District Human Development Report - 2017

Villupuram District

State Planning Commission
Tamil Nadu

VILLUPURAM

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Villupuram, and
State Planning Commission, Tamil Nadu
in association with
Kalvi Kendra Villupuram

Contents

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MESSAGE

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

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

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

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

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PREFACE

Villupuram is the second largest District in Tamil Nadu. It covers mostly rural areas and its main occupation is agriculture.

State Planning Commission of Tamil Nadu has initiated valuable efforts to make Human Development Report, which reflects development of the Districts in Tamil Nadu. Maintenance of District Level information are assuming importance in the context of planning.

Past studies have indicated that Villupuram District is quite backward in terms of Education and Human Development indicators. But now a days the rays of development have seeped up in an unprecendented manner and the district has witnessed tangible improvement in its socio economic profile and remarkable progress can be seen now in sectors like education, employment, health and nutrition and connectivity.

District Human Development Report presents vital information pertaining to Villupuram District for formulating suitable policies by the Government and for planning purpose at micro level.

This report shows real picture of the district position in respect of income, poverty, health and nutrition, employment, Education, infrastructure, Social Security and Gender inequality.

The data furnished in this report are widely used by the planners, Government Departments and Research scholars.

I am also thankful to the resource institutions and other Government Departments who have given great encouragement to bring out this report and make this a total success.

3/4/2017

(Dr.L.Subramanian)
Collector
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Acknowledgement

We take great pleasure in acknowledging the contributions of the stakeholders which has enabled us to prepare Villupuram District Human Development Report.

We express our sincere gratitude to State Planning Commission and District Admininstration in identifying us as a resource institution for preparing the prestigious District Human Development Report. Our thanks to **Tmt. Santha Sheela Nair, IAS, (Retd)** Former Vice Chairperson, State Planning Commission, Government of Tamil Nadu for visioning the possibilities of preparing the DHDR first of its kind in the whole country and **Thiru. M. Balaji, IAS**, former Member Secretary, who provided the software for this vision.

Our thanks to **Dr. Sugato Dutt, IFS,** former Member Secretary i/c, State Planning Commission who gave valuable suggestions and guidance in exploring the facts to substantiate the data through case studies while preparing the report. We thank **Thiru. Anil Meshram, IAS,** Member Secretary, State Planning Commission for reviewing the final draft and setting the time frame for completion of the report.

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We thank **Tmt. M. Lakshmi, IAS,** former District Collector, who supported and guided us in the preparation of this report. We are very much thankful to the District Collector, **Dr. L. Subramanian, IAS**, who not only expedited the data collection from the different district departments, but also shared his insights on the development issues and initiatives of the district administration.

Appreciations to **Thiru S. Chinnappan,** Director of Kalvi Kendra for his guidance in the whole process and **Mr. S. John Paul,** project in charge who has been the focal person in leading the team towards success. Most importantly, the report is a team work and many thanks to the work done by **Dr. B. Regina Papa,** Former Director & Head, Women Studies Division, Alagappa university, Karaikudi; **Dr. N. Narayanasamy,** Professor, Department of Extension Education, Faculty of Rural Development, Gandhigram University; **Dr. S. Manivel,** Associate Professor, Department of Cooperation, Gandhigram University; **Dr. A. Mayil Murugan,** Associate professor of Commerce, Madura College, Madurai; and **Dr.T. Ramanujam,** Associate professor, Centre for Study of Social Exclusion and Inclusive Policy.

The human development report of Villupuram district as presented in the ensuing pages may not be a fast track scenario but an appreciable segment of the onward journey that Tamil Nadu State has envisioned in enriching the quality of life of its people.

List of Boxes

List of Figures

List of Tables

CHAPTER 1

VILLUPURAM DISTRICT - A PROFILE

Chapter - 1

Villupuram District - a Profile

This chapter is designed to present a backdrop to the report on the human development of the Villupuram district in Tamil Nadu. This introductory chapter makes a broader presentation on the physical, historical, social, economic and infrastructural characteristics of the district.

Origin

Villupuram district was formed on 30th September 1993 by bifurcating the erstwhile composite South Arcot district. The residual part of the district was named as Cuddalore district. It is the 23rd district of Tamil Nadu. It is the second largest district in Tamil Nadu with an area of 7194 sq.km. The district is administratively divided into four revenue divisions, 10 administrative taluks, 54 revenue firkas, and 1490 revenue villages. There are three municipalities, 15 town panchayats, 22 panchayat unions, and 1099 village panchayats. The district consists of 11 Assembly and 3 Parliamentary constituencies.

Topography

Location: The district lies between 11^0 38' 25" and 12^0 20'44" N (Latitude), 78^0 15' 00" and 79^0 42'55" E (Longitude). The district is located on the northern part of Tamil Nadu and is close to the State capital, Chennai. It lies at a distance of about 150 kms on the southern side of Chennai and exactly about the same distance from north of Tiruchirapalli. The district is surrounded on the east by Bay of Bengal and Union Territory of Puducherry, the west by Dharmapuri and Salem districts, south by Cuddalore and Perambalur districts and on the north by Kanchipuram and Thiruvannamalai districts.

Geological formation: The greater part of the district is covered by the metamorphic rocks belonging to Gneissic formations. The district has also three types of sedimentary rocks belonging to different geological periods. The Kalrayan hills on the north represent a continuous range of hills covered with some thorny forests and vegetation. The most beautiful hill of the district is Gingee hills. The residual and denudational hills are common in Thirukoilur, Kallakurichi and Gingee taluks. Structural hills are noticed on the western part of the district. The shallow pediments and buried pediments are quite common in the central part of the district.

Hills and forests: Gingee and Kalrayan hills are the two important hills in the district. Trees like teakwood, sandalwood, rosewood, medicinal plants etc., are grown in the hilly regions. The forests lie between 11^0 8' latitudes and 78^0 38' longitudes. Forest areas constitute 9.9 per cent of the total area of the district. Most of the forests in the district lie in Kallakurichi and Thirukoilur taluks. The forest is spread over the areas bordering Salem, Dharmapuri and Thiruvannamalai districts with divisions of reserve forest, interface forest and social forest. Trees in the social forest areas are mainly for firewood and paper making. Babul, eucalyptus and casuarinas are also grown in the district. Cashew is grown in some pockets of the district.

Villupuram Territorial Division is one of the oldest territorial divisions in Tamil Nadu formed in 1957. It covers part of Villupuram and Cuddalore districts. This division is attached with the Conservator of Forests, Dharmapuri circle, Dharmapuri. For administrative convenience, the Villupuram Division has been divided into nine forest ranges. Total forest area that comes under Villupuram Forest Division is 48703.13 ha. Out of this, 24017.24 ha.has been leased out to TAFCORN. Of the remaining 24685.89 hac. 20707.92 ha. fall under Villupuram District and 3977.97 ha. fall under Cuddalore District. Villupuram Forest Division has 26 Reserved Forest areas. The main activities of this division are the protection and preservation of the existing Natural Reserved Forests and Wild animals such as Spotted Deer, Antelope, Sloth Bear, etc., development of the degraded forests, and protection of Reserved Forests and Reserved Land by enforcing the provisions of forest related Acts. The tribals namely Tamil Malayalis are living in Kalrayanhills.

Plains: Barring the Gingee and Kalrayan hills, the entire district is characterised by plains. Major area of the plains is utilized for agricultural purpose.

