it ensures dignity and privacy to the individuals. During rainy season water logging condition is not uncommon which breeds mosquitoes which act as a vector for many diseases. Toilet facilities are available to only 40.98 per cent of the households in Tamil Nadu (2013), a situation which is not good. Even in urban areas, less than 58 per cent of households have access to sanitation facilities, as compared to about 51 per cent in 1981. The fact that there has not been any significant improvement over a decade is worrisome.

TABLE 4.8 PROVISION OF TOILET

Sl. No	Block wise/District / State	Total Number of HHs	Number of HHs with Toilet facilities	% of HHs provided with toilets
			2013-14	2013-14
1	Arakonam	30757	17610	57.26
2	Tirupattur	44663	22015	49.29
3	Pernambut	46789	13836	29.57
4	Natrampalli	20979	5128	24.44
5	Nemili	32009	4700	14.68
6	Arcot	44727	23871	53.37
7	Mathanur	46905	25971	55.37
8	Timiri	33137	9672	29.19
9	Kaniyambadi	16872	5288	31.34
10	Kaveripakkam	36078	7271	20.15
11	Gudiyatham	50846	22036	43.34
12	Sholingar	32832	10952	33.36
13	Vellore	13941	2134	15.31
14	Alangayam	46490	25532	54.92
15	Jolarpet	38845	10621	27.34
16	Anaicut	31508	10927	34.68
17	Walajah	52176	22251	42.65
18	Katpadi	18673	4972	26.63
19	Kanthili	29842	5004	16.77
20	K.V.Kuppam	27986	5518	19.72
21	Vellore Corporation	111954	93290	83.33
	Total	808009	348599	43.14

Source: DRDA, Vellore, 2014

The above table reveals that percentage of households that have been provided with toilets in this district in 2013-14 is 43.14 percent. Among the blocks there are 14 blocks viz, Pernambut, Natrampalli, Nemili, Thimiri, Kaniyambadi, Kaveripakkam, Sholingar, Vellore, Jolarpet, Anaicut, Walajah, Katpadi, Kandhili and K.V. Kuppam where the percentage of households having toilet is less than the district average (43.14). It clearly indicates the very poor status on the nutritional factors in terms of low percentage of households having safe drinking water and sanitation facilities in rural areas. This also an indication of existence of poor preventive measures against diseases from health perspective. Therefore, in recent years, the emphasis is on the provision of quality community toilets with water facilities. Dry type latrines; no longer exist in village panchayat areas. Toilets within or near dwellings are a rarity in rural areas. Defecation in the open is common among villagers, not only because there is no alternative, but also because it is a preference. Even among the upper caste households that have a latrine constructed within, only the women use it while the men continue to go to the fields. Water scarcity in some villages is another factor for dysfunctional latrines.

Rural sanitation is a priority area and the elimination of open defecation in rural population with access to sanitary facilities. This will uphold the dignity and privacy of rural people and improve the quality of life in rural environs. In order to prevent defecation in open areas and in drains, concerted effort is required to disseminate knowledge and create awareness among people on sanitation and its impact on their health and environment. This can be accomplished by educating a target group, in these case women, which would in turn influence the families.

Box-4.2 Utilization of Public Health Services and health programmes of State and Central Govt.

Vellore district has 11 hospitals and the OP & IP details are given below:

Primary Health Centres (PHCs): PHC is a referral unit for six sub-centres. All PHCs provide outpatient services; a majority has four to six in-patient beds. According to the norms they have one medical officer, 14 Para-medical and other supporting staff. At the national level there are more than an adequate number of PHCs and doctors posted at PHCs but the distribution across states is uneven; there are no functional PHCs in many remote areas in dire need of health care.

Community Health Centre (CHC) is the first referral unit (FRU) for four PHCs offering specialist care. According to the norms each CHC should have at least 30 beds, one operation theatre, X-ray machine, labour room and laboratory facilities and is to be staffed at least by four specialists i.e. a surgeon, a physician, a gynecologist and a pediatrician supported by 21 para-medical and other staff.

Hospital	Total OP	IP total	OP/day	IP/day	IP Census Total	Grand Total
KALAVAI	135130	1924	370.22	5.27	5611	147301
PERNAMPET	20737	3927	549.96	10.75	12817	227873
SOLINGUR	302552	6877	828.91	18.84	21137	347355
AMBUR	432538	8960	1185.04	24.55	31035	496210
ARCOT	317565	5970	870.04	16.36	26250	371983
PENTLAND	466396	5976	1277.8	16.37	32286	528823
ARAKKONAM	696471	13570	1908.14	37.18	48112	794306
WALAJAPET	394396	10108	1080.54	27.69	42962	479320
VANIYAMBADI	558775	18129	1530.89	49.67	46349	659267
GUDIYATHAM	557086	19216	1526.26	52.65	55423	674180
TIRUPATHUR	922455	23462	2527.27	64.28	74670	1077610
TOTAL	**4984101**	**118116**	**13655.07**	**323.61**	**396652**	**5804228**

Source: JD, Health Services, Vellore, 2013-14.

Special Progammes

AIDS Control

Human immunodeficiency virus infection / acquired immunodeficiency syndrome is a disease affecting human immune system caused by viruses. There are no curative measures currently or effective HIV vaccine. In general the current health system attaches more importance to killer disease than crippling and disabling diseases. A major thrust in Tamil Nadu in tackling the AIDS epidemic has been in the area of IEC.

TABLE 4.9 INCIDENTS OF HIV

S. No	Age-Group wise	2012-13 Age wise Positive Details		2013-14 Age wise Positive Details	
		Male	**Female**	**Male**	**Female**
1	0-14	14	14	14	21
2	15-19	40	34	16	8
3	20-24	82	49	32	26
4	25-29	46	57	67	58
5	30-39	74	57	127	92
6	40-49	80	69	225	133
7	50>	56	34	91	50
	Total	**392**	**314**	**572**	**388**

Source: DD Health, 2014, Vellore and Tirupattur,

According to data source from DD Health, Vellore district, the incidence of HIV AIDS of various age groups declined. The number of people reported positive between 0-14 years's male has remains same and female has increased by 66.66 percent. The tested positive between the age group 15-19 years had decreased to 60 percentages and female had decreased 76.40 percent between 2012-13 and 2013-14. The age group from 25-49 are highly vulnerable, as the more number cases were noticed these two age groups. Mostly positive cases are between 40-49 age groups around 358 people. Proportion of males afflicted with AIDS is higher than the females and in 2013-14; it is the highest in the age group 40-49 years. All districts of the State have reported AIDS cases. The number of positive male cases increased by 31.46 percentage and the number of female cases increased by 19.07 percentage over the period of one year (2013-2014).

Tuberculosis and Leprosy Patients

The TB control programme in the State functions through district-level units. It is based on the revised national TB control programme. During the Period 2011 and 2014, 2108 and 2096 positive TB cases were identified in Vellore and also Vellore district has not eliminated leprosy as a public health problem. While the incidence of T.B. cases reported has come down, the number of leprosy cases identified has decreased. This calls for action and doubling of efforts in this programme.

TABLE 4.10 TB AND LEPROSY

District	Positive TB				Leprosy			
	2011	2012	2013	2014	2011	2012	2013	2014
Vellore	2108	2158	2120	2096	166	159	160	127

Source: DD Health, 2014, Vellore and Tirupattur,

Case Study: A Case Study on pollution in Vellore district through increasing shoe factories.

Vellore District Industries

You have heard about Vellore as a place famous for medical tourism, educational institutions and age old temples and monuments such as Vellore fort But do you know that Vellore also has hundreds of leather and tannery industries? These are located in Ambur, Ranipet and Vaniyambadi near Vellore. Finished leather goods are exported from Vellore district which include good quality garments, fashionable shoes, shoe uppers, soles, leather gloves, finished leather etc.

Industrial Growth in Vellore

The reasons for industrial growth in Vellore are many. The implementation of South Asia's second railway track between Chennai Royapuram and Walajah, the Golden Quadrilateral road has rendered transport activities in the region better. Chennai and Bangalore IT cities and Tirupati and Thiruvannamalai (Pilgrim centers) are well connected and people even travel to metro cities for work.

Vellore is Famous for Export of Leather Products

The leather industry has also provided employment to many professionals in the field. The emphasis today is on utilizing raw materials to the fullest for maximum ROI (return on Investment), especially from exports. T he leather industry involves small scale industries and cottage industries also. The leather products are of very good quality. For instance, leather shoes give good comfort to the wearer as they are designed for comfort. The Palar River is dry with over exploitation, the groundwater is colored, saline and contaminated with the leather industry's effluents and the air is thick with the stench from the tanning process. This is one of the strongholds of the leather industry in India. It was here, in the Vellore district of Tamil Nadu*, that the study team decided to look for one more different context where Industrial Ecology concepts could be applied. Like the foundry cluster in Haora, the leather industry in this region was the center of a national debate due to the high levels of pollution it created. Although traffic, power plants, and industrial and chemical plants produce the majority of Earth's manmade air pollution, many other factors contribute to the problem.

Conclusion

Total population of Vellore District grew by 13.2% from 34,77,367 to 39,36,331 as per the 2011 Census, which is higher than the state ratio. The density of the district has increased (23.40%) from 684 to 893, which is higher compared to state average (13.51%). The sex ratio for the district was 1005 females for 1000 male population for the year 2011. While it is higher than the state average (995). The district average is slightly lesser than the state average (945) in terms of child sex ratio (946). The life expectancy of the district for the year 2011 is 75.3 years, which is higher than the state average (70.9). The LEB showed an increase from 68.3 to 75.3 years. With regard to IMR, Timiri block (26.4), Arakkonam (23.3) and Alangayam (18.8) were the top three blocks in 2014. The MMR was 64.39in the year 2014. The highest MMR found in Tirupattur (139.3), Madhanur (135.2) and Natrampalli (115.4) blocks, which is due to poor antenatal care given to high risk mothers and also their referral on time.

Most of the deliveries in the district recorded in Primary Health Centres (39.2). SBR of Vellore district is found high in Gudiyatham (20.6), Kandhili (19.4) and Pernambut (18.4) blocks. The variation between the highest and the lowest SBR among the blocks was 13.7 pecent. The overall percentage (97.3) of the total children immunized, 91.5 percentage of Women took IFA tablets, 1.8 percentage Children took IFA tables and 91.8 percentage Adolescent girls took IFA tablets. Majority (99.01) of households have access to safe drinking water from improved source. There are 14 blocks viz, Pernambut, Natrampalli, Nemili, Thimiri, Kaniyambadi, Kaveripakkam, Sholingar, Vellore, Jolarpet, Anaicut, Walajah, Katpadi, Kandhili and K.V. Kuppam where the percentage of households having toilet is less than the district average (43.14). The number of positive male cases increased by 31.46 percentage and the number of female cases increased by 19.07 percentage over the period of one year (2013-2014). While the incidence of T.B. cases reported has come down, the number of leprosy cases identified has in fact decreased.

Though there are different health care programmes and services provided by the district administration, the inter-block variations need to be given attention to ensure equity in accessing the govt. services and programmes for achieving good health for all, particularly children, adolescent girls, pregnant and lactating mothers and under five children. This requires improved attention to areas where health indicators are adverse. Improving access with increase in awareness and information on preventive health could work in improving the health status of the district as a whole. The disparities across socio-economic classes indicate that there need to be additional focus on making health care more accessible and equitable too. The prevalence of malnourishment combined with poor sanitation coverage would cause high levels of morbidity and mortality. The high IMR and MMR in the identified blocks also need to be addressed. The awareness on preventive health and better nutrition needs to be improved in the district. In this respect the role of SHG and NGOs supplementing and complementing the govt. measures assumes significant for this social cause from health dimension.

CHAPTER 5

LITERACY AND EDUCATION

Chapter

5

Literacy and Education

Introduction

" True Education should deepen our insight, widen our horizon and create a meaningful outlook"

Dr. S. Radhakrishnan

Literacy provides a foundation to learn to read and write. Various initiatives have been taken in the district to carry on Early Learning Programme (ELP) effectively. The success of this programme lies in the provision of necessary education to students in addition to the resources like SABL cards, text books and supplementary readers. **Education should bring radical changes in human life, attitude and behavior. Children should be empowered to be global citizens with intellectual, scientific, social, cultural and human outlook. Education is not to cater to intellectual illumination alone. It should develop skills of problems-solving and social interaction to be inculcated and imbibed for the betterment of the individual and the society.**

Government of Tamil Nadu has taken several measures to improve the literacy rate in villages and towns of Tamil Nadu. Various dimensions of education development like literacy rate, gross access ratio, enrollment in primary and upper primary ratio, completion rate, transition rate from primary to upper primary, drop out ratio 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 for higher education schools, students enrolled in noon meal program, scholarship and hostel facilities, have been collected from respective government departments and the chapter studies the intra district variations. There has been a significant improvement in literacy rate of the district as in Tamil Nadu in the last ten years yet it has still a long way to go.

As part of the ongoing efforts to inspire young children to read supplementary books, language text books, school libraries and TLM supplements are provided which stimulate the students' interest in reading which in turn enhances their reading skills. Reading corners are set up in some of the class rooms using books including the existing supplementary readers and other available sources like library books and CDs to motivate the reading habit among children. In order to facilitate the efficient and sustainable implementation of the ELP, various techniques are adapted at school level.

A total of 292 higher secondary schools, 167 high schools, 559 middle schools, 2032 Primary schools are functioning in the district. Vellore has two Universities, 4 Medical Colleges, 11 Engineering Colleges, 51 Polytechnics, 25 Arts and Science Colleges, 1 Agricultural College and 1 Nursing College, apart from 39 teacher training institutes for higher education.

Literacy

Literacy is traditionally understood as the ability to <u>read</u> and <u>write</u>. The term's meaning has been expanded to include the ability to use language, numbers, images and other means to understand and use the dominant symbol systems of a culture. Literacy represents the lifelong, intellectual process of gaining meaning from a critical interpretation of written or printed <u>text</u>.

Literacy Performance of the District

The average literacy rate in 2011 was 79.17 when compared to 72.36 of 2001. In terms of gender, male and female literacy were 86.53 and 73.14 respectively. The gender gap in literacy is around 15 percentage points. This is one of the critical issues as the state is now focusing on the whole for a reduction of the gender gap to less than 10 percentage points. In 2001 census, the figures stood at 81.99 and 59.22 for the district. The gap was much higher in the previous census period but the government's steps to improve literacy rates such as free adult education programs to poor people living in villages and towns, has affected the gender gap percentage positively. Several committees have been formed to ensure proper utilization of funds allotted to improve literacy rate.

Figure 5.1 Literacy Rate in Vellore District
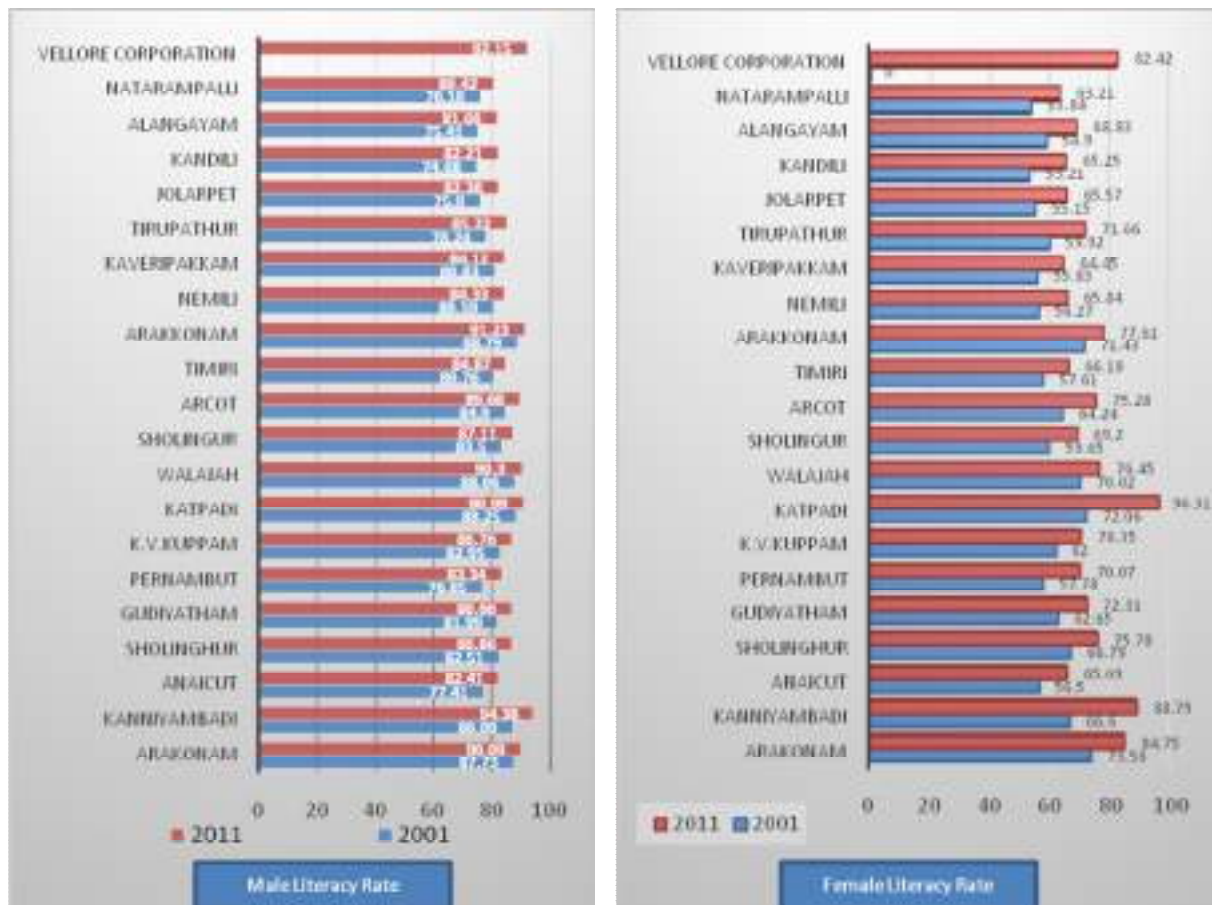
Source: Census of India, 2011

It is evident from the above charts that there is a change with the increase of literacy rate in the district by 11.44 percentage during the period between 2001 and 2011. Relatively gender wise literacy rate indicates that there is a change in both male and female to higher level of accounting 6.37 percent and 23.54 percent respectively during the reference period showing higher level for female. This increase in female literacy is encouraging from the gender perspective in Human Development Index. The block wise analysis indicates that six blocks have literacy rates higher than the district rate in 2011. Gender wise literacy of the blocks shows that seven blocks reported to be higher than the district level female literacy rate in 2011. In case of male literacy rate the number of blocks having the literacy rate higher than the district has increased from 7 to 10 (2001-2011). Although overall literacy level is improving both in district and blocks, the inter block variation in literacy rate may be a result of the accessibility of educational institutions from interior villages within the block's jurisdiction.

Elementary Education

Elementary education consisting of primary (I-V) and upper primary (VI-VIII) is the foundation of the pyramid in the education system. The district has focused its attention on assessing the gap in access to primary and upper primary schools and to provide the required number of schools, ensure the children so enrolled are retained in schools, improve the reading, writing and listening skills of the children, cover out of school children including migrant labourers' children, street children and school drop-outs, focus on education of girl children and provision of required infrastructure facilities to all schools. All these have received a major push through the State Government's own initiatives complimented by Sarva Shiksha Abiyan (SSA) launched in November 2000 to impart quality elementary education to all children in the age group 6-14 by subsuming all existing programmes. The National Programme for Education of Girls at Elementary Level (NPEGEL) was launched in 2003-04 for providing additional components for education of girls at elementary level under the SSA.

Primary Education

Education should bring radical changes in human life, attitude and behaviour. Children should be empowered to be global citizens with intellectual, scientific, social, cultural and human outlook. Elementary education defined as enrolment of all children between six and fourteen years in primary and middle school, Retention of children in primary and middle schools, both with respect to the drop out and repetition rate; and Quality of education with reference to attainment in basic language and numeracy skills.

TABLE 5.1 ENROLMENTS IN PRIMARY EDUCATION

S. No	Blocks	PRIMARY								
		BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
		100.29	99.95	103.2	100.19	99.99	102.4	100.24	99.97	102.8
2	Anaicut	100.25	99.77	102.8	99.87	99.65	103.4	100.06	99.71	103.1
3	Arakkonam	100.29	100.65	102	99.87	100.60	102	100.08	100.63	102
4	Arcot	100.31	100.70	102.4	100.25	101.25	102.7	100.28	100.98	102.5
5	Gudiyatham	100.25	100.12	101.7	99.86	100.14	101.5	100.06	100.13	101.6
6	Jolarpet	100.35	100.10	101.8	100.17	100.12	101.5	100.26	100.11	101.7
7	K.V.Kuppam	100.29	101.11	102.3	100.15	101.85	103.3	100.22	101.48	102.8
8	Kandhili	100.34	99.81	103.2	100.17	99.65	103.4	100.26	99.73	103.3
9	Kaniyambadi	100.40	99.84	101.8	100.15	100.18	101.6	100.28	100.01	101.7
10	Katpadi	100.34	100.17	103.8	100.15	100.10	103.4	100.25	100.14	103.6
11	Kaveripakkam	100.41	99.93	101.5	100.26	99.65	102.4	100.34	99.79	102
12	Madhanur	100.41	100.10	102.2	100.29	100.15	101.6	100.35	100.13	101.9
13	Natrampalli	100.39	100.27	101.4	100.26	100.65	102.1	100.33	100.46	101.7
14	Nemili	100.41	99.90	102.4	100.26	100.13	101.5	100.34	100.02	102
15	Pernambut	100.40	99.95	102.7	100.17	100.15	101.6	100.29	100.05	102.1
16	Sholinghur	100.36	99.90	103.2	100.26	100.65	102.1	100.31	100.28	102.6
17	Tirupattur	100.39	100.09	101.3	100.20	100.25	101.7	100.30	100.17	101.5
18	Timiri	100.30	102.28	103.5	100.30	100.69	102.1	100.30	101.49	102.8
19	Vellore block	100.55	100.84	101.2	100.42	100.06	103.4	100.48	100.45	102.3
20	Walaja	100.42	101.13	102.9	100.30	100.22	102.3	100.36	100.68	102.6
Vellore District		**100.37**	**100.39**	**102.5**	**100.19**	**100.29**	**102.2**	**100.28**	**100.34**	**102.4**

Source: DISE & UDISE 2013-14 -Addl. Chief Educational Officer (SSA), Vellore.

The gross enrollment in primary education in the district is more than 100 percent during 2011-12, which is increased by 2.4 percent in 2013-14. The district shows lowest GER of 101.5 percentage in Tirupattur block. Nine blocks in the district maintained more than 100 percent GER in 2013-14.3. The inter block variations are concerned it can be seen that the GER at primary level is reduced in 10 blocks out of 20 blocks. It is due to lack of interest of the children and ignorance of parents. With regard to gender, the GER of both is increased by 2.13 percent for boys and 2.01 percent for girls from the year 2011-12 to 2013-14. Migration may be the one of the reasons for poor enrollment, as children lack interest in going to school and get involved in economic activities to support their parents.

Completion Rate and Dropout Rate in Primary Education

The completion rate in Primary Education increased to 0.81 percent from 2011-12 to 2013-14. Inter block analysis of data, out of 20 blocks, 10 blocks have shown reduced completion rates. The inter

block difference is 5.26 percentage. Tirupattur block shows the highest difference in percentage, which is 0.83. In terms of gender, the completion rate is increased by 0.10 percent for boys and reduced by 0.10 percent for girls from 2011-12 to 2012-13. This may be due to lack of facilities and proximity of the schools.

The dropout rate at the primary education in the district is increased from 0.91 percent (2011-12) to 1.50 percent (2013-14) which seems to be more number of students are getting dropout. However gender data reveals that the dropout rate increased by 0.06 percent for boys and 0.12 percent for girls from 2011-12 to 2013-14. The district administration is taking efforts to reduce dropout rate and encourage students and we can see it reflected in the reduction of dropout rates in the subsequent years.

TABLE 5.2 COMPLETIONS AND DROPOUT RATE

S. No	Blocks	Completion Rate								
		BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	95.46	97.8	99.7	96.87	97.02	98.8	96.17	97.41	99.3
2	Anaicut	96.42	96.52	98.5	96.54	96.72	97.8	96.48	96.62	98.2
3	Arakkonam	98.58	94.25	98.2	99.99	98.32	97.7	99.29	96.29	98
4	Arcot	94.22	94.02	98.5	94.96	94.85	97.9	94.59	94.44	98.2
5	Gudiyatham	92.43	94.26	96.9	93.59	95.12	97.7	93.01	94.69	97.3
6	Jolarpet	96.59	96.98	98	96.81	97.25	99.3	96.7	97.12	98.7
7	K.V.Kuppam	93.49	93.75	98.6	93.64	95.32	98.9	93.57	94.54	98.8
8	Kandhili	97.87	97.52	98.7	97.97	98.82	99	97.92	98.17	98.9
9	Kaniyambadi	98.69	98.85	98.5	100.02	98.98	98.7	99.36	98.92	98.6
10	Katpadi	98.36	99.38	98.2	98.74	98.23	97.7	98.55	98.81	98
11	Kaveripakkam	99.89	99.32	96.8	99.97	98.92	96.4	99.93	99.12	96.6
12	Madhanur	98.7	98.85	98.7	98.8	98.02	97.8	98.75	98.44	98.3
13	Natrampalli	97.55	97.65	97.4	97.66	97.01	97.5	97.61	97.33	97.5
14	Nemili	96.97	97.35	95.1	97.48	96.95	99.1	97.23	97.15	97.1
15	Pernambut	97.46	97.69	94.8	98.45	97.12	95.6	97.96	97.41	95.2
16	Sholinghur	95.58	96.02	95.1	95.95	96.96	95.9	95.77	96.49	95.5
17	Tirupattur	99.95	99.85	97.8	100.09	98.52	98.1	100.02	99.19	98
18	Timiri	99.07	98.65	98.2	99.19	98.12	96.1	99.13	98.39	97.2
19	Walaja	95.33	95.44	98.4	95.49	96.31	99.6	95.415	95.88	99
20	Vellore block	97.58	97.69	99.7	97.82	97.92	99.7	97.7	97.81	99.7
21	Vellore Corp	97.37	97.82	99.2	97.74	98.26	99.1	97.56	98.04	99.2
	Total	**96.95**	**97.05**	**97.9**	**97.42**	**97.32**	**98.1**	**97.19**	**97.19**	**98**

Source: DISE & UDISE 2013-14 -Addl. Chief Educational Officer (SSA), Vellore.

S. No	Blocks	Dropout Rate								
		BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	1.62	1.62	0.9	1.36	1.36	0.9	1.49	1.49	1.35
2	Anaicut	2.27	2.27	0.27	2.02	2.02	1.2	2.15	2.15	0.87
3	Arakkonam	0.51	0.51	0.9	0.39	0.39	1.1	0.45	0.45	1.45
4	Arcot	0.76	0.76	0.9	0.76	0.76	1.1	0.76	0.76	1.45
5	Gudiyatham	3.49	1.49	1.1	3.42	1.42	1	3.46	1.46	1.6
6	Jolarpet	0.02	0.02	1.77	0.01	0.01	1	0.02	0.02	2.27
7	K.V.Kuppam	0.09	0.09	1.17	0.44	0.44	1.05	0.27	0.27	1.7
8	Kandhili	0.19	0.19	1.07	0.13	0.13	0.95	0.16	0.16	1.55
9	Kaniyambadi	0.72	0.72	1.27	0.57	0.57	1.25	0.65	0.65	1.9
10	Katpadi	0.13	0.13	1.1	0.07	0.07	1.7	0.1	0.10	1.95
11	Kaveripakkam	0.04	0.04	1.1	0	0	1.1	0.02	0.02	1.65
12	Madhanur	0.7	0.7	1.07	0.62	0.62	1.1	0.66	0.66	1.62
13	Natrampalli	1.71	1.71	1.2	1.44	1.44	1.1	1.58	1.58	1.75
14	Nemili	1.47	1.47	1.1	1.23	1.23	0.85	1.35	1.35	1.52
15	Pernambut	0.02	0.02	1.1	0.03	0.03	1.1	0.03	0.03	1.65
16	Sholinghur	1.21	1.21	1.2	1.67	1.67	1.2	1.44	1.44	1.8
17	Tirupattur	1.85	1.85	1.0	1.54	1.54	1.6	1.7	1.70	1.8
18	Timiri	0.3	0.3	1.1	0.21	0.21	1.1	0.26	0.26	1.65
19	Walaja	1.58	1.58	1.37	1.44	1.44	0.35	1.51	1.51	1.55
20	Vellore block	0.78	0.78	0.07	0.85	0.85	0.25	0.82	0.81	0.2
21	Vellore Corp	0.53	0.53	0.57	0.41	0.41	0.85	0.47	0.47	1.0
	Total	**0.94**	**0.85**	**1.00**	**0.88**	**0.79**	**1.00**	**0.91**	**0.82**	**1.50**

Source: DISE & UDISE 2013-14 -Addl. Chief Educational Officer (SSA), Vellore.

Upper Primary/Middle School Education

The growth rate of the economy, birth rate, death rate, infant mortality rate (IMR) and literacy rate are all interconnected. The literacy rate has been the major determinant of the rise or fall of the other indicators. The district administration has been straining every nerve to achieve the goal of Universalization of Education and Education for All for many decades. All these efforts have been bearing fruit in terms of enhanced literacy rate and educational accomplishment Easy accessibility of schools to the pupils at primary and upper primary level is viewed as a cornerstone of the sound educational policy. Existing norms stipulate that a primary school is to be established within a radius of 1 km from the habitations with a population of 300. An upper primary school is to be established within a radius of 3 km from habitations with a population of 500 and more.

TABLE 5.3 GENDER WISE ENROLMENTS IN UPPER PRIMARY EDUCATION

S. No	Blocks	BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	103.12	102.81	103	101.97	101.96	101.8	102.55	102.39	102.4
2	Anaicut	103.47	102.83	102.8	102.03	101.21	101.3	102.75	102.02	102.1
3	Arakkonam	102.36	102.69	103	101.97	101.99	102.3	102.17	102.34	102.7
4	Arcot	103.14	102.83	102.8	101.76	102.66	103	102.45	102.75	102.9
5	Gudiyatham	104.25	102.72	102.7	102.37	101.80	102.1	103.31	102.26	102.4
6	Jolarpet	103.25	102.91	102.9	101.94	101.86	102.3	102.60	102.39	102.6
7	K.V.Kuppam	103.40	102.87	102.9	101.74	101.61	101.9	102.57	102.24	102.4
8	Kandhili	103.58	102.96	101	100.99	101.23	102.3	102.29	102.10	101.7
9	Kaniyambadi	102.58	102.47	102.5	101.97	101.67	102	102.28	102.07	102.3
10	Katpadi	103.14	103.43	102	101.75	102.91	101.3	102.45	103.17	101.7
11	Kaveripakkam	103.24	102.89	102.9	101.75	102.67	103	102.50	102.78	103
12	Madhanur	103.25	101.94	101.9	102.31	101.31	102.3	102.78	101.63	102.1
13	Natrampalli	103.14	102.93	102.9	102.05	101.00	102.3	102.60	101.97	102.6
14	Nemili	103.46	102.63	102.8	103.67	102.05	102.4	103.57	102.34	102.6
15	Pernambut	102.13	103.64	101	101.75	101.65	102.3	101.94	102.65	101.7
16	Sholinghur	102.43	102.87	102.9	101.75	102.19	102.5	102.09	102.53	102.7
17	Tirupattur	102.36	103.73	102	101.87	102.06	101.3	102.12	102.90	101.7
18	Timiri	103.14	103.44	102	101.94	102.08	102.4	102.54	102.76	102.2
19	Vellore	103.19	103.40	103	101.98	102.55	102.3	102.59	102.98	102.7
20	Walaja	103.14	103.14	103.8	101.49	101.45	102.7	102.34	102.77	103.3
	Total	**103.10**	**102.99**	**102.4**	**101.94**	**101.98**	**102.1**	**102.52**	**102.49**	**102.3**

Source: Chief Educational Officer (SSA), 2013-14, Vellore

The GER of upper primary level is decreased by 0.22 percent at district level from 2011-12 to 2013-14. The GER of girls have increased in upper primary level by 0.16 percent when compared to boys from the year 2011-12 to 2013-14. The GER of boys is reduced by 0.7 percent, which is found the preference for girl's enrollment seems to be positive and increasing over a period compare to boys in the district. This may be due to awareness on importance of education and intensive campaign by the school teachers and school students. Innovative teaching methodology has also discouraged dropouts and efforts to ensure enrollment of particular age group in the respective class.

Completion Rate and Dropout Rate in Upper Primary/Middle School Education

The dropout rate is the proportion of pupils/students who leave school during the year as well as those who complete the grade/year level but fail to enroll in the next grade/year level the following school year to the total number of pupils/students enrolled during the previous school year. The completion rate in upper primary in the district has increased from 91.43 percent to 96.08 percent between 2011-12 and 2013-14. It is good sign to see in all the blocks the completion rate is increased positively. Among the block level statistics, it is found that Kaveripakkam block is the lowest (95.35%) in

completion rate during 2013-14. In Alangayam block, highest completion rate is found as 97.28 percent. The difference in completion rate at the district level is 1.93 percent.

TABLE 5.4 COMPLETIONS AND DROPOUT RATE

S. No	Blocks	Completion Rate								
		BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	91.05	94.82	97.1	91.1	95.95	97.4	91.07	95.39	97.28
2	Anaicut	91.15	92.62	94.9	91.5	94.26	95.8	91.32	93.44	95.34
3	Arakkonam	91.36	93.35	95.7	92	94.12	95.6	91.66	93.74	95.63
4	Arcot	90.45	92.41	94.7	91.2	94.85	96.3	90.83	93.63	95.53
5	Gudiyatham	90.49	94.92	97.2	91.3	95.68	97.2	90.89	95.3	97.2
6	Jolarpet	92.39	93.72	96	92	94.93	96.4	92.21	94.33	96.22
7	K.V.Kuppam	91.68	92.92	95.2	91.2	92.71	94.2	91.45	92.82	94.71
8	Kandhili	91.86	93.94	96.2	91.6	94.71	96.2	91.72	94.33	96.22
9	Kaniyambadi	92.7	94.56	96.9	92.3	95.65	97.1	92.52	95.11	97
10	Katpadi	90.78	94.92	97.2	91.9	94.98	96.5	91.34	94.95	96.85
11	Kaveripakkam	90.23	92.15	94.5	91.9	94.75	96.2	91.05	93.45	95.35
12	Madhanur	90.5	94.46	96.8	90.8	94.85	96.3	90.63	94.66	96.55
13	Natrampalli	91.27	92.72	95	92	95.92	97.4	91.65	94.32	96.22
14	Nemili	91.36	93.78	96.1	91.6	93.25	94.7	91.48	93.52	95.41
15	Pernambut	91.69	94.82	97.1	91.9	94.35	95.8	91.8	94.59	96.48
16	Sholinghur	90.15	93.75	96.1	91.4	94.85	96.3	90.78	94.3	96.2
17	Tirupattur	91.01	92.15	94.5	91	94.95	96.4	91	93.55	95.45
18	Timiri	90.94	94.45	96.8	91.5	94.65	96.1	91.24	94.55	96.45
19	Walaja	90.865	93.4	95.7	92.05	94.8	96.1	91.46	94.1	95.92
20	Vellore block	92.49	93.65	96	91.7	93.95	95.4	92.1	93.8	95.7
21	Vellore Corp	92.13	93.4	96.2	91.4	94.65	97.2	91.78	94.02	96.7
Vellore District		**91.25**	**93.65**	**96**	**91.6**	**94.71**	**96.2**	**91.43**	**94.18**	**96.08**

Source: Chief Educational Officer (SSA), 2013-14, Vellore

S. No	Blocks	Dropout Rate								
		BOYS			GIRLS			TOTAL		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	2.43	1.43	0.07	1.98	1.98	1.15	2.21	1.71	0.61
2	Anaicut	1.95	1.95	1.27	1.87	1.87	2.15	1.91	1.91	1.71
3	Arakkonam	2.36	2.36	1.57	1.8	1.8	2.25	2.08	2.08	1.91
4	Arcot	2.69	2.69	1.27	1.83	1.83	2.05	2.26	2.26	1.66
5	Gudiyatham	2.79	1.79	2.87	2.47	1.47	2.25	2.63	1.63	2.56
6	Jolarpet	1.89	1.89	1.77	1.83	1.83	0.65	1.86	1.86	1.21
7	K.V.Kuppam	2.49	2.49	1.17	1.93	1.93	1.05	2.21	2.21	1.11
8	Kandhili	2.28	2.28	1.07	1.8	1.8	0.95	2.04	2.04	1.01
9	Kaniyambadi	1.77	1.77	1.27	1.09	1.09	1.25	1.43	1.43	1.26
10	Katpadi	2.69	2.69	1.57	1.83	1.83	2.25	2.26	2.26	1.91
11	Kaveripakkam	2.52	2.52	2.97	1.9	1.9	3.55	2.21	2.21	3.26
12	Madhanur	2.34	2.34	1.07	2.31	1.31	2.15	2.33	1.83	1.61
13	Natrampalli	2.05	2.05	2.37	1.67	1.67	2.45	1.86	1.86	2.41
14	Nemili	2.48	2.48	4.67	1.8	1.8	0.85	2.14	2.14	2.76
15	Pernambut	2.78	2.78	4.97	1.18	1.18	4.35	1.98	1.98	4.66
16	Sholinghur	2.78	2.78	4.67	1.8	1.8	4.05	2.29	2.29	4.36
17	Tirupattur	2.16	2.16	1.97	2.14	2.14	1.85	2.15	2.15	1.91
18	Timiri	2.16	2.16	1.57	1.83	1.83	3.85	2	2.00	2.71
19	Walaja	1.99	1.99	1.37	1.71	1.71	0.35	1.85	1.85	0.86
20	Vellore block	2.63	2.62	0.07	1.69	1.69	0.25	2.16	2.16	0.16
21	Vellore Corp	2.15	2.15	0.57	2.38	1.38	0.85	2.27	1.77	0.71
	Vellore District	**2.36**	**2.27**	**1.90**	**1.84**	**1.70**	**1.85**	**2.10**	**1.99**	**1.90**

Source: Chief Educational Officer (SSA), 2013-14, Vellore

A major indicator of educational performance and efficiency is the dropout rate at each stage of education. The drop-out rate also measures the ability of the system to retain the enrolled children. The state had a high dropout rate in both primary and middle levels. The drop out at primary level declined marginally from 2.10 percent to 1.90 percent. However, it reduced significantly to 0.20 percent from 2013-2014. The implementation of Rashtriya Madhyamik Shiksha Abhiyan (RMSA) with the objective to enhance access to secondary education and to improve its quality and it served as one of the major factors causing reduced dropout rates. The factors that helped improving the enrolment ratio are also equally responsible for declining drop-out rates.