Coastal area: On the east, the Bay of Bengal coastline extends to about 32 kms in Marakkanam and Vanur blocks. The northern part of the coast has sandy beach. The extreme south part of this coast is covered by swamps and mangrove forest. Coastal areas are having older and younger flood plains and also beach land forms at places. The ground slope is gentle towards the coast. The valley fill near Villupuram is thick, which forms the main ground water discharge zone. Lineaments are restricted to parts of Kallakurichi and Sankarapuram areas and productive fractures are noticed in select pockets. The crystalline sedimentary contact fault is having sympathetic fractures in hard rocks but mostly they are dry fractures.

Climate: The climate in the Villupuram district is mostly humid and hot. The district is characterized by semi arid tropical climate. The temperature is moderate. The climate during summer season is very hot and the temperature can go up to 40 °C. The winter climate during the season is moderate with temperature ranging between 30 °C and 35 °C. The average temperature varies from 30°C to 41°C. The humidity is high in the order of 80 percent. The wind speed is high in the months of July and August and it ranges from 7.4 to 12.6 km/hr.

Rain fall: The district, on an average receives a rainfall of 4.96 mm (0.4 per cent) during the winter season, 139.56 mm (11.32 percent) during the summer season, 410.54 mm (33.31 per cent) during the south west monsoon season and 677.54 mm (54.96 percent) during the north east monsoon season. The district receives the maximum rainfall during the north east monsoon season.

History

Villupuram was part of South Arcot district till 1993. In ancient times, South Arcot was ruled by the Cholas, Pallavas again Cholas and then Pandyas. It was conquered by the Delhi Sultanate in the year 1334. By 1378, the region came under the reign of Vijayanagara Empire and the Nayaks were appointed as the rulers of the region. In 1646, South Arcot came under the Bijapur Sultans who ruled the region till 1676. It was then conquered by the Marathas. In 1677, Shivaji, the great Maratha King captured Gingee area with the assistance of Golkonda forces. In 1698, the Mughal Emperor Aurangazeb took over Gingee and established his rule over South Arcot. During the Mughal regime, both English and the French acquired settlements in South Arcot. The entire district was turned into a battleground due to Anglo-French rivalry. The period between 1767 and 1790 witnessed repeated attack and invasion by Hyder Ali and his son Tippu Sultan. Complete sovereignty over the region was given to the British by the Nawab of the Carnatic in 1801. It remained under the British authority until 1947 when India became independent.

Art, architecture and culture

The district has a variety of historical tourist attractions many of which are more than 1500 years old. First, Rock cut temple of King Mahendra Verma Pallava is located at Mandagapattu village near Gingee. The very big Rock cut temple called Sathru Malleshwara Alayam of first King Mahendra Verma Pallava is located at Thalavanur village near Gingee Fort within 15 km., on the way from Gingee to Villupuram.

The district has temples, mosques and churches which are very old and famous. Veedur Dam is located between the Tindivanam and Villupuram Highway. Gomuki Dam is constructed in Kachirayapalayam near Kallakkurichi. Two falls are located near the same area: Megam falls (6 km from Kachirayapalayam) and Periyar falls.In addition to this the cultural township of Auroville is situatedinthisdistrict.

Thiruvakkarai is a village near Pondicherry. Geological Survey of India has undertaken most of the parts of this village for the valuable fossils it had. In India, it is the only village having fossils of a petrified tree.

KabilarKundru or Kabilar rock is a hill rock in the middle of the Pennaiyar River near Thirukoilur in this district. It is where the great Tamil poet Kapilar who did Vadakirrutal (fast unto death, facing north) after his friend VelPari was killed in a battle. It is one of the protected monuments in Tamil Nadu by the Archeological Survey of India.

District Map

Population Trends

Table 1.1
District Basic Demographic Profile

Sl. No	Indicators	2001	2011
1	Population	2960373	3458873
2	Male	1492442	1740819
3	Female	1467931	1718054
4	Decadal Growth (%)	7.43	16.83
5	Density of population per sq.km.	412	481
6	Urban population (%)	14.42	15.00
7	Population Age Group 0-6	373175	404106
8	Male	190257	208246
9	Female	182918	195860
10	Sex ratio	984	987
11	Child sex ratio	961	941

Source: Census Documents 2001 and 2011

The total population of the Villupuram district was 29.60 lakh as per 2001 census and 34.58 lakh as per 2011 census registering an annual growth rate of 1.68 percent.

The urban population of the district was 14.42 percent in 2001. It rose to 15.00 percent in 2011. The extent of urbanization clearly shows that the district is predominantly rural in spite of the fact that the process of urbanization is quite high in Tamil Nadu.

The density of the population was 412 per sq. km in 2001 which recorded a large increase and stood at 481 per sq. km in 2011.

Sex ratio: The percentage of female population to total population has increased from 49.59 percent in 2001 to 49.67 percent in 2011. Sex ratio for the district as a whole has increased from 984 in 2001 to 987 in 2011 which is less than the State average of 996 in 2011.

Population in the age group of 0-6: The population in the age group of 0-6 years was 12.61 percent in 2001 which decreased to 11.68 percent in 2011. Though the growth rate of population has increased from 7.43 in 2001 to 16.83 in 2011, low birth rate (17.7) and high Under 5 Mortality rate (29.19) might be the cause behind the decrease in proportion of 0 -6 population. The increase in population in the age group is found to be higher than the district average in blocks such as Kalrayanhills, Kanai, Mugaiyur, Risivandiyam, Sankarapuram, Thirukoilur, Thirunavalur, Thiruvennainallur, Thiyagadurgam and Ulundurpet.

Child sex ratio: The child sex ratio for the district as a whole as per 2001 census was 961 which indicates relatively low female child population. Child sex ratio of the district in Census 2011 has fallen down from 961 in 2001 to 941 in 2011. It speaks of the existence of gender disparity in the district in terms of child sex ratio.

Economy:

Agriculture

Gross Area Sown: Out of Total geographical area of 722203 Ha, 500639 Ha fall under the category of gross areas own which is 69.32 percentin total geographical area (Annexure II Table 1.2).

Agricultural land holdings: The district has a predominant proportion of marginal farmers followed by small farmers. Large farmers were hardly noticed. It can, therefore, be stated that a vast majority of the farmers in the district are marginal and small farmers.

The area owned by the marginal farmers across the block varies between 26 and 62 per cent while that of small farmers across the block varies between 25 and 33 percent. The area owned by medium farmers was less than 30 percent in many blocks. Thus a vast area of land is owned by marginal and small farmers (Annexure II Table 1.1).

Chief crops grown: The economy of the district is predominantly agricultural. The major crops grown in the district are paddy, groundnut, sugarcane, cumbu, gingelly and tapioca. Out of the total geo graphical area of 7.22 lakh hectares, the net areas own was 3.31 lakh hectares.

Sericulture: Sericulture is coming up in this district in a modest way. It is being undertaken in Addukam, Avalurpet, Manandal, Athipattu, Kolappalur, Kanai, Kedar, Olakkur, Melvalai, Sembiama Devi and Chinnasalem.

Fisheries: The district has a coastal length of 32 kms. Vanur and Marakkanam blocks fall under coastal zone of the District. The active fishermen population of the district is 2986. They have been organized into fishermen cooperatives. The district also has a few fisher women cooperatives. The district has 18 brackish water aquaculture farms. The scope for inland fisheries in the district is very much limited. Inland fishing is mostly practised in tanks and reservoirs owned by the Public Works Department.