Transition Rate from Primary to Upper Primary and Upper Primary to Secondary

The transition rate is the number of pupils (or students) admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils (or students) enrolled in the final grade of the lower level of education in the previous year.

TABLE 5.5 TRANSITION RATE

S. No.	Block	Transition from Primary to Upper Primary			Transition from Upper Primary to Secondary		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	99.00	99.14	99.24	99.82	99.85	99.10
2	Anaicut	98.61	98.90	98.91	99.79	99.75	98.90
3	Arakkonam	99.71	99.40	99.42	99.86	99.96	99.40
4	Arcot	99.79	99.36	99.42	99.75	99.96	99.40
5	Gudiyatham	99.15	98.96	98.96	98.97	98.22	99.00
6	Jolarpet	99.75	99.50	99.50	99.95	97.72	99.50
7	K.V.Kuppam	98.79	98.36	98.37	99.47	98.75	98.40
8	Kandhili	99.69	99.03	99.20	99.47	99.24	99.00
9	Kaniyambadi	99.59	99.26	99.31	99.90	99.04	99.30
10	Katpadi	99.29	98.72	98.72	99.95	99.46	98.70
11	Kaveripakkam	99.65	99.29	99.29	99.47	97.96	99.30
12	Madhanur	99.69	98.97	98.97	99.98	99.50	99.00
13	Natrampalli	98.69	98.81	98.81	99.91	99.94	98.80
14	Nemili	98.71	98.98	98.98	99.48	99.48	99.00
15	Pernambut	98.89	98.41	98.41	99.96	99.45	98.40
16	Sholinghur	99.69	98.90	98.90	99.73	98.94	98.90
17	Tirupattur	99.83	98.89	98.89	99.48	99.06	98.90
18	Timiri	99.59	99.31	99.32	99.10	98.79	98.90
19	Vellore	99.59	98.92	98.91	99.98	99.95	99.30
20	Walajah	99.63	99.20	99.30	99.96	99.96	99.10
21	Vellore Corp	99.42	99.11	99.21	99.92	99.94	98.90
Vellore District		**99.38**	**99.03**	**99.04**	**99.68**	**99.28**	**99.01**

Source: RMSA, 2014, VELLORE,

The transition rate from primary to upper primary slightly increased in 2013-14 (99.04) when compared to the previous year (99.03). Among the block transition rate is increased in 10 blocks and inter block variation of transition rate from primary to upper primary is 1.14 percent in 2013-14. The transition rate from upper primary to secondary is a decreasing trend and variation is 0.27 percent from 2012-13 to 2013-14. Though transition rates from primary to upper primary is slightly lower than from upper primary to secondary rates, yet more than 99 percent transition rate is noted in the district as per RMSA records.

Access to Schools

Accessibility to school is an important factor to be considered for primary education. Policy says that the habitation with 300 and more population should have a primary school with in a distance of one KM.

<p align="center">TABLE 5.6 AVAILABILITY OF SCHOOL</p>

Sl. No	Block wise/District	Number of habitations	Number of primary School	Number of upper primary /Middle school
1	Alangayam	280	86	17
2	Anaicut	384	124	25
3	Arakkonam	216	82	19
4	Arcot	211	76	26
5	Gudiyatham	498	146	38
6	Jolarpet	649	87	37
7	K.V.Kuppam	410	97	17
8	Kandhili	193	106	33
9	Kaniyambadi	226	63	20
10	Katpadi	371	91	24
11	Kaveripakkam	353	117	21
12	Madhanur	310	94	21
13	Natrampalli	493	80	33
14	Nemili	225	85	24
15	Pernambut	371	115	37
16	Sholinghur	383	116	37
17	Tirupattur	243	109	22
18	Timiri	430	105	34
19	Vellore	175	61	19
20	Walaja	298	112	36
21	Vellore Corp	49	80	19
	Vellore District	**6768**	**2032**	**559**

<p align="center">**Source:** DISE 2011-12 & UDISE 2012-13, Addl.CEO (SSA), Vellore</p>

In the district there are 6768 habitations with 2032 primary schools and 559 upper primary schools with the ratio of 1:3 (one school for three habitations). The inter block variations in access to primary and upper primary schools, Gudiyatham block has the highest number of primary and upper primary schools – 184 which appears to cover around 498 habitations. The Jolarpet block has covered most number of habitations (649) with 124 schools. However, across the district, we see that there are many habitations which are uncovered.

Pupil-Teacher Ratio in Primary and Upper Primary

Teachers act as facilitators of learning. Pupil-teacher ratio (PTR) is the ratio of the number of students enrolled to number of teachers employed. It is considered to be one of the most important

measures of educational quality. The pupil-to-teacher ratio is one of the main indicators of the adequacy of learning process. Pupil–teacher ratios vary significantly within the Vellore district. Subsequently, teacher vacancies have been filled up. Further, the high pupil–teacher ratio districts have been covered by the District Primary Education Programme (DPEP) which has helped reduce the overall disparity.

TABLE 5.7 PUPIL TEACHER RATIOS

Sl. No	Block wise/District	Primary School		Upper Primary School	
		Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio
1	Alangayam	37:1	71:1	44:1	28:1
2	Anaicut	25:1	66:1	27:1	33:1
3	Arakkonam	24:1	64:1	32:1	36:1
4	Arcot	22:1	61:1	34:1	37:1
5	Gudiyatham	20:1	65:1	19:1	35:1
6	Jolarpet	25:1	57:1	26:1	43:1
7	K.V.Kuppam	20:1	70:1	64:1	29:1
8	Kandhili	22:1	62:1	27:1	37:1
9	Kaniyambadi	22:1	58:1	29:1	41:1
10	Katpadi	22:1	55:1	27:1	44:1
11	Kaveripakkam	25:1	72:1	26:1	25:1
12	Madhanur	28:1	65:1	34:1	35:1
13	Natrampalli	27:1	59:1	35:1	41:1
14	Nemili	27:1	58:1	23:1	41:1
15	Pernambut	28:1	60:1	31:1	38:1
16	Sholinghur	18:1	69:1	22:1	30:1
17	Tirupattur	24:1	71:1	29:1	28:1
18	Timiri	30:1	58:1	24:1	41:1
19	Vellore	30:1	58:1	33:1	41:1
20	Vellore Corporation	20:1	65:1	20:1	34:1
21	Walaja	50:1	68:1	26:1	50:1
	Vellore District	**25:1**	**64:1**	**28:1**	**35:1**

Source: RMSA, 2014, Vellore

The pupil–teacher ratio in each district will have to be disaggregated further and studied with reference to block-level variations. A block-wise pupil– teacher ratio for the Vellore districts shows that the district-level ratio conceals more than it reveals. In Vellore district, Walajah block stands high in pupil–teacher ratio (50:1) at primary level, whereas Sholinghur has lowest pupil–teacher ratio (18:1). The pupil-school ratio at the primary level shows that Kaveripakkam block has high pupil-school ratio (72:1) and low pupil-school ratio in Jolarpet block (57:1). With regard to upper primary level data shows that K.V. Kuppam block has highest ratio (64:1) and Gudiyatham block registered lowest ratio (19:1). The pupil-school ratio at the upper primary reveals that Walajah block holds high (50:1) and low in Kaveripakkam block (25:1). The same pattern is observed in nearly all the districts. Further, the highest ratios are observed in areas which are lacking in educational and other infrastructure. New strategies are required to devise means to rationalize teacher availability across the State.

Secondary Education

Secondary school is a school which provides children with part or all of their secondary education, typically between the ages of 11-14 and 16-18, although this varies. It comes after primary school or middle school and may be followed by higher education or vocational training. Tamil Nadu is the first State in the country to provide computer education in all government higher secondary and high schools. Over 1,00,000 students have benefitted from this innovative scheme. The State is also a pioneer in providing multi-skilled training through vocational education to improve the quality of secondary education. In the field of higher education, self-financing institutions, polytechnics, industrial training institutes and arts and science colleges have been encouraged so that the State's burden in providing higher education is considerably reduced.

TABLE 5.8 ENROLMENTS IN SECONDARY EDUCATION

S. No	Blocks	2011-12			2012-13			2013-14		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Alangayam	114.59	112.33	113.46	114.16	114.99	114.58	128.32	116.68	122.63
2	Anaicut	111.96	112.78	112.37	114.11	114.87	114.49	98.44	97.39	97.93
3	Arakkonam	111.98	112.49	112.24	111.17	114.99	113.08	131.71	129.92	130.82
4	Arcot	111.99	112.99	112.49	114.99	114.81	114.90	112.46	102.95	107.82
5	Gudiyatham	112.69	112.85	112.77	114.89	113.98	114.44	97.49	101.57	99.48
6	Jolarpet	111.96	111.98	111.97	114.99	114.91	114.95	90.73	92.01	91.35
7	K.V.Kuppam	110.56	111.79	111.18	114.91	114.91	114.91	100.91	106.45	103.57
8	Kandhili	112.97	112.59	112.78	114.57	114.96	114.77	49.61	48.00	48.61
9	Kaniyambadi	110.98	111.89	111.44	114.59	114.48	114.54	69.80	67.49	68.69
10	Katpadi	110.99	112.99	111.99	114.99	114.87	114.93	96.18	103.23	99.58
11	Kaveripakkam	111.96	111.78	111.87	114.98	114.67	114.83	97.08	96.23	96.66
12	Madhanur	112.99	112.84	112.92	114.78	114.99	114.89	50.48	52.53	51.45
13	Natrampalli	111.98	111.95	111.97	114.54	114.87	114.71	72.01	72.74	72.37
14	Nemili	111.97	110.79	111.38	114.89	114.99	114.94	139.82	133.86	136.87
15	Pernambut	110.99	110.99	110.99	114.45	114.99	114.72	102.75	98.51	100.69
16	Sholinghur	112.94	111.89	112.42	114.98	114.79	114.89	75.18	92.14	83.40
17	Tirupattur	111.99	111.88	111.94	114.89	114.98	114.94	168.98	153.67	161.61
18	Timiri	111.93	112.08	112.01	114.82	114.80	114.81	138.59	134.90	136.76
19	Vellore	112.88	112.99	112.94	114.57	114.99	114.78	83.49	145.86	86.65
20	Walaja	112.99	112.77	112.88	114.78	114.67	114.73	102.75	89.84	100.69
21	Vellore Corp	110.93	112.96	111.95	115.54	114.79	115.17	144.78	98.51	145.31
Vellore District		**112.11**	**112.27**	**112.19**	**114.60**	**114.82**	**114.71**	**102.46**	**101.64**	**102.04**

Source: RMSA, 2014, VELLORE.

Table indicates that GER at secondary level reported in Vellore district is 102.04 percent in the year 2013-14, whereas as in previous year was 114.71 percent. Almost 15 blocks have shown decreasing trend in GER at secondary education. Gender wise data shows that GER of girls lower (0.82%) than the boys in the year 2012-13.

TABLE 5.9 DROPOUTS IN SECONDARY EDUCATION

S. No	Block wise/District	Secondary								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Alangayam	8.25	8.11	4.70	8.92	8.44	3.02	8.59	8.28	3.85
2	Anaicut	8.33	8.21	17.04	8.74	8.11	7.88	8.54	8.16	11.48
3	Arakkonam	8.44	8.33	12.46	8.56	8.22	6.07	8.50	8.28	8.66
4	Arcot	8.49	8.27	8.20	8.82	8.55	4.25	8.66	8.41	5.83
5	Gudiyatham	8.34	8.14	5.23	8.46	8.31	2.75	8.40	8.23	3.81
6	Jolarpet	8.15	8.19	12.12	8.44	8.34	5.64	8.30	8.27	8.47
7	K.V.Kuppam	8.36	8.11	3.86	8.21	8.14	2.56	8.29	8.13	3.12
8	Kandhili	8.18	8.81	7.74	8.86	8.83	6.20	8.52	8.82	6.92
9	Kaniyambadi	8.12	8.16	6.05	8.46	8.16	5.26	8.29	8.16	5.61
10	Katpadi	8.42	8.41	10.39	8.74	8.49	4.51	8.58	8.45	6.96
11	Kaveripakkam	8.56	8.24	9.04	8.54	8.44	13.73	8.55	8.34	11.54
12	Madhanur	8.81	8.61	5.53	8.92	8.88	3.58	8.87	8.75	4.56
13	Natrampalli	8.27	8.16	14.50	8.71	8.64	5.82	8.49	8.40	9.98
14	Nemili	8.17	8.12	11.72	8.43	8.27	7.71	8.30	8.20	9.48
15	Pernambut	8.23	8.17	7.46	8.45	8.26	3.73	8.34	8.22	5.51
16	Sholinghur	8.25	8.14	8.02	8.34	8.28	2.68	8.30	8.21	4.68
17	Tirupattur	8.41	8.11	7.91	8.46	8.29	3.40	8.44	8.20	5.51
18	Timiri	8.34	8.26	6.04	8.56	8.42	2.52	8.45	8.34	4.02
19	Vellore	8.11	8.27	5.13	8.31	8.29	1.92	8.21	8.28	3.23
20	Walaja	8.25	8.42	14.60	8.41	8.31	6.74	8.33	8.37	9.50
21	Vellore Corp	8.42	8.42	3.41	8.11	8.07	5.45	8.27	8.25	4.58
	Vellore District	**8.33**	**8.27**	**8.63**	**8.55**	**8.37**	**5.02**	**8.44**	**8.32**	**6.54**

Source: RMSA, 2013-14, VELLORE.

A major indicator of educational performance and efficiency is the dropout rate at each stage of education. The drop-out rate also measures the ability of the system to retain the enrolled children. However, it reduced significantly to 1.9 percent from 2011-2014. The drop-out rate at Secondary school also declined significantly from 8.44 percent in 2011-12 to 6.54 percent in 2013-14.The implementation of RashtriyaMadhyamikShikshaAbhiyan (RMSA) is the major factor in reducing dropout rates. The factors that helped improving the enrolment ratio are also equally relevant for declining drop-out rates.

Box-5.1 Incentives for improvement of Education

'It was a sign of growing up, when the dark made no more difference to you than the day'.
                                                                                        - Clary fray.
        Sarva Shiksha Abhiyan (SSA) ventilates on the quality of education to fade the dark possibilities of the negative aspects of educational growth with its various functions in the emerging trends in education. It lifts the standards of education positively & remarkably in Vellore district.

Vision 2023 of our Hon'ble Chief Minister
        "The Quality of education to school children is to be set upon with the standards of national and international level" -Miss.J.Jaylalitha, Honourable Chief Minister,Tamil Nadu.SSA has become more significant with the children's right to free and compulsory Education Act, 2009 in force from 1st April 2010, which provides free and compulsory Education to all children in the age group of 6 to 14 years. SSA protects the Education of Physically challenged children. In co-ordination of the British Council and the UNICEF, Training was organized for primary school teachers to improve their communication and spoken English. The teachers evinced a lot of interest in undergoing the training and in practicing the same in the classroom.

Welfare schemes are as follows
        Supply of 4 sets of uniforms, Special cash incentive scheme, Supply of laptops to the students of class XII, School bags 1-XII, Color pencils VI-X, Supply of note books, introduction of chess games, Nutritious meal program, Supply of text books, Supply of bus pass, Financial assistance for students who have lost their breadwinning parents.

Welfare Schemes in Vellore District
        Vellore district is one among the economically backward district; the welfare schemes have an overwhelming impact on the children with regards to their journey of education. In Vellore district students have benefitted with the welfare schemes, Students are having privilege of relishing nutritious noon meal in the school; three sets of uniforms are given to students. The basic need for learning is the notebooks which were provided to Students for all subjects including English, Tamil hand writing note books and drawing books to develop creativity in the children. To nurture cognitive thinking in Government School children, introduction of chess game in their school curriculum has been brought in. To initiate the above schemes teachers from primary and middle schools have been given training who are in turn going to train the students. A point to be noted here is that SSA has already instructed the schools to buy chess boards and each and every school is having them.

Source: DISE 2011-12 & UDISE 2012-13 Addl. Chief Educational Officer (SSA), Vellore

Access to Higher Secondary Schools

        Higher education is the final stage of <u>formal learning</u> that occurs after <u>secondary education</u>. Often delivered at <u>universities</u>, <u>academies</u>, <u>colleges</u>, <u>seminaries</u>, and <u>institutes of technology</u>, higher education is also available through certain college-level institutions, including <u>vocational schools</u>, trade schools, and other career colleges that award <u>academic degrees</u> or <u>professional certifications</u>. Total number of 292 higher secondary schools in Vellore Districts, boys students1,40,484 and girls students 1,22,813 totally 2,63,589 students are studying in higher secondary schools. It is increasing every year because there are more facilities given by the Tamil Nadu government.

Basic Infrastructure

        The basic infrastructure provided in the primary (I to V Std.,) and upper primary (VI to VIII Std.,) and high (IX & X Std.,) and higher secondary (XI & XII Std.,) schools are buildings, toilets, playgrounds, library, kitchen shed, computer, ramp, drinking water, boundary wall etc., not only increases

participation of children but also their retention in schools and also facilitates better academic performance of the students by motivating them.

TABLE 5.10 INFRASTRUCTURES

S. No.	Blocks	Total No. of schools	With 3 Class rooms	More than 3 class rooms	No. of Schools without Toilet facility	No. of Schools without Girls Toilet	No. of Schools without Electricity Connection	No. of schools without Boundary wall	No. of schools with out Drinking water facility	Without desk and Chair
1	Alangayam	108	77	31	4	8	5	31	0	26
2	Anaicut	133	89	44	9	14	7	49	5	44
3	Arakkonam	75	48	27	0	0	1	9	0	4
4	Arcot	91	56	35	0	0	0	15	0	10
5	Gudiyattam	153	100	53	5	2	3	39	0	34
6	Jolarpet	124	71	53	7	5	1	32	0	27
7	K V Kuppam	104	73	31	0	0	0	39	0	34
8	Kandhili	140	88	52	9	9	6	29	2	24
9	Kaniyambadi	67	39	28	0	0	0	13	0	8
10	Katpadi	69	38	31	0	0	0	8	0	3
11	Kaveripakkam	144	105	39	10	12	12	62	2	57
12	Madhanur	82	54	28	1	3	7	8	2	3
13	Natrampalli	100	59	41	0	0	0	23	0	18
14	Nemili	117	69	48	5	7	8	27	3	22
15	Pernambut	129	78	51	24	25	17	29	7	24
16	Sholingur	127	88	39	0	0	0	44	0	39
17	Thimiri	122	87	35	1	2	0	35	0	30
18	Thirupattur	123	72	51	12	8	4	35	0	30
19	Vellore	62	36	26	0	0	0	10	0	5
20	Vellore Corp	46	30	16	0	0	4	0	0	0
21	Walajah	55	70	40	0	1	2	30	0	25
Vellore District		**2171**	**1427**	**799**	**87**	**96**	**77**	**567**	**21**	**467**

Source: UDISE 2013-14 Addl. Chief Educational Officer (SSA), Vellore

Schools with adequate classroom facilities: In Vellore district, there are 2171 schools functioning in which 1427 schools (65.73%) with three class room facilities and 799 schools (36.8%) functioning with more than three class room facilities. Inter block variations shows that, Kaveripakkam block has highest number schools 105 with three class room facilities. Gudiyatham and Jolarpet blocks have 53 schools with more than three class room facilities. It indicates the space constraint to accommodate the students in the school.

Schools with toilet facilities: In the district 96 percent of the schools provided with toilet facilities but 4.42 percent of schools does not have toilet facilities for girls. At block level Pernambut has more number

of schools without girl's toilet (25 schools). This is one of the crucial factors to be observed for the declining of enrollment and dropout in the school. It has close connection with health issues particularly promoting infertility and kidney stone among students and teachers.

Schools with electricity facilities: It is found that the district has provided electricity facility to 96.45 percent of the schools. Only few blocks, Pernambut (17 schools) and Kaveripakkam (12 schools) functioning without electricity facility. The district administration has ensured electricity facility to facilitate effective teaching methods and aids to improve quality of education.

Schools with compound walls: It is observed that the district has provided 73.88 percent of schools with compound facilities and 26.11 percent of the schools (567) does not have compound wall which is very important for providing security for children and school infrastructure. Among blocks, Kaveripakkam (62), Anaicut (49) and Sholingur (44) having high number of schools does not have compound wall.

Schools with drinking water: In the district, 99.04 percent of the schools have been provided with drinking water facility. The district administration has made efforts to provide 100 percent drinking water to the schools.

Schools with desk and chair: The district administration has provided desk and chair to 78.49 percent of the schools in the district. The number of schools with desk and chair is 467 which accounts to 31.51 percent.

Hostel Facilities

The hostel facilities are made available for different communities to access education service for the school going children. This is one of the important services provided by the district administration to encourage the poor students from poor families to continue their studies. There are 41 hostels for both for boys and girls in which 5561 students are accommodated.

TABLE 5.11 HOSTELS

District	Total Number of Hostels	No. of students in hostels
Vellore	41	5561

Source: DD Statistics - Vellore, 2011

Higher Education

Arts and Science Colleges

In Vellore district there are 25 arts and science colleges which includes government, government aided and private institutions in which 31739 students are studying.

Figure 5.2: Arts and Science Colleges and Technical Education
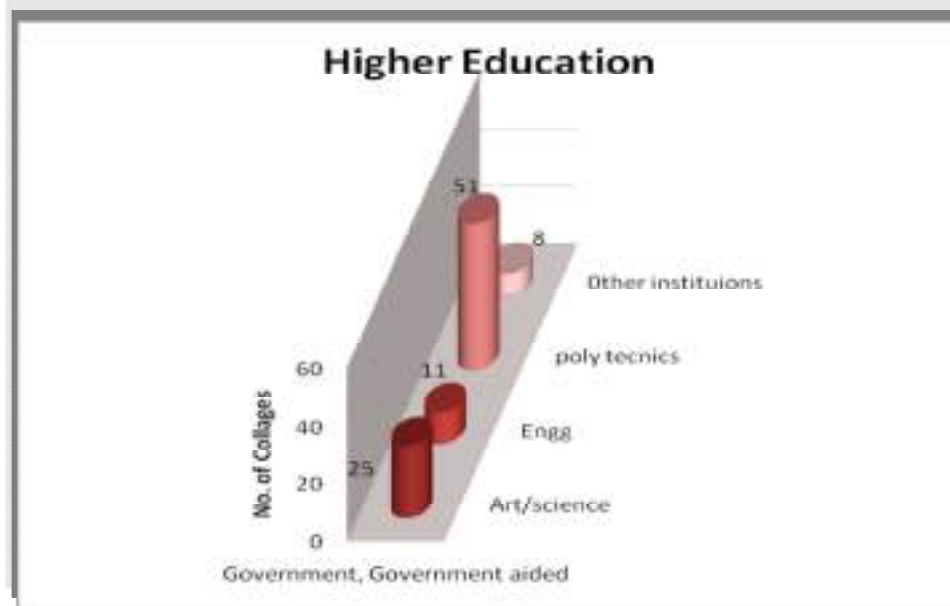
Technical Education

Vellore district has two universities which includes Thiruvalluvar University and VIT University. There are also 4 Medical Colleges, 11 engineering colleges, 1 Agricultural college and 1 Nursing college, apart from that 39 teacher training institutes and 51 polytechnics available in the district in which 11652 students studying engineering, 13857 students studying polytechnic and 3572 students are studying other technical courses.

Figure 5.3 Engineering Colleges and Polytechnics
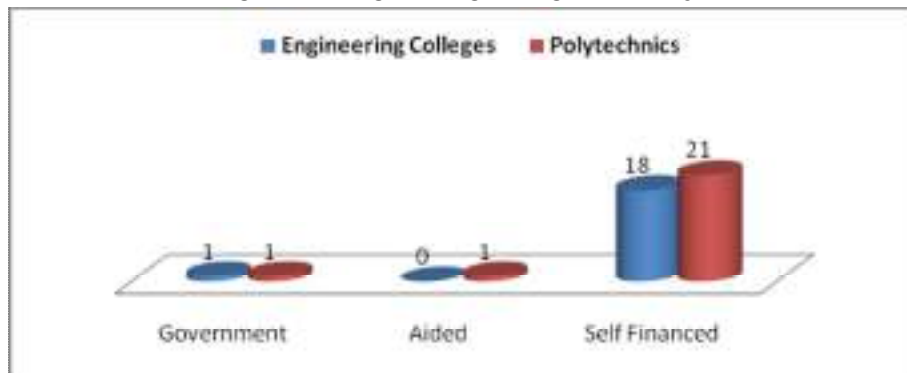
Conclusion

Existence of literacy gap between males and females and rural and urban is a formidable challenge to planners in the District. The gap needs be closed.

- Large scale skill development programme to impart basic training to unskilled labour primarily agriculture workforce (bottom of the pyramid).
- Employability programme for skilled level (middle layer in the pyramid) to deliver industry relevant skills key growth sectors.
- Setting up of centre of excellence in the area of automotive technology, solar and clean energy technology, biotechnology, agricultural practices, water resources management, construction management, lifestyle diseases, aerospace, basic science, nano-technology and social sciences.

The following measures may be considered for the overall development of higher education in the district:

- The gross enrolment ratio of females may be enhanced.
- The Manpower Planning should be such that the demand for and supply of the educated manpower should be dovetailed with each other. Failing to do so, there will be a peculiar situation of shortages for critical skill on one hand and on the other surplus in availability of general educated manpower; there should be a cordial liaison between the educational institutions and industry. There has been a significant room for improvement.
- Up gradation of infrastructure, strengthening of teaching facilities and faculty sharing, networking of universities, digitalization of libraries, etc are key to providing quality higher education and set standards on a par with foreign institutions in future.
- The absorptive capacity of the economy, manpower requirement and dynamic changes emanating from the organic growth of the society all should be taken into account while fixing the quantum of admission of students in a year both in Medical and Engineering Colleges.

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CHAPTER 6
GENDER

Chapter
6
Gender

Introduction

Gender equality is a human right. Women are entitled to live with dignity and with freedom from want and from fear. Gender equality is also a precondition for advancing development and reducing poverty: Empowered women contribute to the health and productivity of whole families and communities, and they improve prospects for the next generation. Still, despite solid evidence demonstrating the centrality of women's empowerment to reducing poverty, promoting development and addressing the world's most urgent challenges, gender equality remains an unfulfilled promise. Hence, promoting gender equality is considered as a back up to greater prosperity. The present chapter tries to look at the extent of gender-inequality and the status of women in Vellore district, access as well as control over resources, trend in female employment in different sectors, trend in political participation.

Status of Women

Gender inequality defines to the uneven handling of individuals based on their gender. It arises from diversity in socially built gender role as well as biological difference. The distinct roles and behaviour may give rise to gender inequalities, i.e. differences between men and women that systematically favour one group. Gender inequality refers to unequal treatment or perceptions of individuals based on their gender. It arises from differences in socially constructed gender roles. A vast gender disparity has been subsisting in Vellore district in terms of literacy, health and working environment.

TABLE 6.1 STATUSES OF WOMEN

Sl. No	Particulars	District 2011 Population
1	Female Population	1736234
2	Percentage in Total population	49.93%
3	Sex-ratio	1005
4	Female literacy rate	73.14
5	School enrollment	100.29
6	MMR	53
7	% of women worker in agriculture sector	58.02
8	% of women in non-agri. Sector	6

Source: Census of India, Statistical Hand Book, Tamil Nadu, 2011.

The women population in Vellore district is 17362234 and it was 49.93 percent from total population in 2011 census. District sex ratio is 995 which is equal to the state average sex ratio. Female literacy rate is 73.14 percent which is lesser than 86.53 percent. There is a gender inequality in terms of literacy in Vellore district. While comparing the literacy gap between district and blocks, Natrampalli shows high gender gap and lower literacy rate (63.21%) in the district. In 2013-14, the girl's gross enrollment in primary education is 102.2 percent which lesser than boy's rate (102.5%). The female literacy rate in the district is important to address the issue of female empowerment.

The MMR of Vellore district was 64.39 percent in the year 2014. The IMR and MMR reflect the availability of quality of health care services to the people. The percentage women's participation in the agricultural sector is 58.02 percent and in the non agricultural sector is 6 percent in 2011.

Box 6.1 Status of Gender Inequality Index in the district

GII measures the human development performance in terms of gender gaps and it is considered as a negative index. In such case lower index value (closer to 0) is better performance of human development with low in gender gaps. Gender Inequality Index (GII) is a measure to assess the gender gaps against the human development variables. While gender inequalities intensify with poverty, caste inequalities and geographical location (particularly in underdeveloped rural areas), particular gender-differentiated ideologies cut across all social groups, explaining why in all social groups, girls lag behind boys in access to and participation in education. These include specific views on the appropriate roles to be played by women in family and society, and the underlying controls placed on female mobility and chastity. These gender-specific ideologies are responsible for the continued wide gaps in female secondary schooling enrolment. Further, responsibilities for securing domestic water and fuel plays tremendous time burdens on women, often shared with younger girls in the family who could otherwise be in school or at rest or play. Gender inequality which indicates status of women in various sectors of economy has adverse impact on economic growth.

The result of this computation exhibits the GII of Vellore district. This shows lower range of inequality in 10 blocks. In Vellore District, Vellore (0.01), Katpadi (0.01), Madanur (0.02) stands first three ranks in Gender Inequality Index. Kaveripakkam (0.18), Walajah (0.18), Gudiyatham, Pernambut and Kaveripakkam (0.08) stands bottom three places in GII. Overall in the district it is found that the MMR, low female work participation rate in agriculture and non agricultural sector and disparity in wage rates between female and male, gender gap in literacy rates are contributing factors for GII in the district, which needs greater attention.

Access and Control over Resources

Resources are significant to people's uniqueness and source of revenue. Evaluation of access to and control of resources has been a basic tool of gender scrutiny. The fact that women engage less in paid work and have less access to formal education than men further constraints their ability to access credit. They also do not have valuable assets to make them credit worthy. Other constraining factors are distance from banks, gender bias of bankers, working time of banks and the lack of resources to meet formalities. These were the situation before the Self Help Groups entered. Gender equality in the allocation of resources has positive prospects for human development with poverty reduction.

Box 6.2 Self Help Groups

The Tamil Nadu Government has evolved the Tamil Nadu Women's Development Project (Mahalir Thittam) which is SHG based scheme with a focus on the economic empowerment of women. Self Help Group (SHG) were proven to be the best way of organizing the poor, particularly women to address micro credit needs, gender issues and social issues. This is one of effective low cost development intervention which can be simultaneously used for poverty reduction, women empowerment and empowerment of vulnerable social group. Many developmental organizations either with or without the support of the state government has been promoting SHG's for the upliftment of rural poor. As SHGs contribute significantly to human development, it is important to look into their status in the district.

Years	Group Formation			Revolving Fund					Economic Assistance					Direct Linkage		Total	
	No. of Groups	Total Members	Total Savings	No. of Groups	No. of Members	Subsidy	Credit	Total	No. of Groups	Total Members	Subsidy	Credit	Total	No. of Groups	Amount	No. of Groups	Total
10-11	2250	28350	325.85	4350	59482	435.00	2175	2610.0	605	8707	451.750	1355.25	1807.0	5742	8556.81	11237	13079.52
11-12	3067	41405	502.25	2402	32427	240.20	1201	1441.2	764	10314	573.000	2865.00	3438.00	-	-	6233	4066.00

In Vellore District a cumulative total of 24,056 Self Help Groups had been formed under Mahalir Thittam, there are 345871 members in the groups and totally 25618.38 lakh loans disbursed to these SHGs. Pudhu Vazhvu Project also facilitating in formation of SHGs in Vellore district. There has been consistent improvement every year in group formation, disbursing of revolving funds and economic assistance to the groups. However, direct linkages have not been steady in its performance indicating that the lead banks' have not been able to expand their reach proportionately. The SHGs support to the women in taking up many farm based and non-farm based economic activities through grants and loan facilities from banks.

Source: Project Officer, Mahalir Thittam, TNSWA, Vellore, 2012

Employment

Economic participation of women is a foundation for all other forms of empowerment. It focuses on employment and income for the women in a household. Employment in terms of worker participation, access to bank credit and other government subsidy linked employment oriented programmes for women in the district. During this time there was a little development in the women's status. Vellore district reported 53% of female employment participation. Only 6 percent of female workers were employed in non-agricultural sector and only 58.02 percent of female workers participated in agricultural sector.

Trend in Female Employment
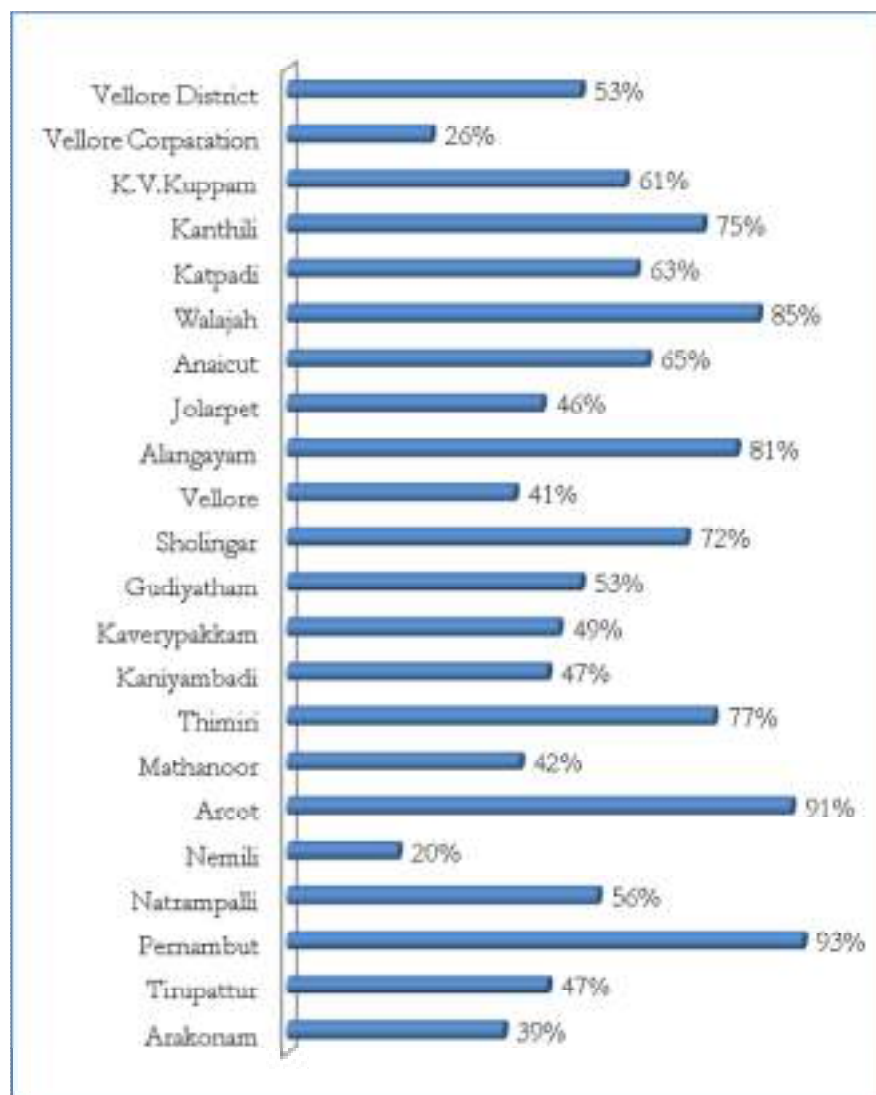
Source: District Employment Officer, Vellore. Year 2013.

Highest female workforce participation rate was in Natrampalli block and lowest in Vellore Corporation. Only in 6 of the blocks, female workforce participation is lower than the district average of 28.64. But the overall average is lower than 30 percent which could also be due to the engagement of women in unpaid work.

Trends in Political Participation

The situation of political participation is more favourable for women. The 73rd and 74th Constitutional Amendments in 1992, which went a long way in re-activating decentralized democracy in India, also made it mandatory to reserve one-third of seats in local bodies for women. This set the stage for serious participation by women in the political process in India, not as passive voters or party workers

alone, but also candidates.Women's participation in any political activity has important implications in the broader context of power sharing in any country. Political activism and voting are the areas of women's political participation. Issues that challenge the participation of women in politics are rampant sexual violence, discrimination, and illiteracy. In Tamil Nadu 33 percent reservation for women to join politics is implemented. Regarding empowerment, women's role in decision making in children's education has improved considerably than their role in decision making related to savings and expenditure. Above all they are able to vote independently without any direction from their husbands. SHGs act as a change agent in enhancing the political participation of women in local self governance (Mandakini 2007). Similarly they were able to express their views freely in the family and in groups and able to discuss freely with bankers, government officials and NGOs.

TABLE 6.2 WOMEN MEMBERSHIPS IN LOCAL BODIES

SL. No	Member ship of women in State Assembly and local Body	Number of Male	Number of Female	% of female participation
1	Alangayam	220	130	37.14
2	Anaicut	257	161	38.51
3	Arakonam	184	116	38.66
4	Arcot	252	160	38.83
5	Gudiyatham	298	194	39.43
6	Jolarpet	255	158	38.25
7	K.V.Kuppam	240	155	39.24
8	Kaniyambadi	155	100	39.21
9	Kandhili	246	153	38.34
10	Katpadi	234	149	38.90
11	Kaverypakkam	329	205	38.38
12	Mathanoor	226	145	39.08
13	Natrampalli	160	114	41.60
14	Nemili	307	197	38.85
15	Pernambut	338	205	37.75
16	Sholingar	255	171	40.14
17	Thimiri	308	192	38.04
18	Tirupattur	242	143	37.03
19	Vellore	119	70	41.64
20	Walajah	227	162	34.42
21	Vellore Corporation	40	21	38.79
	District Total	**4892**	**3101**	**38.79**

Source: BDO, TP, Municipality, corporation. Vellore District. 2011

In Vellore district, there are 3101 elected representatives in local body elections. Out of which 38.79 percent of them are women. Inter block disparity varies from Vellore (41.64%) to Alangayam (37.14%).

Conclusion

A vast gender disparity has been subsisting in Vellore district in terms of literacy, health and working environment. District sex ratio is 995 which is equal to state average sex ratio. Female literacy rate is 73.14 percent which is lesser than 86.53 percent. There is gender inequality in terms of literacy in Vellore district. While comparing the literacy gap between district and block, Natrampalli shows high gender gap and lower literacy rate (63.21%) in the district. In 2013-14, the girl's gross enrollment in primary education is 102.2 percent which lesser than boy's rate (102.5%).

The MMR of Vellore district was 564.39 percent in the year 2014. The IMR and MMR reflect the availability of quality of health care services to the people. The result of this computation exhibits the GII of Vellore district showing lower range of inequality in 10 blocks. In the district a cumulative total of 24,056 Self Help Groups had been formed under Mahalir Thittam, 345871 members in the groups and totally 25618.38 lakh loans have been disbursed to these SHGs. Pudhu Vazhvu Project is also facilitating the formation of SHGs in Vellore district. Vellore district reported 53% in female employment participation. Only 6 percent of female workers were employed in non-agricultural sector and only 58.02 percent of female workers participation in agricultural sector. There are 3101 female elected representatives in the state assembly and local body elections. Overall in the district it is found that the MMR, low female work participation rate in agriculture and non agricultural sector and disparity in wage rates between female and male, gender gap in literacy rates are contributing factors of GII in the district, which needs greater attention.