Irrigation: The rivers in the district are seasonal, hence, the major sources of irrigation are tube wells and open dug wells. The net irrigated area in the district is 2.45 lakh hectares which constitutes 33.9 percent of the total geographical area of the district and 45.90 percent of the net cultivated area. Irrigation through rivers accounts for less than five percent of the total irrigated area. The district largely depends on ground water and tanks. Out of the 2.48 lakh hectare meters of utilized water, the recharge of around 2.05 lakh hectare meters have already been utilized leaving a balance of 0.43 lakh hectare meters which can be economically exploited. The pattern of irrigation over a period shows that the proportion of area cultivated through tanks and wells and tube wells have come down. The areas irrigated through other sources have increased considerably.

Irrigation sources: The major rivers of the district are Gadilam, Malattar, Pennar (Thenpennai), Sankaraparani and Komuki. Gadilam River flows through Thirukoilur Taluk. Malattar river joins Gadilam before flowing into the Bay of Bengal. Pennar River flows through Thirukoilur and Villupuram Taluks. Sankaraparani rises in Gingee Taluk and flows through Villupuram Taluk.

The rivers are mostly seasonal, carrying flood waters. None of them is perennial. These rivers could not be used for irrigation purpose to the expected level because of low precipitation.

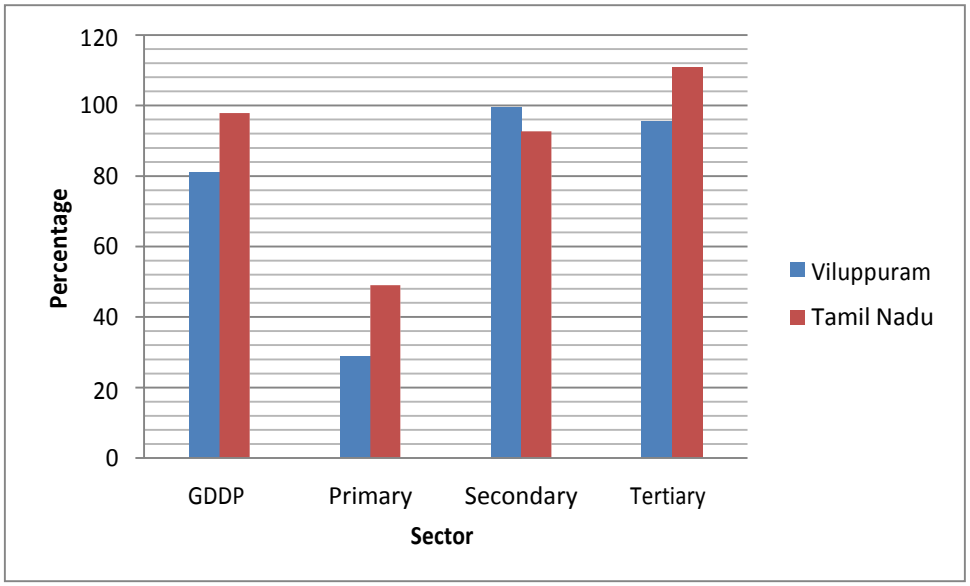
Veedur, Manimuktha and Komuki reservoirs are located in this district. Water from these reservoirs is used for irrigation purposes only.

Gross District Domestic Product

The economic scenario of the district is analyzed with reference to two indicators viz; Gross District Domestic Product (GDDP) and the percapita income, the details of which are presented in fig 1.1. (Annexure II. Table 1.8)

Figure 1.1

Sectoral wise Growth Rate of Gross District Domestic Product from 2004-05 to 2011-12



Source : Department of Economics and Statistics(2004-05 & 2011 -12)

Sectoral Growth Rate of Gross District Domestic Product from 2004-05 to 2011- 12 shows that the growth rate is about 20 percent less than the State GDP growth. Growth of district primary and tertiary sector is lower than the State growth. But Secondary sector growth is higher than the State growth level.

Industry

The total industrial units in the district are 20199 (as on 2008), of which, one third of these units are registered units (33.31%). Among the registered industrial units, 10.45 percent units are agro based MSMEs; 12.39 percent MSMEs are in the textile sector; 7.34 of the units are engineering based units; 3.2 percent are wooden furniture units. 1.89 percent of the units each are chemical based MSMEs and leather based industrial units; 1.26 percent units were producing paper and paper products; 61.2 percent of units are however categorised into other categories.

Income and Poverty

The per capita income of the district in 2008-09 was Rs. 27577 which increased and stood at Rs. 35295 in 2011 - 12.

Table 1.2

Growth rate of Per Capita Income

Sl. No	District / State	Percapita Income (In Rupees)			
		2008 – 09	2009 – 10	2010 -11	2011 -12
1	Villupuram	27577	29895	33029	35295
2	Tamil Nadu	48473	53359	59967	63996

Source: Department of Economics & Statistics, Villupuram. 2008-09, 2009-10, 2010 -11 & 2011 - 12.

The per capita income of the district in 2008-09 was Rs.27577 which increased to Rs.35295/- in 2011-12 recording an increase of 21.86 percent. However, the per capita income of the district is much less than the per capita income of the State.

Percapita income of the State at current prices for the given years shows that the growth is more than Rs.4500 each year. But in the case of Villupuram district the growth is below Rs. 3500 each year. The growth in district PCI is much less than that of the State.

Social Sector Health

Crude birth rate and crude death rate: The crude birth rate of Villupuram district in the year 2014 was 13.4. The district average of CDR has 4.2 as per 2014 data (Annexure II –Table 1.3).

Infant mortality rate (IMR)

The IMR of Villupuram district was 22.9 (2009-10), as compare to the State IMR of 21.2. IMR of the district in 2013 – 14 was 18. There was a considerable decrease in IMR over a period (Annexure II–Table 1.4).

Literacy and education

The literacy rate for the district shows a decadal appreciation from 64.02 per cent in 2001 to 71.9 per cent in 2011. The district has been able to achieve 100 per cent Gross Enrolment Rate (GER) at the primary level in all the blocks, under SSA (Sarva Shiksha Abhiyan). The gross enrolment rate in upper primary was 100.15 per cent as per 2013- 14 Data. The completion rate in primary education for the years 2013-2014 for girls and boys shows that the boys and girls have performed equally well. The growing literacy rate, increasing gross enrolment ratio, improvement in completion rate and reduction in dropout rate irrespective of sex can be attributed to the extent of availability of school facilities across the district. In 2013 - 14, the district had 3301 primary and Middle schools covering the educational need of 3581 habitations. Children below the age of six who attend the pre schooling in Anganwadies are given free lunch. They are also given energy giving nutritious powder. Children studying in government and aided schools are given footwear, two sets of uniform, school bags, books, cycle, and all these freely. The adolescent girls are given free supply of napkins. IFA tablets are also supplied. The tribal children in schools are supported with nutritious powder made out of drumstick leaves. The District has 11 Arts and Science Colleges and 29 Engineering colleges. A few Arts and Science colleges offer Degree programmes in Hotel Management. The Government of Tamil Nadu has started a medical college with full-fledged hospital in 2010 in Mundiaymbakkam village of Villupuram District (Annexure II Table 1.7).