CHAPTER 7
SOCIAL SECURITY

Chapter
7
Social Security

Introduction

"Our social security system is critical to protecting middle class families, and we cannot allow it to be dismantled inch by inch" – Senator Elizabeth Warren

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable on her dignity and the free development of his or her personality. The social effect of a social security programme is to improve the quality of life and its economic effect is to redistribute income through a combination of promotional and protective measures. Social security in Tamilnadu has been mostly at two levels such as nutrition and some assistance schemes for the unorganized sector. The action programmes of Government envisioned to promote the welfare of the population through assistance measures for accessing to sufficient resources for food and shelter and to promote health and well-being for the potentially vulnerable segments of population such as children, the elderly, the sick and the unemployed may refer to Social security.

Now a days there is no joint family system and most of the aged people are left alone by their family members. Growing old age homes are the sign of growing population of elderly people. Other socially vulnerable groups looking for support are abandoned children, differently abled, child labourers, HIV/AIDS infected children / adults, destitute and women headed poor families. The Government of Tamilnadu is implementing various pension schemes through revenue department to provide social security for the aged / destitute person in the district who neither have any means of subsistence nor any relative to support them. The action programme of government extended to promote the welfare of the population through assistance measures to provide for food and shelter and to promote health and well-being of the population at large and potentially vulnerable segments such as children, the elderly, the sick and the unemployed.

The present chapter deals with the ageing profile of the Vellore district. Financial and social security to elderly is a must in human development from the equity perspective. It is encouraging to observe that financial security to the aged is ensured through various social welfare programs which include Indira Gandhi national Old Age Pension (OAP), Tamil Nadu state government OAP, Destitute Physically Handicapped Pension, Destitute Widow Person, Destitute & Deserted Wives Pension.

Demographic profile of the Aged

In the process of human development, sustaining the wellness of the elders in a given demography assumes the importance due to their increased dependency ratio on others and lower degree of participation in the development process. Their happiness and health are also good indicators of human development. Further when economy grows and there is corresponding growth of life expectancy of the population, it results in an increase in the share of elderly in the demography demanding greater care for them. The multi-dimensional problems of these groups have a weak relationship with each other, but the underlying factors are strongly intertwined.

TABLE 7.1 DEMOGRAPHIC PROFILES

Sl. No	District	Total Population 2011	Population aged above 60
1	Vellore	3477317	296324 (8.52%)

Source: District Hand Book, DD Statistics - Vellore, 2011.

The table above portrays the share of elderly was 296324 representing 8.52 percent of the total district population in 2011. This 8.52 percent indicates the dependency ratio of person aged above 60. The number of beneficiaries in Vellore and Tirupattur are high. Considering the district holistically, 94.4 percent of the old age people in the district were covered under some scheme or the other.

Financial Security

Considering the longevity of life, the population at the age of 60 or above is considered as ageing in India. Taking care of this ageing population is taken as moral responsibility of the respective family members and the society. Financial security is most important for poor people.

TABLE 7.2 FINANCIAL ASSISTANCE TO OLD AGE PEOPLE

Sl. No	Category	Coverage
1	Indira Gandhi National Old age Pension	115970
2	Destitute Physically Handicapped Pension	20963
3	Destitute Widow Pension	51894
4	Destitute Agricultural Labours Pension	69402
5	Destitute and Deserted Wives Pension	19757
6	Unmarried poor Women Pension	1786
	Total	**279772**

Source: Vellore and District Hand Book – 2013

The State and Central government were giving more schemes; OAP (Indira Gandhi National Old age Pension) is one of the useful schemes for the Old Age People. In Vellore District financial assistance has been provided to 115970 of old age people followed by 20963 destitute physically handicapped pension, 51894 destitute widow pension, 69402 destitute agricultural laborers 19757 destitute and deserted wives and 1786 unmarried poor women pension. During the year 2012-13, 279772 persons were given with pension assistance. Around 50 percent of the old age population is covered under the Indira Gandhi National Old Age Pension scheme. Nearly 24.81 percent of the beneficiaries are covered under the destitute agricultural workers' pension. The district administration also implements other relief

measures and pension schemes such as Nalinthor Nalathittam, Freedom Fighters Pension Scheme, Chief Minister's Relief Fund, Mozhikavalar Pension Scheme, Nalintha Kazhaignar Pension Scheme for needy people.

Differently Abled

Disability, as one of the important form of vulnerability, is assumed to have multiple dimensions including physical, psychological, poverty, gender and contexts such as rural and urban. More than 24 different schemes are being implemented for the welfare of the disabled called differently abled population at different levels in the district. The District's Differently abled Welfare Office has opened a help desk at Vellore Collectorate exclusively for differently abled persons, to educate them on various welfare schemes and extend a helping hand to ensure and avail the benefits through government schemes. The objective of the help desk is to facilitate the differently abled with their petitions, in distributing applications of various welfare schemes and in educating them about schemes.

TABLE 7.3 ASSISTANCE TO DIFFERENTLY ABLED

Categories	Male	Female	Total
<u>Marriage assistance</u> : *Hearing Impaired Persons Marrying Normal Persons, Locomotors Differently Able Persons marrying normal persons, Differently abled persons marrying differently able persons*	12	10	22
Day care centre for muscular dystrophy, DMLT Training, Cell phone service, Adult home for mentally retarded, Special school for mentally retarded and Tamil Nadu Welfare Board for the Differently able.	256	120	376
<u>Aids and Appliances</u>: *wheel chair, Talking watches, Hearing Aid, Goggles and Folding sticks, Solar Re-Chargeable Batteries, Calipers, Crutches, Artificial Limbs, Modular Artificial Limbs, petrol Scooter, and Tricycle,*	332	162	491
75 % bus pass concession and Free bus pass	1800	1150	2950
Self employment Loan	28	12	40
Unemployed Assistance Ortho, VI and HI	970	517	1487
Motorized Tailoring Machine	39	21	60
NHFDC	114	42	156
MES Training	17	8	25
Private Placement	19	11	30
Pasumai Veedugal	54	17	71
MGNREGS	20530	11070	31600
Readers Assistance	19	7	26
Scholarship	510	219	729
Feeding Grant for 2012-2013	252	102	354
Cash Award for Visually Impaired, Hearing Impaired and Cash incentives to Differently abled students studying 10th, 11th and 12th std	33	22	55
Maintenance Allowance to Leprosy affected persons commission charges	194	36	230
MG (MR) and (Ortho)	2504	1299	3803
Special School for Hearing Impaired and Visually Impaired	31	10	44
Total	**27714**	**14835**	**42549**

Source: Welfare office in Different Able Persons, Vellore, 2014.

The table reveals that the inclusion of the differently abled under the MGNREGS has been quite high in the district. This sort of convergence ensures that the differently abled are linked to some regular source of income in rural areas where there are limited employment opportunities. Scholarships, free bus passes, special schools to take care of the educational needs of the differently abled children. The state is committed to provide inclusive education and improve access to the differently abled and in continuation with same objective has ensured that there are special schools in all the districts. The district has also identified a few NGOs who exclusively cater to the needs of the differentlyabled. Schemes for Differently abled such as providing national ID cards, Early intervention center for infants and young children with hearing impairment, Special education, training and employment, 3% reservation in educational institutions and in employment, assistive devices, maintenance allowance to MR, muscular dystrophy and leprosy, marriage assistance, social security schemes (personal accident relief, financial assistance – funeral expenses, marriage and natural death etc.) and other schemes home for MR, rehabilitation, care camp, day care center and travel concessions etc.

Box-7.1 Marriage and Maternity Assistance Programme

Programs and policies indicate that it is necessary to empower girl children in all aspects of life so that there is equity and equal opportunity. It is also realized that special measures are required to protect the survival and security of the girl child from conception to birth, in infancy, and throughout the period of her childhood. It is a fact that in many families, poverty is the major constraint that prevents raising and educating of girl children.

Sl. No	Category	No of Women Assisted
1	Maternity Assistance	35728
2	Marriage Assistance	11245

The set of staggered financial incentives are to encourage families to retain the girl child and to educate her and the ultimate objective of these schemes is to change the attitude and mindset of parents towards the girl child (Govt. of India, 2007). The Moovalur Ramamirtham Ammaiyar Memorial Marriage Assistance Scheme is being implemented by the Tamil Nadu Government. Totally 11245 women are given financial assistance for marriage. The Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) was meant for the first two deliveries of BPL women. Over the years the eligibility criteria has undergone various changes. In its present version, all BPL women who access the services of a primary health centre (PHC) are eligible for the benefits, but the annual household income limit has been revised to Rs. 24,000 from Rs. 12,000. Totally 35728 women were benefited with maternal assistance through this programme.

Source: District Social Welfare Officer, DD Heath & Vellore & Tirupathur, 2011

Crime against Women

Crimes such as murder, robbery and theft are not only considered as the legal violation of human rights but also the extreme obstacles of human development. Crimes against women are various types such as crimes involving sex for economic gains including prostitution, kidnapping and abduction, running a brothel, seduction, wrongful confinement, trafficking, dowry extortion, murder etc.

TABLE 7.4 CRIMES AGAINST WOMEN

Sl. No	Category	Number of cases
1	Dowry Harassment	45
2	Dowry Death	5
3	Molestation	29
4	Eve-teasing	10
Total		**89**

Source: Vellore District Hand Book, 2011

Conclusion

It needs to be clearly understood that various measures of social security cater to different and often mutually exclusive categories and the provision of one measure need not necessarily mean the elimination of another. The social security measures implemented by the government are relevant for the rural poor only when they have access to such measures and derive benefits from them. The magnitude of problems faced by the elderly is confined 8.52 percent of the total population. Around 50 percent of the old age population is covered under the Indira Gandhi National Old Age Pension Scheme. Nearly 24.81 percent of the beneficiaries are covered under the Destitute Agricultural Workers' Pension. Most vulnerable among the aged and women with multiple vulnerabilities need to be covered on a priority basis in implementation not only in the support programme. While reported crime rate against women is not alarming in the district, it is matter worth studying whether there is less occurrence of crime or underreporting due to social stigma.

CHAPTER 8

INFRASTRUCTURE

Chapter
8
Infrastructure

Introduction

Vellore district has one of the good infrastructure services in the state such as universal access to road, electricity, communication system, housing, water & sanitation, energy, transportation, irrigation, connectivity, healthcare, and education. It also nurtures a culture of responsive and transparent governance that ensures progress, security, and equal opportunity to all stakeholders. It is important to realize that the goals set and the actions required are part of a wholesome package with inter-linkages amongst them.

The community infrastructure provides space to facilitate lateral learning. This final chapter attempts to highlight Vellore strategy for the future to meet these challenges and progressively reduce the extent of human deprivation among different sections of the people. While there are many international examples of economic and human development taking diverging paths, it also seems clear from general experience that the most sustainable development in the long run is that in which human development is fully integrated.

This chapter focuses on the status of different types of infrastructure and their role (road, railways, electricity, transport and communication) in the economic development of which has implication on human development.

Roads

Roads have a multifarious social and economic impact on the locality. Road is a route or way on land between two places, which has been paved or otherwise improved to allow travel by some conveyance, including a hour, cart or motor vehicle. The roads must connect places and people. Infrastructure needs to be developed that provide road facilities and fulfill requirement of the communities. The Tamil Nadu State Transport Corporation, Vellore Division assists in developing and maintaining the national highways, city roads and village roads. It also formulates various methods and strategies for the safety and security of the citizens.

TABLE 8.1 DISTRIBUTION OF TOTAL ROAD LENGTH

Sl. No	Block/District	BT	CC	Water Bound Macadam (WBM)	Un-surfaced Road	Total
1	DE Highways Vellore	1530.730	-	-	-	1530.730
2	Corporation/Municipality	297.661	342.144	79.224	61.248	780.277
3	Panchayat Union	1862.973	251.703	338.249	458.123	2911.048
4	Town Panchayat	133.099	117.312	34.308	47.456	332.175
	Vellore District	**3824.463**	**711.159**	**451.781**	**566.827**	**5554.230**

Sources: DD Statistics and Highway department – Vellore, 2011

The Table 8.1 indicates that the Vellore district is having an extensive road network comprising of national highways 226 km, DE highways 1530.730 k.m, corporation and municipality roads 780.277 k.m, panchayat union roads 2911.048 k.m and town panchayat roads 332.175 k.m. Apart from this certain roads are maintained by local bodies and other departments. The railway network in Vellore district comes under the southern railways, with major railway junctions are Arakonam, Katpadi and Jolarpet in the district. There are a total of 28 railway stations and a total of 152 km of rail tracks. There is a domestic airport which is not in use. It shows that Vellore district seems to have better access to road infrastructure.

Transport Facilities

Vellore municipality maintains 104.332 km of roads. It has 50.259 km concrete roads, 6.243 km kutcha roads and 47.88 km bituminous road. The national highways passing through Vellore are NH 46 (Bangalore - Chennai road), NH 234 (Mangalore to Villupuram) and NH 4 from Ranipet to Chennai and the Cuddalore - Chittoor. Vellore is connected with major cities in the states of Tamil Nadu, Andhra Pradesh and Karnataka. Bus service is available to Chennai, Coimbatore, Bangalore, Tirupathi, Salem, Chittoor, Hosur, Nagercoil, Cuddalore, Kurnool, Trichy, Thiruvannamalai, Villupuram, Kanyakumari, Arani, Madurai, Tirunelveli, Kanchipuram, Kalpakkam, Gudiyatham, Dharmapuri, Erode, Tirupur, Palakkad, Krishnagiri, Gingee and other major towns and cities in South India. Vellore is served by a city bus service, which connects the city, suburbs and other places of interest. The bus service extends about 30 km from the city center.

Rail Network

Railway network in Vellore comes under the Southern Railways, with <u>Vellore</u> (Katpadi), Arakkonam and Jolarpettai forming the major railway junctions in the district. There are a total of 28 railway stations and a total of 152 km (94 mi) of rail tracks. This is a major railway junction on the Chennai-Bangalore broad-gauge line running to Chennai, Bangalore, Tirupati and Coimbatore. More than 150 trains cross the Vellore-Katpadi Junction daily.

Air Network

The city has an airport near Abdullapuram; as of 2010 it was not open to the public and was used for aeronautical training programmes. The nearest international airports are Chennai International Airport (130 km) and Bengaluru International Airport (200 km); the nearest domestic airport is Tirupati Airport (100 km).

Communication System

Communication is an effective tool which has rapidly increased in today's world. Wide usage of the phone has increased the portfolio of trade and business and we could see the development in other sector. Communication is vital tool in connecting people for socio economic reasons. Residential telephone was considered as a household amenity of the affluent a decade earlier. Telephones that way do not stop with serving as a communication devise, go beyond, by serving many other purposes like a tool for livelihood. A decade ago usage of public booths and office landline services more, but now usage of cell phones widely increased in and around Vellore district.

TABLE 8.2 TEECOMMUNICATION SYSTEMS

District	No. of Tel. Exchange	No. of PCO	No. of Land Line
Vellore	85	9137	123027

Sources: DD Statistics – Vellore and District Hand Book, 2011

The Table 8.2 shows that 85 tele-exchange in Vellore district, 9137 PCO's and land line usages only 1,23,027, because of increasing communication within the district, through developing communication with reflect economic development in the district. In addition to the government telecommunication network, there are several private players who provide cellular facilities.

Financial Institutions

A financial institution is an institution that provides financial services for its clients or members. Most likely the greatest important financial service provided by financial institutions is acting as financial intermediaries. Most financial institutions are regulated by the government. Financial institutions provide service as intermediaries of financial markets. Banking services perform a key role in improving the economic condition of the people. It is main tool for human development in terms of offering credit services with low interest rate enhances secured livelihood, higher education and creating employment opportunities among the poor.

TABLE 8.3 BANK DETAILS IN VELLORE DISTRICT

S.No	BANK	No. OF BRANCHES				DEP	ADV	CD RATIO
		R	SU	U	TOT			
1	SBH	1	1	0	2	184800	185400	100
2	SBI	27	15	8	50	36954100	30901100	84
3	SBM	0	1	1	2	493304	263697	53
4	SBT	0	0	1	1	369500	223600	61
	SBI GROUP	**28**	**17**	**10**	**55**	**38001704**	**31573797**	**298**
5	Alla Bk	0	0	1	1	237965	193180	81
6	AB	1	4	3	8	690087	429932	62
7	BOB	1	3	1	5	401619	592579	148
8	BOI	3	3	3	9	679755	1300262	191
9	BOM	0	1	1	2	37093	62487	168
10	CB	19	8	5	32	8404453	11468029	136
11	CBI	7	2	2	11	1158295	378215	33
12	Corp.B	3	5	1	9	1957945	1981686	101
13	DB	1	1	1	3	111146	138876	125
14	IB	26	20	6	52	25196500	16458700	65
15	IOB	16	9	5	30	9931600	9314500	94
16	OBC	0	0	1	1	127715	93972	74
17	PNB	0	4	1	5	1123559	828160	74
17	SYB	3	5	3	11	2414361	2998640	124
19	UCO	0	0	1	1	134229	210398	157
20	UBI	9	4	1	14	3182100	3017100	95
21	VB	4	2	1	7	973894	965784	99
22	IDBI Bank Ltd	0	3	1	4	723490	808302	112
	Total Nat. Bank (Including SBI)	**121**	**91**	**48**	**260**	**95487510**	**82814599**	**87**
23	Axis Bank	0	1	2	3	789626	1027577	130
24	CSB	1	3	1	5	738491	856986	116
25	CUB	0	5	4	9	2328565	1979200	85
26	Dh.B	3	0	1	4	310300	528100	170
27	HDFC	1	5	2	8	3540104	4118747	116
28	FB	0	4	1	5	475495	520084	109
29	ICICI	2	5	3	10	2307000	2696700	117
30	KARNATAKA BANK	0	0	1	1	136002	286536	211
31	KVB	2	7	1	10	2410218	1283716	53
32	LVB	1	1	1	3	72463	23701	33
33	SIB	2	1	2	5	343150	377043	110
34	TMB	0	6	2	8	2432217	1623841	67
35	KODAK MAHINDRA	1	0	1	2	254948	167898	66
	Total PVT Banks	**13**	**38**	**22**	**73**	**16138579**	**15490129**	**96**
36	Pallavan G Bank	4	3	1	8	538340	721603	134
	Total RRB	**4**	**3**	**1**	**8**	**538340**	**721603**	**134**
37	VCCB	7	15	13	35	10828826	11562865	107
	Total-Cooperative Banks	**7**	**15**	**13**	**35**	**10828826**	**11562865**	**107**
38	T. I. I. C.	0	0	1	1	0	2539	0
	GRAND TOTAL	145	147	85	377	122993255	110591735	90

Sources: Lead District Manager, Indian Bank, Vellore, 2015

Insurance

Insurance is the equitable transfer of the risk of a loss, from one entity to another in exchange for payment. It is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. Access to insurance also one of the risk improvement measures to people especially to the poor. This could measured by the insurance coverage in terms of number of policies subscribed.

TABLE 8.4 INSURANCE COMPANIES

Sl. No	Name of the Insurance	No. of branches	Polices Issued
1	LIC, Vellore	10	324222
2	PLI HPO, Vellore	1	107
3	PLI HPO, Tirupattur	46	6205
4	General Insurance	6	41206
5	Oriental Insurance	3	64300

Source: District Hand Book, Vellore, 2011

Insurance plays major role in protecting livelihoods from sudden death and unexpected losses and thereby continuity to livelihood, even after the incidence of accidents and other such situations. In the district 10 branches are offering insurance through LIC, General Insurance and Oriental Insurance. Branches of Postal Life Insurance (PLI) seems be 47 in the district. LIC covers most number of 324222 policies and reach of LIC in the district is more. Even number of policies taken does not reflect the reality as many policy holders enrolled insurance for the income tax purposes.

Electricity

Access to electricity improves standard of living. Many of these concerns can be addressed by improving the living conditions of the poor. The correlation between health and living conditions is well established. Providing decent shelter, drinking water and electricity and sanitation facilities is essential if health indicators in the Vellore district are to improve.

TABLE 8.5 STATUS OF ELECTRIFICATION

Sl. No	District	Revenue Village	Hamlets	Towns	Population Covered	No. of street lights
1	Vellore	842	41222	28	-	49740

Sources: DD Statistics – Vellore and District Hand Book, 2011

The Table 8.5 express that in Vellore district the Electricity Service Connection has been provided by the TANGEDCO around 842 revenue villages, 41,222 hamlets, 42 towns and 49,740 Street lights. While even the rural/urban areas that have power connection feel the pinch of the absence of electric supply when there is a power shutdown, one can imagine the plight of the villagers who do not have power connection at all.

Tourism

The Vellore Fort is the primary tourist attraction in the district headquarters. Vellore Fort is the most prominent landmark. During British rule, Tipu Sultan's family and the last king of Sri Lanka, Vikrama Rajasinha, were held as royal prisoners in the fort. The fort houses a church, a mosque and a Hindu temple, the latter known for its carvings. The first rebellion against British rule erupted at this fort in 1806, and it witnessed the massacre of the Vijayanagara royal family of Emperor Sriranga Raya.

The golden temple of *Sripuram* is a spiritual park situated at the foot of a small range of green hills in a place known as "Malaikodi". The temple is located between Vellore-Odugathur state highway and at the southern end of the city of Vellore, at Tirumalaikodi. The temple with gold covering has intricate work done by artisans specializing in temple art using gold. The Jalagandeeswarar Temple inside the Vellore fort dedicated to Jalagandeeswar, is noted for its sculptures, and speaks volumes of the exquisite craftsmanship of the highly skilled artisans of that period. Other famous temples are Ratnagiri Murugan Temple, Wallajapet Dhanvantri Temple, Sri Veera Vijaya Anjaneya Swami temple at D.P Palayam and Ponnai Navagraha Kottai Temple. Assumption Cathedral and the 150-year-old, St. John's Church inside the fort are among the churches in Vellore. The Big Mosque, in the heart of the city, houses the largest Arabic college in India.

Yelagiri is a hill station situated off the Vaniyambadi - Tirupattur road. Located at an altitude of 1,410.6 meters above Mean Sea Level and spread across 30 km^2. The hill station is much unspoiled and retains its laid-back atmosphere, unlike many other hill stations of India. Near Yelagiri there is a seasonal waterfall named Jallagamparai, which receives water during the rainy season. Amirthi Forest & Zoological Park is situated under the Javadu hills of Tellai across Amirthi River which is 25 km from Vellore. The area of the park is 25 hectares. "Sri Thenvenkatachalapathy Temple" is a Vedic temple in the down of the Vallimalai hill town near Thiruvalam in Vellore district of Tamil Nadu, India. It was located in Vellore district of Tamil Nadu. Vallimai is present 25 km from Vellore and 12 km from thiruvalam. In Sri Thenvenkatachalapathy temple Vishnu looks like a saint and also he is an Syambumoorthy (which was not carved by any one). According to history when Vishnu was in deep meditation Lakshmi came like deer and she plays in front of him. At that time Vishnu's meditation was dispersed and he saw that deer. Due to his holy glory a beautiful daughter was born both of them left their daughter for the sake of their devotee king.

Palar River

Palar River has its origin in Nandi hills situated in Kolar district of Karnataka. It flows elegantly touching states of Karnataka and Andhra Pradesh before its confluence in Vayalur (100 kms, from Chennai, towards the South) into the Bay of Bengal.

There are seven tributaries but Cheyyar River is the main tributary. Throughout its long journey, the river flows as an underground course or 'Guptagamini' and appears near Bethamangala town. The river gains speed here further flowing down the Deccan Plateau. Vellore, Kanchipuram, Walajapet (Anaicut), Arcot, Vaniyambadi and Ambur are all situated on the banks of Palar river. When the Andhra Pradesh Government came up with the proposal of constructing a dam across Palar River, it was met with agitation in various neighboring states. They believed that Palar river is an interstate river and hence as per clause in interstate River Water Disputes Act 1956. 'The upstream state should not build any new dam or structure to obstruct river or store waters of the rivers without the consent of downstream state'.

Kosasthalaiyar River

Kosasthalaiyar River or (Kortalaiyar River) has its origin near Kaveripakkam (Vellore district) and it drains into the Bay of Bengal. At Tamaraipakkam and Vallur, there are two check dams across the river. Level of water in the river is controlled by Vallur Anicut check dam near Minjur. It was proposed by the water Resources Department (WRD) to construct the Bandikavanur check dam. Mordana dam is yet another dam near Vellore.

Mordhana Dam

The dam is situated 8 kms. From Gudiyatham town near Vellore. It is a picnic spot. The dam has been constructed between two hills, dotted with greenery on all sides.

Conclusion

On the infrastructure point the district had fared well in the case of roads and electrification of the villages. The district administration needs to be appreciated for improvement in above mentioned public infrastructures. The recent efforts to identify infrastructural needs and planning for the same at the village level through various schemes is a positive move. Vellore district is having an extensive road network comprising of National Highways 226 km, DE highways 1530.730k.m, Corporation and Municipality roads 780.277k.m, Panchayat Union roads 2911.048k.m and Town Panchayat roads 332.175k.m. Electricity Service Connection has been provided by the TANGEDCO around 842 revenue villages, 41,222 hamlets, 42 towns and 49,740 Street lights. 9137 PCO's and land line usages only 1,23,027, because of increasing communication within the district.

CHAPTER 9
SUMMARY AND WAY FORWARD

Chapter
9
Summary and Way Forward

Introduction

This chapter has made attempt to summarize the status of human development from different aspects in Vellore district. We have worked out Human Development Index, Gender Inequality Index, Child Development Index, and Multi Dimensional Poverty Index based on the guidance of the State Planning Commission and secondary data provided by the District Planning Cell, Vellore district. The following section summarizes the achievements made in various sectors and other developmental aspects of the district and suggestion for overcoming the challenges.

Human Development Status

✓ HDI scores range from 0.90 to 0.36, with Vellore Corporation taking the top position while Kandhili block is placed at the bottom. Vellore Corporation– highly urbanized block stands in the top position due to the lesser number of malnourished children, more accessibility to health care facilities and high rate of enrollment in secondary education. The Vellore Corporation stands first in literacy and Katpadi block which has a considerable urban population stands next to it in terms of literacy. The Kandhili block has got a low literacy level

Top 5 blocks	Value	Bottom 5 blocks	Value
Vellore Corporation	0.90	Kandhili	0.36
Walaja	0.74	Madhanur	0.43
Sholinghur	0.67	Natrampalli	0.45
Arcot	0.67	Arakkonam	0.49
Katpadi	0.66	Anaicut	0.49

✓ GII rank is less than the HDI rank in a block, it shows that women in the Block suffer lower achievement than men. If the HDI and GII ranks are the same in a Block, it is indicative of gender equality in human development. This is the appreciable stage and the disparity within the blocks and between the block should be overcome through implementing human and gender development measures. While comparing the three dimensions, Pernambut and Nemili blocks draw closer to the first rank than that of other blocks. Other blocks show undulated nature in these three GII dimensions.

Top 5 blocks	Value	Bottom 5 blocks	Value
Kandhili	0.01	Kaniyambadi	0.14
Gudiyatham	0.02	Katpadi	0.13
Vellore Block	0.03	Tirupattur	0.11
Vellore Corporation	0.03	Madhanur	0.10
Kaveripakkam	0.04	Natrampalli	0.09

✓ In terms of the overall Child Development Index, K.V Kuppam block have the highest index at 0.80 and Katpadi (0.77), the lowest at Anaicut (0.46). This implies that the district administration has to take up concerted efforts to ensure that children who constitute the most vulnerable population receive equitable resource for their development across blocks.

✓ MPI in Vellore district exhibits the higher range of disparity among the blocks. While comparing to other indices like HDI, GII and CDI, the MPI range is elevated to 0.48. The range starts from Vellore Corporation (0.11) to Arakkonam (0.59

Employment, Income and Poverty

✓ The working population in Vellore District was 39, 36,331in 2011, an increase of working population from 34, 77,317in 2001 i.e. an increase by 4, 59,014since 2001.

✓ Work Participation Rates were higher in rural areas than in urban areas. Vellore District rural WPR increased from 98.00 per cent in 2001 to 99.60 per cent in 2011. WPR in urban was 49.74 per cent and 50.26 per cent in the 2011 census.

✓ A drastic decline trend in cultivators from 2001 to 2011. The district cultivators' percentage declined from 17.61 percent to 9.09 percent in 2001 and 2011 respectively.

✓ Natrampalli block particularly reports 32 percent HH completing their 100 days. However, the gap between the number of people who demanded jobs and those provided with jobs has not been very high in any of the blocks. Only in Kaveripakkam block, the difference is substantial.

✓ The percentage of PCI increase for the year 2011 – 2012 for the Vellore District (16.27%) when it is compared with the state average (16.39%) for the year 2011-12 and the variation between the district and state average is 0.12 percentage.

✓ The percentage of PCI increased for the year 2011 – 2012 for the Vellore District than the state average for the year 2011-12. The contribution of primary sector is very low in NDDP. Agriculture is a primary sector, enhancement in agriculture production through new technology adoption is the need of the hour to promote

rural livelihood as a backbone of our country. One third of the district's total population was below the poverty line in 2014.

✓ About one third (35.6%) of the district's total population was below the poverty line in 2014. The poverty range starts from Alangayam (47.1%), Pernambut (44.5%) and Gudiyatham (40.5%) and the variation is 18.1 percentage. It clearly indicates the disparity within the districts, 9 blocks have BBL households more than the district average (35.6%), which indicates that the district need to improve better employment opportunities for the families and reduce the marginal workers by increasing the main workers' share to the total workers.

✓ The district needs to improve employment opportunities for the BPL families and reduce the marginal workers by increasing the main workers' share to the total workers. More emphasis should be placed on employment generating schemes. Block specific interventions are required to overcome the inequality. Improvements in the physical infrastructure, access to facilities like education and health only will be able to change the situation for the better.

Demography Health and Nutrition

✓ An analysis of the decennial growth of population from 2001 to 2011 shows that total population of Vellore District grew by 13.2% from 34,77,367 to 39,36,331 as per the 2011 Census, which is higher than the state ratio.

✓ Declining trend between 2011 and 2014 in both CBR and CDR in the district which is also responsible for upward demographic transition in the district during the reference period. As a consequence of family planning drive, birth rate has registered a declining trend consistently in the three years from 15.9 percent in 2011 to 15.7 percent in 2014.

✓ The sex ratio for the Vellore district was 1005 females for 1000 male population which is higher than the state average (995). The district average is slightly lesser than the stateaverage (945) in terms of child sex ratio (946). The district average is slightly lesser than the state average (945) in terms of child sex ratio (946).

✓ The life expectancy of Vellore District for the year 2011 is 75.3 years, which is higher than the state average (70.9). The LEB showed an increase from 68.3 to 75.3 years.

✓ As the socio economic status of the community is low and there is lack of awareness

in the community, the health outcomes are also poor. There were also more habitations in these blocks. There is an increasing need to educate mothers about proper child care, disease prevention, management through community sensitization and mobilization.

✓ The variation in the IMR at block level between the highest and lowest is 18.3 percentage, which could be due to limitation of inter block accessibility to poor road and transportation facilities.

✓ The MMR of Vellore district was 64.39 percent in the year 2013-14, which is less compared to previous year 2012-13. The IMR and MMR reflect the availability of quality of health care services to the people.

✓ Institutional delivery has increased because of various schemes being linked to institution based safe delivery. However, a less than 1 percent of deliveries are happening at home or classified as domiciliary deliveries. There is now greater awareness in the community and availability of ambulance in the health care system of Vellore district like 108 and 104 which has improved access to health largely.

✓ The variation between the highest and the lowest SBR among the blocks was 13.7 pecent. The overall percentage (97.3) of the total children immunized, 91.5 percentage of Women took IFA tablets, 1.8 percentage Children took IFA tables and 91.8 percentage Adolescent girls took IFA tablets.

✓ Majority (99.01) of households have access to safe drinking water from improved source. The district has 84.98 percent of households have access to safe drinking water from improved source. Vellore Corporation, Natrampalli and Tirupattur blocks occupy the first three positions in ensuring improved water source at habitation level.

✓ The number of HIV positive male cases increased by 31.46 percentage and the number of female cases increased by 19.07 percentage over the period of one year (2013-2014). While theincidence of T.B. cases reported has come down, the number of leprosy cases identified has in fact decreased.

✓ Though there are different health care programmes and services provided by the district administration, the inter-block variations need to be given attention to ensure equity in accessing the govt. services and programmes for achieving good health for all, particularly children, adolescent girls, pregnant and lactating mothers and under five children. This requires improved attention to areas where health indicators are adverse. Improving access with increase in awareness and information on preventive health could work in improving the health status of the district as a whole.

Literacy &Education

- ✓ There is a change with the increase of literacy rate in the district by 11.44 percent during the period between 2001 and 2011. Relatively gender wise literacy rate indicates that there was a change in both male and female to higher level of accounting 6.37 percent and 23.54 percent respectively during the reference period showing higher level for female. This higher percentage of increase in female literacy is encouraging from gender perspective in Human Development Index.

- ✓ The gross enrollment in primary education in the district is more than 100 percent during 2011-12, which is increased by 2.4 percent in 2013-14. The district shows lowest GER of 101.5 percentage in Tirupattur block. Nine blocks in the district maintained more than 100 percent GER in 2013-14.3. It is due to lack of interest of the children and ignorance of parents.

- ✓ The completion rate in Primary Education increased to 0.81 percent from 2011-12 to 2013-14. The dropout rate at the primary education in the district is increased from 0.91 percent (2011-12) to 1.50 percent (2013-14) which seems to be more number of students are getting dropout.

- ✓ The transition rate from primary to upper primary slightly increased in 2013-14 (99.04) when compared to the previous year (99.03). Among the block transition rate is increased in 10 blocks and inter block variation of transition rate from primary to upper primary is 1.14 percent in 2013-14.
- ✓
- ✓ In the district there are 6768 habitations with 2032 primary schools and 559 upper primary schools with the ratio of 1:3 (one school for three habitations).
- ✓
- ✓ A major indicator of educational performance and efficiency is the dropout rate at each stage of education. The drop-out rate also measures the ability of the system to retain the enrolled children. The drop out at primary level declined marginally from 2.10 percent to 1.90 percent.
- ✓
- ✓ In the district, Walajah block stands high in pupil–teacher ratio (50:1) at primary level, whereas Sholinghur has lowest pupil–teacher ratio (18:1). The pupil-school ratio at the primary level shows that Kaveripakkam block has high pupil-school ratio (72:1) and low pupil-school ratio in Jolarpet block (57:1). With regard to upper primary level data shows that K.V. Kuppam block has highest ratio (64:1) and Gudiyatham block registered lowest ratio (19:1). The pupil-school ratio at the upper primary reveals that Walajah block holds high (50:1) and low in Kaveripakkam block (25:1).
- ✓
- ✓ There are 2171 schools functioning in which 1427 schools (65.73%) with three class

room facilities and 799 schools (36.8%) functioning with more than three class room facilities.

✓ It is found that the district has provided electricity facility to 96.45 percent of the schools. Only few blocks, Pernambut (17 schools) and Kaveripakkam (12 schools) functioning without electricity facility.

✓ It is found that the district has provided electricity facility to 96.45 percent of the schools. Only few blocks, Pernambut (17 schools) and Kaveripakkam (12 schools) functioning without electricity facility.

✓ It is observed that the district has provided 73.88 percent of schools with compound facilities and 26.11 percent of the schools (567) does not have compound wall which is very important for providing security for children and school infrastructure.

✓ In the district, 99.04 percent of the schools have been provided with drinking water facility. The district administration has made efforts to provide 100 percent drinking water to the schools.

✓ The district administration has provided desk and chair to 78.49 percent of the schools in the district. The number of schools with desk and chair is 467 which accounts to 31.51 percent.

✓ Though there are good number of arts and science colleges, engineering colleges and professional colleges, one need to study the access for rural children for higher education. There are 41 hostels for both for boys and girls in which 5561 students are staying.

Gender

✓ The total number of women population in Vellore district is 17362234 and it is 49.93 percent of the total population according to 2011 census. District sex ratio is 995 which is equal to state average sex ratio. Female literacy rate, 73.14 percent which is lesser than 86.53 percent. There is a gender inequality in the literacy of Vellore district.

✓ The MMR of Vellore district was 64.39 percent in the year 2014. IMR and MMR reflect the availability of quality of health care services to the people. The result of this computation exhibits the GII of Vellore district shows the lower range of inequality in 10 blocks.

✓ A cumulative total of 24,056 Self Help Groups had been formed under MahalirThittam, 345871 members in the groups and totally 25618.38 lack loans disbursed to these SHGs.Vellore district reported 53% in female employment participation. Only 6 percent of female workers were employed in non-agricultural sector and 58.02 percent of female workers participation in agricultural sector.

✓ There are 3101 elected representatives in the state assembly and local body elections out of which 38.79 percent are women.

Social Security

✓ The share of elderly was 296324 representing 8.52 percent of the total district population in 2011. This 8.52 percent indicates the dependency ratio of person aged above 60 and 94.4 percent of the old age people in the district were covered under some scheme or the other.

✓ Financial assistance has been provided to 115970 of old age people followed by 20963 destitute physically handicapped pension, 51894 destitute widow pension, 69402 destitute agricultural laborers 19757 destitute and deserted wives and 1786 unmarried poor women pension.

✓ The differently abled under the MGNREGS have been quite high in the district. This sort of convergence ensures that the differently abled are linked to some regular source of income in rural areas where there are limited employment opportunities. Scholarships, free bus passes, special schools take care of the educational needs of the differently abled children.

✓ Under MoovalurRamamirthamAmmaiyar Memorial Marriage Assistance Scheme 11245 women are given financial assistance for marriage.

✓ Under The Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) maternity assistance totally 35728 women were benefited through this programme.

✓ While reported crime rate against women is not alarming in the district, it is worth studying whether there are low rates of crime or underreporting of crime due to social stigma.

Infrastructure

✓ The infrastructure front the district had fared well in the case of roads and electrification of the villages. The district administration needs to be appreciated for improvement in above mentioned public infrastructures. The recent efforts to identify infrastructural needs and planning for the same at the village level through various schemes are a positive move.

✓ Vellore district seems to have better access to road infrastructure and extensive road network comprising of National Highways 226 km, State Highways 1530.730 k.m, Corporation and Municipality roads 780.277 k.m, Panchayat Union roads 2911.048 k.m and Town Panchayat roads 332.175 k.m.

✓ Electricity Service Connection has been provided by the TANGEDCO around 842 revenue villages, 41,222 hamlets, 42 towns and 49,740 Street lights.

✓ 9137 PCO's and land line usages only 1,23,027, because of increasing communication within the district.