Box 1.1

Malayali Tribe in Kalrayan hills in Search of an Identity

Almost 80 per cent of the Tribal population in Villupuram district is congregated in Kalrayan hills which is the only hilly administrative block inVillupuram district. Kalrayan hills are a major range of hills situated in the Eastern Ghats of Tamil Nadu. The Malayali tribes inhabiting the Kalrayan hills are in a tradition-modern interface and are in search of an identity. Being rooted in traditional customs and practices and concurrently, getting exposed to advancing changes, their cultural trend is oscillating in the tradition-modern interface. Against this background, the Malayali Community turns into a case study

In certain phases of history, Malayali had their rulers, chiefs and kings and enjoyed sole authority. The Malayali chiefly depended upon forests for their survival. The forests provided them with food grains such as common millets, fodder for livestock, firewood for cooking, fertilizer for farming, forest tree wood and bamboo and grass for housing, and minor forest produce to earn additional income.

The Malayali tribe in Kalrayan hills is undergoing a socio-economic-cultural transition due to the tradition-modernity interface. They are no more an isolated group but forces of urbanization, modernization and industrialization on the plains have also impacted them. The recent development of communication technology has dimished the distance between rural and tribal as most of the Malayali have started using mobile phones, coming closer to the fast changing world outside. On the other hand, the non-tribals in their contact with the Malayali, aim at appropriating the tribal land for their own and political ends. The non-tribals who stay in Kalrayan hills are traders cum money lenders who exploit the tribal community to a greater extent. The tribal characteristics such as forest dependency, widow remarriage, bride price, dress pattern, and food security are at the changing edge. In many of the development indicators, their score is at the bottom. But in gender parity, Kalrayan hills exceed other blocks in the district.

The Malayali tribesmen are yet to find their identity in the configuration of tradition and modernity.Government policies and development programmes need to be strengthened as per the need of the tribal community. Same indicators cannot be used for the tribal and people on the plains. By doing so, Kalrayan hills stands at the bottom in every development indicator in the present DHDR of Villupuram district save gender where it tops the list of 22 blocks. Gender is the most elusive development indicator. While socio-economically well developed blocks fail in gender parity, the Malayali out beat others in gender parity. For future human development programmes, this specific cultural characteristic should be cashed in.

Though the tribal community living in Kalrayan hills are still bound with their traditional practices, Education and participation in local governance are the leading change factors contributing to the on-going process of change among the Malayali tribe in Kalrayan hills. Government policies and the programmes still need to be strengthened as per the need of the tribal community.

Conclusion

Villupuram district, the second largest district of the State is located in the northern part of Tamil Nadu. Located strategically, the district serves as a link point with the southern, eastern and western districts of the State. The district is characterised mostly by plains, the major area of which is utilized for agricultural purposes. It also has vast area of hills in two of the blocks (Karajan hills and part of Kallakurichi). The district is endowed with significant historical monument including the ones protected and maintained by Archeological Survey of India. The population of the district is 34.58 lakh with an annual growth of 1.67 percentages. The sex ratio is 987 but the child sex ratio is low at 941. The district is predominantly agri-based. The gross area sown is 500639 hectares. The marginal and small farmers are numerically larger. They own 20 to 60 percent of the lands across the blocks in the district. Around one-third of the total geographical area is net irrigated area with irrigation intensity of one. The district is industrially backward. Most of the industries are micro, small and medium in nature. Contribution of the primary sector to the Gross District domestic product has registered 16 percent. Tertiary sector has contributed around 60 percent of the GDDP (2011-12).

The per capita income of the district has recorded a substantial increase; however the per capita income of the district is much lower than the State average.

The district is found to have performed better in bringing down the IMR; however, it has to strive hard to bring down the MMR. The government has established a network of hospitals to meet the health care needs of the people. It has also introduced various schemes to eliminate malnutrition especially among less than 5 children, adolescent girls and pregnant women. The literacy level is low when compared to the State average. However, the district has performed well with regard to enrolment rate, transition rate and completion rate, mainly because of effective implementation of various government sponsored schemes. The district due to its strategic location has the potential to progress in various sectors of development.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

Chapter - 2

Status of Human Development in the Villupuram District

This chapter is a prelude to the " Human Development Approach "as used in this Report and also introduces the vital dimensions of human development before their explication in the succeeding chapters.

Human development goes directly at the determining factors that influence the quality of our lives. Mahabub Ul Hag and Amartya Sen have gradually shifted the human development approach from economy centered to people centered which puts human agency at the centre stage. The objective of development, as Amartya Sen explains, is to expand people's capabilities and increase their opportunities to things that they value. Development is valued as people's freedom to live long and healthy, be educated, have access to resources and lead a decent standard of living. Human development is not solely tied to the market economy. Markets do not bring progress automatically to other dimensions of human development. Economic growth does not guarantee equality in the distribution of benefits among the population. Human development attests equality in choices and distribution of development achievements between men and women in the community.

Accordingly, the status of human development in Villupuram district is analysed using four indices: Human development index (HDI), Gender Inequality Index (GII), Child Development Index (CDI), and Multi - dimensional Poverty Index (MPI). These four indices are worked out in this backdrop chapter as a framework for analysis.

Human development index (HDI)

HDI has three dimensions: the standard of living, health and education of the people. Each dimension is measured using relevant indicators. There are five indicators for Living Standard, three indicators for Health and three for measuring Education. Those are,

Standard of Living	Access to Cooking Fuel
	Access to Toilet Facilities
	Access to Drinking Water
	Access to Electricity
	Access to Pucca Houses
Health	Infant Mortality Rate
	Meternal Mortality Rate
	Under 5 Mortality Rate
Education	Literacy Rate
	Group Enrollement Rate Primary
	Group Enrollement Rate Secondary

The performance of all the 22 blocks, with reference to three indicators viz., standard of living, Health and Education are ranked. Five top ranking blocks and five low performing blocks under HDI are presented in Table 2. 1 (See alsoAnnexure1Tables 1.1, 1.2 & 1.3).

Table 2.1
Top and Bottom Five Blocks In Human Development Index

Name of the Blocks Top 5	Value	Name of the Blocks Bottom 5	Value
Koliyanur	0.800	Kalrayanhills	0.230
Chinnasalem	0.775	Rishivandiyam	0.408
Olakkur	0.751	Gingee	0.433
Vanur	0.682	Thirvennainallur	0.434
Thiyagadurgam	0.642	Melmalaiyanur	0.436

A chequered picture of development emerges out of HDI. It shows that none of the block experiences a holistic, uniform and even development in all three dimensions. Rather, a block that stands among the top five in any one dimension may slide to the bottom in other two HD dimensions. These dimensions should feed into each other. Lopsided growth in one dimension will not be contributive to sustained human development.

Listing the blocks in the order of overall HDI ranking, the blocks that are at the top are: Koliyanur (0.800), Chinnasalem(0.775), Olakkur (0.755), Vanur (0.682) and Thiyagadurgam (0.642). Likewise, the five blocks at the bottom are: Kalrayan hills (0.230), Rishivandiyam (0.408), Gingee (0.433), Thiruvennainallur (0.434) and Melmalayanur (0.436)(See Annexure 1.1)

The better performance of Koliyanur block as the first ranking block in HDI may be attributed to its advantageous geographical location. It is very close to Villupuram town which is the district headquarters. All the government offices, educational Institutions and marketing centres are located in Villupuram town which can easily be accessed by the people of Koliyanur. Proximity to Villupuram town with network of rails and roads is really a blessing for the people of Koliyanur Block. It is also closer to Puducherry.

The block is almost transformed and urbanized. Children and adults have better and easy access to various schemes, programmes, projects, infrastructure facilities and so on. As a result, the block is able to have better access to cooking fuel, toilet, safe drinking water, electricity, housing, education, health care, etc. All these have enabled Koliyanur Block to secure the top position in HDI.

Chinnasalem and Thiyagadurgam is education-centred and educational institutions in the blocks have been developed over a long period. Chinnasalem maintains a moderate development in terms of all developmet indicators and that places Chinnasalem block on second in the top list.

Kalrayan hills and Rishivandiyam blocks have secured the lowest ranks in HDI. This may be explained that Kalrayan hill is a tribal block with low educational and health indices. The Tamil Malayalee tribes are in the interface of tradition to modernity.

The tribes are yet to fully benefit out of the various development schemes, programmes and projects. The government has launched Tribal sub-plan through 21 sectoral departments. The tribes have not made use of the various benefits available under the sub-plan. As a result, they occupy the last position inHDI.

Rishivandiyam block is another poor performer with reference to HDI. The reasons for its poor performance are: i) it is a drought prone area; ii) migration in search of livelihood opportunities is high, failing steady growth in the block ; and iii) SC population is predominant in the block who are yet to have opportunities to improve educationally and socially.

Employment opportunities are very low in Gingee, Melmalayanur and Thiruvennainallur blocks. Irrigation facilities are also less in these blocks. Hence, all these blocks perform very poor in terms of human development.

Gender inequality index (GII)

GII is a composite measure of three dimensions: Reproductive Health, Empowerment, and Labour Market Participation. Each dimension is measured using relevant indicators, three for Reproductive Health, three for Empowerment, and three for Labour Market. Those are,

Health	Maternal Mortality Ratio
	Share of Institutional Deliveries
	Share of Ante Natal Coverage
Empowerment	Female Literacy
	Male Literacy
	Share of female Children (0-6) years
	Share of male Children (0-6) years
	Share of Female Elected Represen tativies in RLBs and ULBs
	Share of Male Elected Represent ativies in RLBs and ULBs
Labour	Female Worker Partic ipatio n Rate
	Male Worker Partic ipatio n Rate
	Female Worker Particip ation Rate in Non- Agri Sector
	Male Worker Particip ation Rate in Non- Agri Sector
	Female Agri. Wage rate
	Male Agri. Wage rate

Table 2.2 presents the top 5 and bottom 5 blocks assessed using gender inequality indicators. The GII measures the loss in potential of human development due to inequality between female and male achievements. The blocks with high GII have low equity and those with low GII have high equity.

Table 2.2

Top and Bottom Five Blocks in Gender Inequality Index

Name of the Blocks Top 5	Value	Name of the Blocks Bottom 5	Value
Kalrayanhills	0.085	Marakkanam	0.252
Thiruvennainallur	0.107	Olakkur	0.249
Sangarapuram	0.108	Melmalayanur	0.248
Mailam	0.117	Thiyagadurgam	0.238
Gingee	0.122	Thirunavalur	0.229

In the equality level ranking, Kalrayanhills leads the district holding the 1st place with the index value 0.085. Thiruvennainallur (0.107), Sankarapuram (0.108), Mailam(0.117) and Gingee (0.122) are the other four blocks holding the ranks 2,3,4,5 respectively. The least rank (22) among the blocks goes to Marakkanam with the GII index value 0.252. Olakkur, Melmalayanur, Thiyagadurgam and Thirunavalur are the other blocks whose ranks are 18, 19, 20, and 21 low at the equality level respectively(See also Annexure1 Tables 2.1, 2.2 & 2.3).

The better performance of Kalrayan hills block as the first ranking block in GII may be attributed to its cultural practices. Kalrayan hills which is predominantly of tribal population, maintains the culture of involving the women in decision making. Also women are equally respected in the tribal population. These are the reasons which contribute for its best position in Gender equality.

Thiruvennainallur block records appreciative contribution of female in Health, Empowerment and Labour force indicators. The performance of the block is not very high or low in the indicators as it varies very largely in other blocks. This medium performance of the block makes it to hold 2nd rank in the equality index. Sankarapuram block records highest share of institutional deliveries It witnesses the healthy condition of women which is the result of equal opportunity.

The performance of Mailam block as the fourth ranking block in GII may be attributed to its performance in the women empowerment aspects. The Share of female children in the age group of 0-6 is high in the block compared to all other block. This is a potential indicator of equality which clearly indicates the community in the gender matter. Being performed better in the case of female worker participation, Gingee ranks five in the equality aspects.

Female worker Participation and their participation in Non agri sector is very low in Marakkanam block which pulls down the block to last place in the ranking. Ante natal coverage in olakkur block is very low compared to other blocks. Women involvement in the non agriculture activities is also very poor in Melalayanur and Thirunavalur blocks which is the main reason for the poor performance of these blocks in the equality ranking.

Child development index (CDI)

CDI indicates how children are faring in the district. Their health and education are combined as performance measures specific to children to form child development index. The measuring indicators are,

Health	Under 5 Mortality Rate
	Percentage of Malnourished Children
	Juvenile sex ratio(0-6)
Education	Enrollment in Primary
	Enrollment in Secondary
	Children never Enrolled in School
	Transition rate from primary to Upper Primary
	Transition rate from Upper Primary to Secondary

Health is measured by Child Mortality Rate (U5MR), nutrition and juvenile sex ratio. Education is measured by the enrolment in primary and secondary schools, children never enrolled in school, transition rate from primary to upper primary, and transition from upper primary to secondary.

Table 2.3

Top and Bottom Five Blocks in Child Development Index

Name of the Block Top 5	Value	Name of the Block Bottom 5	Value
Chinnasalem	0.737	Kalrayanhills	0.092
Olakkur	0.723	Melmalayanur	0.500
Mailam	0.712	Vallam	0.513
Gingee	0.711	Sankarapuram	0.551
Vikkiravandi	0.699	Thiyagadurgam	0.568

In child development ranking Chinnasalem tops the list with the index value 0.737. Olakkur (0.723), Mailam (0.712), Gingee (0.711) and Vikkiravandi (0.699), are the other blocks holdingranks 2,3,4,5 respectively in child development index. Kalrayan hills records 22nd rank in child development with the index value of 0.092. Melmalayanur (0.500), Vallam (0.513), Sankarapuram (0.551), and Thiyagadurgam (0.568) are the other four blocks that recorded low level child development in their blocks(See Annexure1 Tables 3.1 & 3.2).

Chinnasalem and Olakkur blocks hold first and second rank in child development index because of their educational performance. Secondary enrollment as well as transition rate from Upper primary to Secondary is quite high in these blocks compared to other blocks in the district. Juvenile sex ratio in Mailam block is relatively high, which makes the block perform best in Child Development Index. Mortality of children Under 5 and Malnourishment of children is also very low in Gingee. These are the factors which put Gingee in fourth rank in child development index.

Vikkiravandi block is located near Villupuram which is the district headquarters particularly the district General hospital is located in Mundiyambakkam which is one of the habitations of Vikkiravandi block. Health services are easy accessible to the people in Vikkiravandi block. There are many educational institutions in Vikkiravandi block which also could be the reason for the best performance of the block in child development.

The reason for the poor performance of Kalrayanhills in child development index may be attributed to its traditional practices in child care and the low level of awareness about children's education. Juvenile sex ratio in Melmalayanur block is very low, which is the main contributor for the block backwardness in child development. Mortality of children under 5 years is very high in Vallam block also the secondary enrollment rate is very poor in the block. These two factors contribute to the poor performance of Vallam block in child development.