✓ In the district 10 branches are offering insurance through LIC, General Insurance and Oriental Insurance. Branches of Postal Life Insurance (PLI) seen to be 47 in the district. LIC covers most number of policies (324222) and the reach of LIC in the district is more.

ANNEXURES

Annxeures

A1. Index and Indicators

A1.1 HUMAN DEVELOPMENT REPORT (DATA)

S. No	Block	Standard of Living					Health			Education		
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
		2011	2013-14	2013-14	2011	2011	2013-14	2013-14	2013-14	2011	2013-14	2013-14
1	Vellore	93.54	15.31	99.11	96.48	58.18	10.6	10.0	102	76.38	102.30	86.65
2	Kaniyambadi	89.86	31.34	95.91	92.78	39.76	17.6	65.1	87	74.12	101.70	68.69
3	Katpadi	91.04	26.63	100.00	95.20	33.36	8.2	55.5	18	76.81	103.60	99.58
4	Anaicut	85.97	34.68	97.36	90.94	28.63	11.7	41.0	90	65.60	103.10	97.93
5	Gudiyatham	91.25	43.34	98.90	93.85	40.85	19.4	46.1	54	70.95	101.60	99.48
6	Pernampet	90.18	29.57	98.47	92.76	60.09	9.4	71.2	41	67.45	102.10	100.69
7	K.V.Kuppam	87.13	19.72	98.28	92.40	50.57	17.4	61.8	31	70.32	102.80	103.57
8	Walajah	97.63	42.65	98.41	95.87	52.41	8.5	41.6	93	74.45	102.60	100.69
9	Sholinghur	90.73	33.36	99.49	94.59	84.09	10.5	51.9	86	69.81	102.60	83.40
10	Arcot	87.80	53.37	98.82	95.43	41.83	16.7	45.9	114	73.39	102.50	107.82
11	Timiri	87.71	29.19	97.20	92.98	59.27	26.4	57.5	141	67.53	102.80	136.76
12	Arakkonam	90.34	57.26	99.52	95.69	27.16	23.3	83.2	84	75.66	102.00	130.82
13	Nemili	93.65	14.68	99.63	93.59	81.58	15.9	96.5	105	66.79	102.00	136.87
14	Kaveripakkam	83.81	20.15	100.00	93.66	82.81	9.6	77.9	97	66.01	102.00	96.66
15	Thirupattur	96.64	49.29	98.28	92.17	24.73	11.4	139.3	27	69.45	101.50	161.61
16	Kandhili	74.08	16.77	100.00	88.26	52.09	14.6	10.0	38	65.21	103.30	48.61
17	Jolarpet	91.09	27.34	100.00	89.43	73.36	11.4	36.2	38	65.45	101.70	91.35
18	Natrampalli	88.29	24.44	100.00	89.08	43.03	8.1	115.4	17	63.69	101.70	72.37
19	Madhanur	94.99	55.37	98.56	94.52	37.06	15.3	135.2	26	72.02	101.90	51.45
20	Alangayam	91.94	54.92	100.00	91.09	29.57	18.8	46.4	44	65.78	102.80	122.63
21	Vellore Corp	98.36	83.33	100.00	100.13	85.92	10.14	10.0	12	77.15	102.40	101.81

DISTRICT HUMAN DEVELOPMENT REPORT - VELLORE DISTRICT.

Standard of Living					Health			Education			Standard of Living Index	Health Index	Education Index	Overall Index	Rank
Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary					
0.85	0.03	0.93	0.82	0.56	0.88	1.00	1.00	0.96	0.89	0.36	0.41	0.96	0.68	0.64	6
0.73	0.26	0.70	0.64	0.27	0.55	0.62	0.90	0.85	0.84	0.21	0.47	0.67	0.53	0.55	10
0.77	0.19	1.00	0.76	0.17	1.00	0.68	0.79	0.98	1.00	0.47	0.46	0.81	0.78	0.66	5
0.61	0.31	0.81	0.56	0.10	0.83	0.78	0.26	0.42	0.96	0.46	0.38	0.55	0.57	0.49	17
0.78	0.43	0.92	0.70	0.29	0.46	0.75	0.50	0.69	0.84	0.47	0.57	0.56	0.65	0.59	8
0.74	0.23	0.89	0.64	0.59	0.94	0.57	0.13	0.51	0.88	0.48	0.57	0.41	0.60	0.52	14
0.65	0.09	0.87	0.63	0.44	0.56	0.64	0.71	0.66	0.93	0.51	0.43	0.63	0.68	0.57	9
0.98	0.42	0.88	0.79	0.47	0.98	0.78	0.75	0.86	0.92	0.48	0.67	0.83	0.73	0.74	2
0.76	0.29	0.96	0.73	0.97	0.89	0.71	0.74	0.63	0.92	0.34	0.68	0.78	0.58	0.67	3
0.67	0.57	0.91	0.77	0.31	0.59	0.75	0.68	0.81	0.91	0.54	0.61	0.67	0.74	0.67	4
0.66	0.23	0.80	0.65	0.58	0.13	0.67	0.60	0.51	0.93	0.79	0.54	0.37	0.72	0.52	12
0.75	0.63	0.96	0.79	0.08	0.27	0.49	0.18	0.92	0.87	0.74	0.49	0.29	0.84	0.49	18
0.85	0.02	0.97	0.68	0.93	0.63	0.40	0.66	0.48	0.87	0.79	0.41	0.55	0.69	0.53	11
0.54	0.10	1.00	0.69	0.95	0.93	0.53	0.25	0.44	0.87	0.45	0.51	0.49	0.56	0.52	13
0.95	0.51	0.87	0.62	0.04	0.84	0.10	0.71	0.61	0.83	1.00	0.40	0.39	0.80	0.50	16
0.23	0.05	1.00	0.43	0.47	0.69	1.00	0.37	0.40	0.98	0.04	0.30	0.64	0.25	0.36	21
0.77	0.20	1.00	0.48	0.80	0.84	0.82	0.57	0.41	0.84	0.40	0.57	0.73	0.52	0.60	7
0.68	0.16	1.00	0.47	0.33	1.00	0.26	0.51	0.32	0.84	0.24	0.44	0.51	0.40	0.45	19
0.89	0.60	0.89	0.73	0.23	0.66	0.13	0.67	0.74	0.86	0.07	0.61	0.38	0.35	0.43	20
0.80	0.59	1.00	0.56	0.11	0.49	0.75	0.18	0.43	0.93	0.67	0.50	0.40	0.64	0.51	15
1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.94	1.00	0.90	0.49	1.00	0.95	0.76	0.90	1

A1.2 GENDER INEQUALITY INDEX

S. No	Indicators	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 Representativies in RLBs and ULBs	Share of male Elected Representativies in RLBs and ULBs	Female Worker Participation Rate	Male Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector	Male Worker Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
		2013-2014	2013-14	2013-14	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2013-14	2013-14
	Unit	Rate	%	%	%	%	%	%	%		%	%	%	%	%	%
1	**Vellore**	10.0	100	95.70	72.0	80.9	49.1	50.9	37.00	63	20.53	57.11	68.22	78.47	150	400
2	**Kaniyambadi**	65.1	99.9	98.50	67.6	80.7	49.0	51.0	40.00	60	27.69	56.03	40.89	65.77	80	400
3	**Katpadi**	55.5	99.9	91.00	71.3	82.2	48.6	51.4	39.00	61	23.04	52.09	61.57	79.08	85	400
4	**Anaicut**	41.0	99.8	88.10	58.5	72.8	49.0	51.0	39.00	61	30.30	57.79	26.82	42.94	100	400
5	**Gudiyatham**	46.1	99.84	95.20	64.9	77.1	48.8	51.2	40.00	60	30.13	58.29	54.34	68.04	100	250
6	**Pernampet**	71.2	100	75.30	62.0	73.0	48.9	51.1	38.00	62	26.85	56.51	56.67	67.12	100	250
7	**K.V.Kuppam**	61.8	100	95.60	63.3	77.5	48.9	51.1	39.00	61	30.81	57.30	33.86	51.89	90	300
8	**Walajah**	41.6	99.8	91.00	68.7	80.3	49.0	51.0	38.00	62	23.71	58.39	57.91	79.9	80	250
9	**Sholinghur**	51.9	99.9	94.90	62.1	77.5	48.5	51.5	40.00	60	31.05	58.08	27.57	50.19	100	300
10	**Arcot**	45.9	100	101.30	67.3	79.5	48.1	51.9	39.00	61	24.75	57.60	50.99	74.59	75	250
11	**Timiri**	57.5	99.8	99.00	59.4	75.7	48.4	51.6	39.00	61	36.57	60.09	16.74	39.1	80	250
12	**Arakkonam**	83.2	100	95.9	69.8	81.5	48.7	51.3	39.00	61	21.28	57.72	41.08	70.09	90	250
13	**Nemili**	96.5	99.9	101.1	58.8	74.8	48.7	51.3	39.00	61	36.66	60.87	20.03	44.13	120	350
14	**Kaveripakkam**	77.9	99.9	96.80	57.5	74.5	48.9	51.1	38.00	62	35.61	59.04	20.39	42.86	100	250
15	**Thirupattur**	139.3	100	99.90	63.7	75.1	48.6	51.4	37.00	63	32.29	56.79	36.53	58.37	100	400
16	**Kandhili**	10.0	100	84.20	57.9	72.3	47.8	52.2	38.00	62	40.03	57.99	34.18	47.38	150	400
17	**Jolarpet**	36.2	100	99.90	58.2	72.6	48.1	51.9	38.00	62	35.28	55.55	46.67	55.21	120	400
18	**Natrampalli**	115.4	100	83.50	56.3	71.0	47.5	52.5	41.00	59	43.27	58.26	28.22	36.18	100	400
19	**Madhanur**	135.2	99.8	99.90	67.5	76.8	48.2	51.8	40.00	60	24.54	56.63	55.15	71.19	100	350
20	**Alangayam**	46.4	98.65	77.10	60.5	71.1	48.2	51.8	37.00	63	25.72	56.56	37.04	62.95	100	350
21	**Vellore Corp**	10.0	100	99.90	73.1	81.4	49.3	50.7	34.00	66	18.39	57.90	83.24	93.05	150	400

A1.2 GENDER INEQUALITY INDEX (INDICES)

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 Representativies in RLBs and ULBs	Share of Male Elected Representativies in RLBs and ULBs	Female Worker Participation Rate	Male Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector	Male Worker Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
1.00	1.00	0.96	0.72	0.81	0.49	0.51	0.37	0.63	0.21	0.57	0.68	0.78	1.00	1.00
0.15	1.00	0.99	0.68	0.81	0.49	0.51	0.40	0.60	0.28	0.56	0.41	0.66	0.15	1.00
0.18	1.00	0.91	0.71	0.82	0.49	0.51	0.39	0.61	0.23	0.52	0.62	0.79	0.21	1.00
0.24	1.00	0.88	0.59	0.73	0.49	0.51	0.39	0.61	0.30	0.58	0.27	0.43	0.39	1.00
0.22	1.00	0.95	0.65	0.77	0.49	0.51	0.40	0.60	0.30	0.58	0.54	0.68	0.39	0.14
0.14	1.00	0.75	0.62	0.73	0.49	0.51	0.38	0.62	0.27	0.57	0.57	0.67	0.39	0.14
0.16	1.00	0.96	0.63	0.77	0.49	0.51	0.39	0.61	0.31	0.57	0.34	0.52	0.27	0.43
0.24	1.00	0.91	0.69	0.80	0.49	0.51	0.38	0.62	0.24	0.58	0.58	0.80	0.15	0.14
0.19	1.00	0.95	0.62	0.77	0.48	0.52	0.40	0.60	0.31	0.58	0.28	0.50	0.39	0.43
0.22	1.00	1.01	0.67	0.80	0.48	0.52	0.39	0.61	0.25	0.58	0.51	0.75	0.09	0.14
0.17	1.00	0.99	0.59	0.76	0.48	0.52	0.39	0.61	0.37	0.60	0.17	0.39	0.15	0.14
0.12	1.00	0.96	0.70	0.82	0.49	0.51	0.39	0.61	0.21	0.58	0.41	0.70	0.27	0.14
0.10	1.00	1.01	0.59	0.75	0.49	0.51	0.39	0.61	0.37	0.61	0.20	0.44	0.64	0.71
0.13	1.00	0.97	0.57	0.75	0.49	0.51	0.38	0.62	0.36	0.59	0.20	0.43	0.39	0.14
0.07	1.00	1.00	0.64	0.75	0.49	0.51	0.37	0.63	0.32	0.57	0.37	0.58	0.39	1.00
1.00	1.00	0.84	0.58	0.72	0.48	0.52	0.38	0.62	0.40	0.58	0.34	0.47	1.00	1.00
0.28	1.00	1.00	0.58	0.73	0.48	0.52	0.38	0.62	0.35	0.56	0.47	0.55	0.64	1.00
0.09	1.00	0.84	0.56	0.71	0.47	0.53	0.41	0.59	0.43	0.58	0.28	0.36	0.39	1.00
0.07	1.00	1.00	0.68	0.77	0.48	0.52	0.40	0.60	0.25	0.57	0.55	0.71	0.39	0.71
0.22	0.99	0.77	0.61	0.71	0.48	0.52	0.37	0.63	0.26	0.57	0.37	0.63	0.39	0.71
1.00	1.00	1.00	0.73	0.81	0.49	0.51	0.34	0.66	0.18	0.58	0.83	0.93	1.00	1.00

A1.2 GENDER INEQUALITY INDEX (INDICES)

Female Health Indices	Male Health Indices	Female Emp Indices	Male Emp Indices	Female LF Indices	Male LF Indices	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
0.99	1	0.51	0.71	0.45	0.76	0.61	0.81	0.70	0.99	0.61	0.60	0.72	0.03	3
0.53	1	0.51	0.70	0.20	0.75	0.38	0.80	0.52	0.77	0.60	0.48	0.60	0.14	21
0.55	1	0.51	0.71	0.22	0.72	0.40	0.80	0.53	0.77	0.61	0.47	0.61	0.13	20
0.60	1	0.48	0.67	0.35	0.76	0.46	0.80	0.59	0.80	0.57	0.55	0.63	0.07	16
0.59	1	0.50	0.68	0.34	0.29	0.47	0.58	0.52	0.80	0.59	0.32	0.53	0.02	2
0.47	1	0.49	0.67	0.33	0.28	0.42	0.58	0.49	0.74	0.58	0.30	0.51	0.04	7
0.54	1	0.49	0.69	0.29	0.50	0.43	0.70	0.53	0.77	0.59	0.39	0.56	0.06	14
0.60	1	0.50	0.71	0.19	0.29	0.39	0.59	0.47	0.80	0.60	0.24	0.49	0.04	10
0.57	1	0.49	0.68	0.35	0.50	0.46	0.70	0.56	0.78	0.59	0.42	0.58	0.04	9
0.60	1	0.50	0.70	0.15	0.29	0.36	0.58	0.44	0.80	0.60	0.22	0.47	0.06	13
0.56	1	0.48	0.68	0.24	0.29	0.40	0.58	0.47	0.78	0.58	0.26	0.49	0.04	6
0.49	1	0.51	0.71	0.24	0.29	0.39	0.59	0.47	0.74	0.61	0.26	0.49	0.05	11
0.47	1	0.48	0.68	0.48	0.66	0.48	0.76	0.59	0.74	0.58	0.57	0.62	0.06	12
0.50	1	0.47	0.68	0.37	0.29	0.45	0.58	0.51	0.75	0.58	0.33	0.52	0.04	5
0.42	1	0.49	0.69	0.36	0.75	0.42	0.80	0.55	0.71	0.59	0.56	0.61	0.11	19
0.94	1	0.47	0.67	0.63	0.76	0.66	0.80	0.72	0.97	0.57	0.70	0.73	0.01	1
0.65	1	0.47	0.67	0.47	0.75	0.53	0.79	0.63	0.83	0.57	0.61	0.66	0.04	8
0.42	1	0.48	0.65	0.41	0.76	0.43	0.79	0.56	0.71	0.56	0.59	0.62	0.09	17
0.42	1	0.51	0.68	0.31	0.64	0.40	0.76	0.53	0.71	0.59	0.47	0.58	0.10	18
0.55	1	0.48	0.67	0.32	0.64	0.44	0.75	0.55	0.77	0.57	0.48	0.60	0.07	15
1.00	1	0.50	0.73	0.43	0.76	0.60	0.82	0.69	1.00	0.61	0.59	0.72	0.03	4

A1.3 MULTI DIMENSIONAL POVERTY INDICATORS (DATA)

SL. NO	Block Name	Health			Education		Living Standards				
		IMR	High order Birth Rate	Malnour shied Children	Drop out in primary	Drop out secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Electricity	Pucca house
1	Vellore	10.6	8.00	10.75	0.20	3.23	93.54	15.31	99.11	96.48	58.18
2	Kaniyambadi	17.6	11.30	13.58	1.90	5.61	89.86	31.34	95.91	92.78	39.76
3	Katpadi	8.2	10.20	16.79	1.95	6.96	91.04	26.63	100.00	95.20	33.36
4	Anaicut	11.7	11.40	31.6	0.87	11.48	85.97	34.68	97.36	90.94	28.63
5	Gudiyatham	19.4	7.50	24.7	1.60	3.81	91.25	43.34	98.90	93.85	40.85
6	Pernampet	9.4	10.60	35.36	1.65	5.51	90.18	29.57	98.47	92.76	60.09
7	K.V.Kuppam	17.4	11.40	18.95	1.70	3.12	87.13	19.72	98.28	92.40	50.57
8	Walajah	8.5	10.50	17.72	1.55	9.50	97.63	42.65	98.41	95.87	52.41
9	Sholinghur	10.5	7.50	17.93	1.80	4.68	90.73	33.36	99.49	94.59	84.09
10	Arcot	16.7	14.90	19.68	1.45	5.83	87.80	53.37	98.82	95.43	41.83
11	Timiri	26.4	21.10	22.13	1.65	4.02	87.71	29.19	97.20	92.98	59.27
12	Arakkonam	23.3	17.30	33.79	1.45	8.66	90.34	57.26	99.52	95.69	27.16
13	Nemili	15.9	19.20	20.43	1.52	9.48	93.65	14.68	99.63	93.59	81.58
14	Kaveripakkam	9.6	17.60	31.93	1.65	11.54	83.81	20.15	100.00	93.66	82.81
15	Thirupattur	11.4	14.00	19	1.80	5.51	96.64	49.29	98.28	92.17	24.73
16	Kandhili	14.6	19.70	28.38	1.55	6.92	74.08	16.77	100.00	88.26	52.09
17	Jolarpet	11.4	15.00	22.83	2.27	8.47	91.09	27.34	100.00	89.43	73.36
18	Natrampalli	8.1	19.90	24.5	1.75	9.98	88.29	24.44	100.00	89.08	43.03
19	Madhanur	15.3	9.00	20.13	1.62	4.56	94.99	55.37	98.56	94.52	37.06
20	Alangayam	18.8	12.90	33.79	1.35	3.85	91.94	54.92	100.00	91.09	29.57
21	Vellore Corp	10.14	9.8	12.30	1	6.54	98.36	83.33	100.00	100.13	85.92

A1.3 MULTIDIMENSIONAL POVERTY INDEX (INDICES)

	Health		Education		Living Standards					Overall index	Rank
IMR	High order Birth Rate	Malnourished Children	Drop out in primary	Drop out in secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Electricity	Pucca house		
0.86	0.96	1.00	1.00	0.99	0.80	0.01	0.78	0.69	0.55	0.24	2
0.48	0.72	0.89	0.18	0.70	0.65	0.24	0.00	0.38	0.25	0.55	16
0.99	0.80	0.75	0.15	0.54	0.70	0.17	1.00	0.58	0.14	0.42	6
0.80	0.71	0.15	0.68	0.01	0.49	0.29	0.35	0.23	0.06	0.62	19
0.38	1.00	0.43	0.32	0.92	0.71	0.42	0.73	0.47	0.26	0.44	7
0.93	0.77	0.00	0.30	0.72	0.66	0.22	0.63	0.38	0.58	0.48	10
0.49	0.71	0.67	0.28	1.00	0.54	0.07	0.58	0.35	0.42	0.49	12
0.98	0.78	0.72	0.35	0.24	0.97	0.41	0.61	0.64	0.45	0.39	4
0.87	1.00	0.71	0.23	0.81	0.69	0.27	0.88	0.53	0.97	0.30	3
0.53	0.46	0.64	0.40	0.68	0.56	0.56	0.71	0.60	0.28	0.46	8
0.00	0.00	0.54	0.30	0.89	0.56	0.21	0.32	0.40	0.56	0.62	20
0.17	0.28	0.06	0.40	0.34	0.67	0.62	0.88	0.63	0.04	0.59	17
0.57	0.14	0.61	0.36	0.24	0.81	0.00	0.91	0.45	0.93	0.50	14
0.92	0.26	0.14	0.30	0.00	0.40	0.08	1.00	0.45	0.95	0.55	15
0.82	0.52	0.66	0.23	0.72	0.93	0.50	0.58	0.33	0.00	0.47	9
0.64	0.10	0.28	0.35	0.55	0.00	0.03	1.00	0.00	0.45	0.66	21
0.82	0.45	0.51	0.00	0.36	0.70	0.18	1.00	0.10	0.79	0.51	13
1.00	0.09	0.44	0.25	0.19	0.59	0.14	1.00	0.07	0.30	0.59	18
0.61	0.89	0.62	0.31	0.83	0.86	0.59	0.65	0.53	0.20	0.39	5
0.42	0.60	0.06	0.44	0.91	0.74	0.59	1.00	0.24	0.08	0.49	11
0.89	0.83	0.94	0.61	0.59	1.00	1.00	1.00	1.00	1.00	0.11	1

A.1.4 CHILD DEVELOPMENT INDICES (DATA)

Sl. NO	Block	Health	Education

DISTRICT HUMAN DEVELOPMENT REPORT - VELLORE DISTRICT.