Multi – dimensional poverty index (MPI)

Poverty is multi-dimensional and has inter-locked issues. It is a sum of all deprivations. Poor health results in poor economy which impacts on school attendance and all aspects of living standard. The indicators used to measure MPI are,

Health	Infant Mortality Rate
	High Order Birth rate
	Malnourished Children
Education	Drop out in primary
	Drop out secondary
Living Standards	Access to cooking fuel
	Access to toilet facilities
	Access to drinking water
	Access to Electricity
	Pucca house

Three basic indicators, namely, health, education and standard of living are adopted for the calculation of MPI. The data are collected from various sources and they are given against the indicators

Table 2.4

Bottom and Top Five Blocks in Multi Dimensional Poverty Index

Name of the Block Bottom 5	Value	Name of the Block Top 5	Value
Olakkur	0.192	Kalrayanhills	0.736
Koliyanur	0.218	Rishivandiyam	0.729
Chinnasalem	0.237	Ulundurpet	0.587
Kandamangalam	0.276	Thiruvennainallur	0.578
Mailam	0.288	Mugaiyur	0.566

Kalrayanhills tops the list with the value of 0.736. Rishivandiyam (0.729), Ulundurpet (0.587), Thiruvennainallur (0.578) and Mugaiyur (0.566) are the other blocks which leads in poverty index with the rank 2,3,4 and 5 respectively. Olakkur with the index value of 0.192 possesses the least place in terms of poverty. Koliyanur (0.218), Chinnasalem (0.237), Kandamangalam (0.276) and Mailam (0.288) are the other blocks which occupy the rank of 21,20,19 and 18 respectively in terms ofpovertyindex(See Annexure 1 Tables 4.1 & 4.2).

The traditional practices of tribal community, prevalence of unemployment problems and the traditional agricultural practices are the contributors of increased poverty level of Kalrayanhills. Kalrayan hills having 80 percent of tribal community is performing very poor in the indicators of standard of living, also being the hilly area scope for the development is also very less. Being backward in many indicators Rishivandiyam holds 2nd rank in terms of poverty. Rishivandhiym, Ulundurpet, Thiruvennainallur and Mugaiyur blocks are drought – prone and migration is a common pattern of life, Thus these blocks had top ranks in poverty.

Olakkur, Koliyannur, Chinnasalem, Kandamangalam and Mailam blocks are urbanising blocks and thus the employment opportunities are high in these blocks. The income through the employment makes them to access good education, health. These are the main reasons for the better performance of the blocks in terms of poverty.Small trade and businesses are very effective in Mailam block, thus the people are engaged in some sort of business activities and earn. This stable income opportunity makes the people access better health, education. And thus the poverty level is minimum in the block.

Comparison of HDI, GII, CDI, and MPI Values

Table 2.5 compares four sets of the indices viz., HDI, GII, CDI and MPI across the blocks. It reveals that the HDI value and GII value of a block need not be same and GII value is inversely proportional to gender equity. The least GII value signifies the highest equality level.

Table 2.5

Block-wise HDI, GII, CDI and MPI Values

SL .No	Block	HDI Value		GII Value		CDI Value		MPI Value	
		Index	Rank	Index	Rank	Index	Rank	Index	Rank
1	Chinnasalem	0.775	2	0.149	9	0.737	1	0.237	3
2	Gingee	0.433	20	0.122	5	0.711	4	0.457	14
3	Kallakurichi	0.621	8	0.189	14	0.605	14	0.419	10
4	Kalrayanhills	0.230	22	0.085	1	0.092	22	0.736	22
5	Kanai	0.498	16	0.221	15	0.573	17	0.424	11
6	Kandamangalam	0.534	11	0.150	10	0.692	6	0.276	4
7	Koliyanur	0.800	1	0.181	13	0.674	7	0.218	2
8	Mailam	0.600	9	0.117	4	0.712	3	0.288	5
9	Marakkanam	0.524	13	0.252	22	0.648	11	0.295	6
10	Melmalayanur	0.436	18	0.248	20	0.500	21	0.481	15
11	Mugaiyur	0.518	14	0.122	6	0.630	12	0.566	18
12	Olakkur	0.751	3	0.249	21	0.723	2	0.192	1
13	Rishivandiyam	0.408	21	0.171	12	0.601	16	0.729	21
14	Sankarapuram	0.508	15	0.108	3	0.551	19	0.486	16
15	Thirukoilur	0.628	7	0.136	7	0.663	9	0.428	12
16	Thirunavalur	0.586	10	0.229	18	0.602	15	0.432	13
17	Thiruvennainallur	0.434	19	0.107	2	0.617	13	0.578	19
18	Thiyagadurgam	0.642	5	0.238	19	0.568	18	0.487	17
19	Ulundurpet	0.525	12	0.140	8	0.648	10	0.587	20
20	Vallam	0.437	17	0.157	11	0.513	20	0.319	8
21	Vanur	0.682	4	0.224	16	0.674	8	0.308	7
22	Vikkiravandi	0.636	6	0.228	17	0.699	5	0.329	9

HDI value: Listing the blocks in the order of overall HDI ranking, the blocks that are at the top are: Koliyanur (0.800), Chinnasalem (0.775), Olakkur (0.755), Vanur (0.682) and Thiyagadurgam (0.642). Likewise, the five blocks at the bottom are: Kalrayan hills (0.230), Rishivandiyam (0.408), Gingee (0.433), Thiruvennainallur (0.434) and Melmalayanur (0.436)

Each one of these blocks ranks one among the top five in one or two dimensions of HDI. Koliyanur stands among the top five in Standard of Living and Education, Thiyagadurgam in Education, Olakkur in Education and Chinnasalem in Health.

GII value: In the inequality level ranking, Kalrayanhills leads the district holding the 1st place with the index value 0.085. Thiruvennainallur (0.107), Sankarapuram (0.108), Mailam(0.117) and Gingee (0.122) are the other four blocks holding the ranks 2,3,4,5 respectively. The least rank (22) among the blocks goes to Marakkanam with the GII index value 0.252. Olakkur, Melmalayanur, Thiyagadurgam and Thirunavalur are the other blocks whose ranks are 18, 19, 20, and 21 low at the equity level respectively.

CDI value: Block-wise, Chinnasalem ranks first (0.737) and Kalrayan hills (0.092) have the lowest rank. The CDI value among the blocks ranges from 0.092 to 0.737. It shows that child development programmes have shown better performance than other components in human development.

MPI value: Olakkur (0.192) leads all the blocks in managing multiple poverty factors. Next to Olakkur, Koliyanur, Chinnasalem, Kandamangalam and Mailam are the blocks which manages poverty factors efficiently. Among the blocks which suffer from the multiple poverty areKalrayan hills, Rishivandiyam, Ulundurpet, Thiruvennainallur and Mugaiyur with the least capability to overcome multiple deprivations. They lag far behind all other blocks in the district.

Conclusion

The HDR status of the blocks in Villupuram district is measured using HDI, GII, CDI, and MPI. HDI analysis with all constituent dimensions and indicators,centre around education, health, income and living standards. Among the facilities required for a decent standard of living, access to drinking water and electricity are availed by 93% of the households respectively. They are followed by the number of households which have pucca house structure (71%) thanks to government housing schemes such as Thane Housing Scheme, Green Housing Scheme and Indira Awaas Yojana. Only 35 per cent of the households have access to cooking fuel. Only one-fourth of the households have full access to toilet facilities in terms of structure and use, in spite of the government sanitation schemes with liberal subsidy to BPL families.

The GII measures gender inequalities in three important aspects of human development— the reproductive health status of women, measured by maternal mortality ratio, institutional deliveries and antenatal coverage. Institutional deliveries are on the average scale and antenatal coverage is appreciable. Women empowerment is measured by the female literacy rate in the district and elected female representatives in RLBs and ULBs. There is striking gender discrimination between male literacy and female literacy rate. The female literacy rate is lower by 18 points. The 73rd and 74th amendments have made it mandatory that 33% of members in RLBs and ULBs should be women. This has enabled women to find berths in local bodies.

Regarding women workforce participation, the gender disparity is obvious. The average female workforce participation rate is 41.5 per cent as against the male worker participation rate of 58.7 per cent evidencing disparityin labour force participation. Less women work in non-agricultural sector (7 %) when compared to men (20%) and earn wages lower than men. On the whole, intervening strategies are to be initiated to reduce the gender disparities in the district and strengthen the HDI and CDI values of the district.

To sum up, out of the 22 Blocks in Villupuram district, Koliyanur, Olakkur, Chinna Salem, Thiyagadurgam, Vikkiravandi merit are first five developed blocks in terms of HDI. The blocks that need lot of concern and efforts to be uplifted are Rishivandiyam, Kallakurichi, Kalrayan hills, Kanai, and Thiruvennainallur.

Though being a large district geographically, Villupuram district performs better in terms of Himan development indicators. The block wise performance shows that some of the blocks like Kalrayanhills, Rishivandiyam, Kallakurichi need to be concentrated more in the developmental initiatives.

Box 2.1
Migration

Migration is a persistent issue in Villupuram district. Migration occurs in places where agriculture is seasonal, industry is not supportive, and socio-economic condition of the migrant community is low. This Case study deals with the major causes of migration in Villupuram District.

Migration becomes an inevitable compulsion every year for all the BPL families in the blocks like Kallakurichi, Chinnasalem, Thiuvennainallur, Thirukoilur, Kanai and so on. Apart from the daily labourers, many of the small farmers also migrate due to the failure of agriculture activities. Most of the migrants are involved in brick- klin work.

School going children from the migrant families are left under the care of their grand parents when their parents migrate for work. Some of the migrants take their children along since there is nobody to take care in their native, hence, education of their children get affected.

Four to ten families join together and work a particular site. The owner of the working site has put up a large thatched shed dividing into ten rooms. Each family is allotted a single room. The families came from different places in Perambalur, Cuddalore and Kancheepuram districts. They do not have proper water supply and sanitation facilities: practise open defecation nearer to the site. They drink the bore well water which was used for the brick-kiln also.

In the brick making process, women are engaged in tempering and molding and men do the firing and sorting. Women are paid Rs. 300/- per day and men are paid Rs. 450/-. They all work for 12 hours a day, from 7 am till 7 pm. People get injured often, particularly, when they arrange the bricks for heating and during the firing of bricks. Each family was given an advance of Rs. 6,000/- and the money must be repaid in partsbeforetheyleave.

Despite of its location on the highways and it being located near industrially developed regions like Puducherry State and Chennai city, migration is high in the district. It clearly indicates that the scope for the industrial development is high which can prevent migration from the district. However efforts are low for the establishment of industries. Thus the importance for the industrial development and provision of alternative livelihood options for the farmers who left the agriculture within the district has to be included in upcoming government programmes.

CHAPTER 3

EMPLOYMENT, INCOME AND POVERTY

Chapter - 3
Employment, Income and Poverty

Income is an important indicator depicting access to resources for developing capabilities and expanding people's choice. It is universally accepted that income increases people's command over the resources required to gain access to food, shelter, clothing, and broader options in life. Income in its own way improves the lives of people through its correlation to non-income dimensions of human development such as health and education. Income growth indicates opportunities for decent work and helps advance one's life plan without undue material constraints. Income is also the prime factor in the measurement of poverty, which to a greater extent decides the human development status of the country. Income is primarily dependent on the employment status of the people. Enabling employment opportunities to the people, in general, generates income.

Employment has bearing on the income. More than the problem of chronic unemployment, the most challenging threats are the educated unemployment and underemployment, particularly in the rural (and unorganized) areas. Employment also drives growth and economic development. Though growth by itself is not sufficient for eradicating poverty, some level of growth is obviously necessary for sustained poverty reduction. Since poverty is multidimensional and has many interlocking issues, the standard of measurement of poverty and appropriate indicators are still to be perfected.

Gender inequity is another key issue to be addressed with regard to employment in the context of HD. Although women have access to paid work, women's work is characterized by deterioration of terms and conditions of work. Still, many women do not have equal access to employment opportunities because they are burdened with unpaid work in the domestic front. Societal norms and power relations within families and communities also play a decisive role in determining women's ability to earn and have control over a decent wage. Therefore, inclusive economic growth policies and strategies are assuming significance in addressing poverty.

This chapter deals with employment, income, and poverty status of the people in the Villupuram district of Tamil Nadu. It discusses employment and status, worker participation and gender differences in the worker participation rate, different sources of income, net domestic product, sectoral contribution to income, poverty, and share of BPL households and different dimensions of poverty.

Employment

Size of work force

The size of workforce primarily depends on the population in a given area, the age composition of the population, their skill level and the occupational opportunities available to them. It is also, to some extent, decided by willingness and preference of the people to be engaged in some kind of productive work. Table 3.1 presents the distribution of workforce.

Table 3.1

Total Workers and Non - Workers

Sl. No	Block /District	Total workers		Main Workers		Marginal Workers		Non-Workers		Total Population	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Chinnasalem	86549	95978	60584	75701	25965	20277	68221	86054	154770	182032
1	Gingee	80693	91126	56485	53609	24208	37517	70127	82391	150820	173517
3	Kallakurichi	83757	99457	58650	74487	25107	24970	79270	102629	163027	202086
4	Kalrayan Hills	28247	32678	19773	26373	8474	6305	20834	23649	49081	56327
5	Kanai	62097	70612	43468	43369	18629	27243	62901	69126	124998	139738
6	Kandamangalam	63875	71182	44713	56061	19162	15121	65523	73999	129398	145181
7	Koliyanur	83859	115541	60701	92117	23158	23424	155812	165051	239671	280592
8	Mailam	53385	85597	37370	66925	16015	18672	124435	104638	177820	190235
9	Marakkanam	83148	91064	60204	69078	22944	21986	68894	110409	152042	201473
10	Melmalayanur	65385	78567	45770	58623	19615	19944	57063	62588	122448	141155
11	Mugaiyur	80618	98851	56433	67202	24185	31649	97795	106086	178413	204937
12	Olakkur	63875	45002	44712	31460	19163	13542	19404	41698	83279	86700
13	Rishivandiyam	61981	74881	43387	58143	18594	16738	56684	68361	118665	143242
14	Sankarapuram	68446	80444	47912	62967	20534	17477	71464	86594	139910	167038
15	Thirukoilur	67524	78138	47267	55293	20257	22845	64826	85533	132350	163671
16	Thirunavalur	54396	67996	38077	44948	16319	23048	48609	64571	103005	132567
17	Thiruvennainallur	57190	72625	40033	50746	17157	21879	60890	72302	118080	144927
18	Thiyagadurgam	55244	61470	38671	52468	16573	9002	45228	59747	100472	121217
19	Ulundurpet	58834	81450	41184	67770	17650	13680	77432	92338	136266	173788
20	Vallam	56246	62557	39372	47573	16874	14984	44724	46713	100970	109270
21	Vanur	73003	81509	51102	59376	21901	22133	93564	83187	166567	164696
22	Vikravandi	56825	66524	39778	46513	17047	20011	61496	67960	118321	134484
Villupuram District		**1445177**	**1703249**	**1015646**	**1260802**	**429531**	**442447**	**1515196**	**1755624**	**2960373**	**3458873**