		U5MR	Juvenile Sex Ratio (0-6)	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children never enrolled in Schools	Transistion from Prim to Upper primary	Transistion from Upper Prim to Secondary
1	**Vellore**	102	964	10.75	102.30	86.65	0.00	98.91	99.3
2	**Kaniyambadi**	87	959	13.58	101.70	68.69	0.00	99.31	99.3
3	**Katpadi**	18	944	16.79	103.60	99.58	0.00	98.72	98.7
4	**Anaicut**	90	960	31.6	103.10	97.93	0.60	98.91	98.9
5	**Gudiyatham**	54	951	24.7	101.60	99.48	0.00	98.96	99
6	**Pernampet**	41	956	35.36	102.10	100.69	0.00	98.41	98.4
7	**K.V.Kuppam**	31	957	18.95	102.80	103.57	0.00	98.37	98.4
8	**Walajah**	93	961	17.72	102.60	100.69	0.00	99.30	99.1
9	**Sholinghur**	86	941	17.93	102.60	83.40	0.00	98.90	98.9
10	**Arcot**	114	927	19.68	102.50	107.82	0.00	99.42	99.4
11	**Timiri**	141	939	22.13	102.80	136.76	0.00	99.32	98.9
12	**Arakkonam**	84	950	33.79	102.00	130.82	0.00	99.42	99.4
13	**Nemili**	105	951	20.43	102.00	136.87	0.00	98.98	99
14	**Kaveripakkam**	97	956	31.93	102.00	96.66	0.00	99.29	99.3
15	**Thirupattur**	27	947	19	101.50	161.61	0.00	98.89	98.9
16	**Kandhili**	38	917	28.38	103.30	48.61	0.00	99.20	99
17	**Jolarpet**	38	925	22.83	101.70	91.35	0.00	99.50	99.5
18	**Natrampalli**	17	903	24.5	101.70	72.37	0.00	98.81	98.8
19	**Madhanur**	26	930	20.13	101.90	51.45	0.00	98.97	99
20	**Alangayam**	44	929	33.79	102.80	122.63	0	99.24	99.1
21	**Vellore Corp**	12	971	12.30	102.40	101.81	0	99.04	99.1

A.1.4 CHILD DEVELOPMENT INDICES

Health			Education					Overall index	Rank
U5MR	Juvenile Sex Ratio (0-6)	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children never enrolled in Schools	Transition from Prim to Upper primary	Transition from Upper Prim to Secondary		
0.30	0.89	1.00	0.38	0.34	1.00	0.52	0.18	0.58	6
0.42	0.82	0.89	0.10	0.18	1.00	0.17	0.18	0.47	16
0.95	0.60	0.75	1.00	0.45	1.00	0.69	0.73	0.77	2
0.40	0.83	0.15	0.76	0.44	0.00	0.52	0.55	0.46	17
0.67	0.71	0.43	0.05	0.45	1.00	0.48	0.45	0.53	10
0.78	0.77	0.00	0.29	0.46	1.00	0.96	1.00	0.66	4
0.85	0.78	0.67	0.62	0.49	1.00	1.00	1.00	0.80	1
0.37	0.84	0.72	0.52	0.46	1.00	0.18	0.36	0.56	9
0.43	0.55	0.71	0.52	0.31	1.00	0.53	0.55	0.57	7
0.21	0.35	0.64	0.48	0.52	1.00	0.07	0.09	0.42	18
0.00	0.52	0.54	0.62	0.78	1.00	0.16	0.55	0.52	12
0.44	0.69	0.06	0.24	0.73	1.00	0.07	0.09	0.41	19
0.28	0.70	0.61	0.24	0.78	1.00	0.46	0.45	0.56	8
0.34	0.77	0.14	0.24	0.43	1.00	0.19	0.18	0.41	20
0.88	0.64	0.66	0.00	1.00	1.00	0.54	0.55	0.66	5
0.80	0.20	0.28	0.86	0.00	1.00	0.27	0.45	0.48	15
0.80	0.32	0.51	0.10	0.38	1.00	0.00	0.00	0.39	21
0.96	0.00	0.44	0.10	0.21	1.00	0.61	0.64	0.49	14
0.89	0.39	0.62	0.19	0.03	1.00	0.47	0.45	0.51	13
0.75	0.38	0.06	0.62	0.66	1.00	0.23	0.36	0.51	11
1.00	1.00	0.94	0.43	0.47	1.00	0.41	0.36	0.70	3

Following Data's given for figures.

Chapter I

Crude Birth Rate (CBR)

Year	Vellore
2009	16.5
2010	15.9
2011	15.9
2012	15.2
2013	15.0

Source: DD Health Vellore &Thirupathur. Year 2014

Infant Mortality Rate (IMR)

Year	Vellore
2009	23.6
2010	22.3
2011	21.2
2012	21.3
2013	11

Source: DD Health Vellore &Thirupathur. Year 2014

Figure 4.1 Trends in CBR and CDR

Sl. No.	Name of the Block	CBR					CDR				
		2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
1	Vellore	16.0	15.6	16.4	15.9	15.3	5.6	4.6	4.3	5.2	5.7
2	Anaicut	17.1	16.1	16.6	16.2	15.8	6.3	6.5	5.3	5.4	5.6
3	Sholinghur	15.7	14.7	14.9	15.6	15.9	6.1	5.4	5.1	4.9	4.7
4	Walajah	17.5	16.5	17.0	16.0	15.5	5.9	4.9	5.6	5.3	5.6
5	Kaveripakkam	16.5	15.9	16.5	15.8	15.2	6.9	5.9	5.3	5.8	5.4
6	Arakkonam	16.9	16.1	16.3	15.9	15.4	5.6	4.6	4.8	4.9	5.6
7	Nemili	15.8	14.8	15.1	15.2	16.0	6.0	5.0	5.1	5.6	5.2
8	Arcot	17.1	16.1	16.1	15.7	15.2	6.4	5.4	4.9	5.0	5.8
9	Thimiri	16.3	15.3	15.8	15.3	15.9	6.5	5.7	5.7	5.6	5.3
10	Kaniyambadi	15.8	14.8	14.3	15.2	16.1	6.2	5.6	5.0	4.8	5.1
11	Alangayam	17.8	17.3	16.9	16.8	16.6	6.9	6.4	6.3	3.6	3.1
12	Tirupathur	16.4	16.2	16	16.1	15.5	6.2	5.7	5.6	5.6	3.6
13	Gudiyatham	18.2	17.2	16	14.0	14.2	5.9	5.4	5.3	4.9	4.5
14	Kandhili	16.5	16.2	16	15.9	16.2	6.3	5.8	5.7	4.0	4.7
15	Madhanur	16.4	15.9	15.6	15.2	15.3	6.1	5.6	5.5	6.4	4.9
16	Pernambut	16.6	16	16.3	17.0	16.3	6.4	5.9	5.8	4.4	4.3
17	Natrampalli	16.5	16.3	16.2	18.2	17.5	6.9	6.4	6.3	5.8	4.5
18	Jolarpettai	17	16.7	16.4	16.2	16.6	6.8	6.3	6.2	6.3	5.2
19	Katpadi	14.3	14.9	14.2	11.8	11.8	5.9	5.4	5.3	4.3	4.4
20	K.V.Kuppam	16.1	15.9	15.3	14.7	14.8	6.2	5.7	5.6	5.5	5.8
	District	16.5	15.9	15.9	15.2	15.0	6.3	5.6	5.4	5.0	4.6

Source: DD Health Vellore & Thirupathur, 2014

Figure 4.2-Infant Mortality Rate

S. No	Name of Block	Rate
1	Vellore	10.6
2	Kaniyambadi	17.6
3	Katpadi	8.2
4	Anaicut	11.7
5	Gudiyatham	19.4
6	Pernampet	9.4
7	K.V.Kuppam	17.4
8	Walajah	8.5
9	Sholinghur	10.5
10	Arcot	16.7
11	Timiri	26.4
12	Arakkonam	23.3
13	Nemili	15.9
14	Kaveripakkam	9.6
15	Thirupattur	11.4
16	Kandhili	14.6
17	Jolarpet	11.4
18	Natrampalli	8.1
19	Madhanur	15.3
20	Alangayam	18.8
21	Vellore Corporation	10.14

Source: DD Health Vellore & Thirupathur, 2014

Figure 4.3 Percentage of Institutional Delivery Overall District

Name of the District	HOME	TOTAL INSTITUTIONAL DELIVERIES				
		% of HEALTH SUBCENTRE Deliveries	% of PRIMARY HEALTH SUB CENTRE Deliveries	% of GOVT. HOSPITALS Deliveries	% of PRIVATE HOSPITALS Deliveries	% of TOTAL INSTITUTIONAL DELIVERIES
Vellore	0.19	0.82	39.20	36.44	24.46	99.85

Source: DD Health Vellore & Thirupathur, 2014

Figure 4.4   Trend in Nutritional Status (0-5 years)

S. No	Block	% of Underweight (MUW+SUW)
1	Anaicut	24.44
2	Arakkonam	27.67
3	Arcot	17.04
4	Gudiyatham	26.66
5	Jolarpet	30.41
6	K.V.Kuppam	16.56
7	Kandili	26.12
8	Kaniyambadi	13.99
9	Katpadi	16.93
10	Kaveripakkam	30.72
11	Madhanur	21.55
12	Natrampalli	26.10
13	Nemili	24.09
14	Pernambut	36.46
15	Sholinghur	17.67
16	Thimiri	22.60
17	Thirupathur	21.56
18	Alangayam	18.73
19	Vellore block	21.14
20	Walaja	37.93
Vellore		**23.11**

Source: ICDS, 2014 - Chennai.

Figure 4.5 Accesses to Drinking Water

S. No	Blocks	Reached
1	Arakonam	94.00
2	Tirupattur	98.17
3	Pernambut	81.17
4	Natrampalli	98.38
5	Nemili	94.96
6	Arcot	85.18
7	Madanur	62.36
8	Timiri	91.85
9	Kaniyambadi	85.90
10	Kaveripakkam	91.26
11	Gudiyatham	87.01
12	Sholingar	95.49
13	Vellore	44.03
14	Alangayam	71.43
15	Jolarpet	77.40
16	Anaicut	79.56
17	Walajah	58.86
18	Katpadi	20.44
19	Kanthili	86.20
20	K.V.Kuppam	89.35
21	Vellore Corporation	100.00

Source: www.mdws.gov.in   NRDWP, 2014

Figure 5.1 Literacy Rate in Vellore District

SL. NO	BLOCK	2001		2011	
		% of Male Literacy	% of Female Literacy	% of Male Literacy	% of Female Literacy
1	Arakonam	87.73	73.58	90.09	84.75
2	Kanniyambadi	86.99	66.60	94.38	88.79
3	Anaicut	77.41	56.50	82.41	65.69
4	Madhanur	82.51	66.79	86.86	75.78
5	Gudiyatham	81.99	62.65	86.66	72.31
6	Pernambut	76.85	57.78	83.34	70.07
7	K.V.Kuppam	82.95	62.00	86.76	70.35
8	Katpadi	88.25	72.06	90.99	96.31
9	Walajah	88.06	70.02	90.30	76.45
10	Sholingur	83.50	59.65	87.11	69.2
11	Arcot	84.90	64.24	89.68	75.28
12	Timiri	80.76	57.61	84.87	66.18
13	Arakkonam	88.79	71.43	91.23	77.61
14	Nemili	80.59	56.27	84.33	65.84
15	Kaveripakkam	80.83	55.83	84.12	64.45
16	Tirupathur	78.24	59.92	85.22	71.66
17	Jolarpet	75.90	55.15	82.38	65.57
18	Kandili	74.68	53.21	82.21	65.25
19	Alangayam	75.41	58.90	81.66	68.83
20	Natarampalli	76.16	53.84	80.42	63.21
21	Vellore Corporation	0.00	0.00	92.15	82.42
TOTAL		**81.62**	**59.20**	**86.53**	**73.14**

Source: Census of India, 2011

Figure 5.2: Arts and Science Colleges and Technical Education

Sl. No	District	Art/Science		Engineering		Poly Techniques		Other Institutions	
		No	Students	No	Students	No	Students	No	Students
1	District	25	31739	11	11652	51	13857	8	3572

Source: CEO, 2014, Vellore

Technical Notes

Construction of Indices

Introduction

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

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

Indicators for HDI

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

Indicators for measuring HDI

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

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

Method of Estimating HDI

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

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

As a first step, a minimum and maximum value has to be set for each of the above 11 indicators to transform them into indices lying between zero and one. For this purpose, the observed minimum and maximum figures for each of the indicators will be taken. Since the Geometric Mean has to be calculated, in the case of a positive indicator, the minimum value would be taken as 10 per cent less than the observed minimum value in the block similarly, in the case of a negative indicator, the maximum value would be taken as 10 per cent more than the observed maximum value.

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

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

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

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

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

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

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

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

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

Construction of Gender Inequality Index (GII)

 Introduction

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

Indicators considered for measuring GII

Dimensions	Indicators
Health	Maternal Mortality Rate (MMR)
	Share of Institutional deliveries (ID)
	Ante-natal coverage
Empowerment	Share of female and male elected representatives in Urban and Rural Local Bodies (PR_F and PR_M)
	Share of female and male literacy (LIT_F, LIT_M)
	Share of Female and Male Children (0-6) years
Labour market	Share of female and male Work Participation Rate (WPR_F, WPR_M)
	Share of female and male workers in the non agricultural sector (NAG_F, NAG_M)
	Female and male Agricultural wage rate ($WAGE_F$, $WAGE_M$)

Method

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

For females

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

For Males

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

2. Aggregating across gender group using a Harmonic mean.

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

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

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

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

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

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

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

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

Construction of Child Development Index (CDI)

Introduction

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

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

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

Indicators for Child Development

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

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

Computation of Child Development Index

- The indicators have been broadly categorized under the 3 parameters that influence the HDI.

- All the above indicators are negative and positive in nature.

  The index value (in the case of a positive indicator) can be calculated using the formula –
  Index Value = (Actual Value – Min. Value) / (Max.Value – Min.Value)
  Eg.: calculations will be based on highest values being assigned highest ranking
  The index value (in the case of a negative indicator) can be calculated by using the formula –
  Index Value = (Max. Value – Actual Value) / (Max.Value – Min.Value)

- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block

- The Child Development Index would be the average of the index values of the three indicators – with highest value indicating better child development.

- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

Multidimensional Poverty Index

Indicators

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

Computation of Multidimensional Poverty Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.

- All the above indicators are negative and positive in nature.

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

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

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

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

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

- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block

- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

Abbreviations

ART	Anti-Retro Viral Treatment
BMO	Block Medical Officer
BPL	Below Poverty Line
BSNL	Bharat Sanchar Nigam Limited
CBR	Crude Birth Rate
CDI	Child Development Index
CDR	Crude Death Rate
CEO	Chief Education Officer
CHN	Community Health Nurse
DRDA	District Rural Development Agency
DWP	Destitute Widows Pension
FY	Financial Year
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GII	Gender Inequality Index
GSDP	Gross State Domestic Product
ha	Hectare
HDI	Human Development Index
HDR	Human Development Report
HHs	Households
HOB	High Order Birth Rate
HSC	Health Sub Centre
HUD	Health Unit District
ICDS	Integrated Child Development Service Scheme
ICT	Information and Communication Technology
IDU	Injecting Drug User
IEC	Information Education and Communication
IFA	Iron Folic Acid
IHDS	India Human Development Survey
IMR	Infant Mortality Rate
IRDP	Integrated Rural Development Programme
ITES	Information Technology Enabled Services
Km	Milometer
LBW	Low Birth Weight
LEB	Life Expectancy at Birth
LIC	Life Insurance Corporation of India
LNG	Liquefied Natural Gas
MDG	Millennium Development Goals
MDPI	Multi Dimensional Poverty Index
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MMR	Maternal Mortality Rate
MSME	Micro, Small and Medium Enterprises
MUW	Moderately Under Weight
NABARD	National Bank for Agriculture and Rural Development
NCAER	National Council of Applied Economics Research
NDDP	Net District Domestic Product
NGO	Non- Governement Organization
PCI	Per Capita Income
PCO	Public Call Officer
PDS	Public Distribution System
PHC	Primary Health Center
PHP	Physically Handicapped Person
PPP	Public Private Partnership
RIDF	Rural Infrastructure Development Fund

RMSA	Rashtriya Madhyamik Shiksha Abhiyan
SBR	Still Birth Rate
SC & ST	Scheduled Caste & Scheduled Tribe
SHDRs	State Level Human Development Reports
SHG	Self Help Group
SIDCO	Small Industries Development Corporation
SIPCOT	State Industries Promotion Corporation of Tamil Nadu
SMS	Short Message Service
SRI	System of Rice Intensification
SSA	Sarva Shiksha Abhian
SUW	Severely Under Weight
TB	Tuberculosis
THAI	Tamil Nadu Village Habitations Improvement Scheme
TNAHCP	Tamil Nadu Area Health Care Project
TNCDW	Tamil Nadu Corporation for Development of Women
TNEB	Tamil Nadu Electricity Board
TRF	Total Fertility Rate
TSC	Total Sanitation Campaign
U5MR	Under 5 Mortality Rate
UN	United Nation
VHN	Village Health Nurse
VHS	Voluntary Health Service
WPR	Work Participation Rate

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