Sources: Census 2001 and 2011

The worker population of the district has increased from 14.45 lakh in 2001 to 17.03 lakh in 2011. The total population of the district also increased from 29.60 lakh in 2001 to 34.58 in 2011. The share of workforce population to the total population has increased by by 1.42 per cent, from 48.82 per cent in 2001 to 49.24 per cent in 2011. Thus the increases of workforce population go parallel with the district total population. This increase of workforce is also justified with the growth rate of literacy which rose from 64.02 in 2001 to 71.9 in 2011.

In the analysis of growth rate of total workforce to the growth rate of total population of the blocks, a decadal decline is seen in eight blocks in 2011 - Chinnasalem, Gingee, Kallakurichi, Marakkanam, Olakkur, Thirukoilur, Thirunavalur and Thyagadurgam. The decline varies between 1 to 15 percentage points. Olakkur is a striking case. It stood first in the WPR of the blocks in 2001 with 76.70 percent. But in 2011, it has dipped to seventh position with 51.91 percent. Almost one-third of workers are found missing in Olakkur block over a period of ten years despite increase in the total popalation. It may be due to repeated migration forced on workers by compounded factors. The Olakkur block is known for water scarcity and does not have any river or major water flow or alternative industries. Hence workers who were engaged in agriculture were compelled to leave their traditional work and migrate to places such as Bangalore and Thiruvannamalai as labourers in construction sites and brick-kilns.

The share of worker population in Kalrayan hills is almost steady with no steep rise or fall. In 2001 Kalrayan hills was in the second place with 57.55 per cent and ascended to the first place in 2011 with 58.01 per cent. The growth rate of workforce to the total population over ten years is almost unwavering in three blocks, Kandamangalam, Rishivandiyam and Sankarapuram. Among the rest 11 blocks -Kalrayanhills, Kanai, Koliyanur, Mailam, Melmalayanur, Mugaiyur, Thiruvennainallur, Ulundurpet, Vallam, Vanur, Vikkiravandi- except Mailam whose workforce has a decadal expansion by 15 percentage points, others have recorded only a slight rise.

The Census Reports of 2001 and 2011 reveal that out of the total number of workers in Villupuram District, main workers(workers who had worked for 6 months or more during the reference period)constitute 70.28 per cent and 74.02 per cent respectively, recording an increase of 3.76 per cent in the size of the main workers.

Thiyagadurgam has the largest percentage of main workers (85.36%) in the district followed by Ulundurpet (83.20 %). Gingee has the lowest percentage (58.83%) and Kanai with 61.42 % stands one above Gingee. The marginal workers, who had worked for less than 6 months during the reference period, constitute 29.72 per cent in 2001 and decline to 25.98 per cent in 2011. The decline also marks a shift in the workforce from marginal to main.

Non-workers show a slight decline from 51.18 per cent of the total population of the block in 2001 to 50.76 per cent in 2011. Koliyanur (58.82%), Mailam (55%), Marakkanam (54.80%) and Ulundurpet (53.13%) register the highest percentage of non-workers in the district.

76.50 percent of the farmers in the district are marginal farmers. Majority of the lands are occupied by the Marginal farmers. Out of total workers, 71 percent of the workers are dependent on agriculture.

The main causes for the increase in the size of the workforce over a period of decade in certain blocks may be: i) improvement in the educational status (Literacy rate of Mailam has increased from 63 percent in 2001 to 72 in 2011. Literacy rate of Kalrayan hills also has raised from 24.23 in 2001 to 59.75 in 2011); ii) availability of gainful employment opportunities in neighbouring Districts / State for the blocks located on the borders (Ulundurpet, Vanur and Koliyanur); and iii) prevalence of migration in search of jobs including oversees jobs(Mugaiyur). The important causes for the fall in workforce in certain blocks are i) reduction in agricultural activities (Kallakurichi and Koliyanur) and ii) growing trend in urbanization resulting in reduction of traditional workforce (Kallakurichi, Koliyanur and Chinnasalem).

Work participation rate

The worker participation rate is defined as the number of people who are at present in the job and who are actively looking for a job. People who are not willing to work are not included in the calculation of worker participation rate as they come under the unemployed category. Worker participation rate is a measure in assessing the labor force of an economy. It is the percentage of total workers (main andmarginal) to total population.

Table 3.2
Worker Participation Rate

Rural/ Urban	2001		2011	
	Numbers	Percentage	Numbers	Percentage
Rural				
Male	743524	58.21	874316	59.02
Female	553921	44.10	638637	43.79
Persons	1297445	51.21	1512953	51.46
Urban				
Male	114006	53.02	143067	55.16
Female	33726	15.92	47229	18.18
Persons	147732	34.60	190296	36.66
Total				
Male	857530	57.46	1017383	58.44
Female	587647	40.03	685866	39.92
Persons	1445177	48.82	1703249	49.24

Source: Census 2001 and 2011

The worker population in Villupuram district was 1445177 in 2001 census and 1703249 in 2011 showing an increase of 258072. The decadal increase is 0.42 per cent in the work participation rate. Substantial difference is noticed in the trend in terms of gender.

A.WPR Rural

While the male worker participation rate increased from 57.46 per cent in 2001 to 58.44 per cent in 2011, conversely, the female worker participation rate came down by 0.11 per cent from 40.03 per cent in 2001 to 39.92 per cent in 2011. Looking at the rural- urban disparity in regard to worker participation rate, it becomes clear that there is an increase in both rural and urban areas in the total work force participation between 2001 and 2011. The rural workforce participation during the decade increased from 51.21 to 51.46 with a marginal addition of 0.25 per cent. But gender differences are noticed with male participation showing an increase by 2.14 per cent. But the female worker participation rate came down by 0.31 per cent.

B. WPR Urban

In urban areas, the overall worker participation rate showed an increase by 2.06 per cent from 34.60 per cent in 2001 to 36.66 per cent in 2011. The gender based analysis shows that both male and female worker participation rates appreciated during the last decade by 2.14 per cent and 2.26 per cent respectively.

It can be used as proxy for access to employment, ownership of assets, access to credit and markets, etc. Annexure II-Table 12 points out the worker participation rate of male and female workers.

Male worker participation rate is 58.44 per cent while female worker participation is 39.92 per cent, which is substantially low by 18.52 points. It highlights the gender difference between male and female workforce. The female worker participation in Villupuram district is lower than the State average.With regard to the male worker participation rate, Vallam block ranks first (62%) and at the bottom are Ulundurpet (55%) and Thirukoilur (57 %).

The gender differences in the work force participation rate indicates the need for encouraging women participation in the gainful economic activities not only to ensure gender equality but also to bring improvement in the economic status of the households, by ensuring additional income to the households.

Block-wise analysis of the Female Worker Participation Rate reveals that Kalrayan Hills has the highest Female WPR of 56 per cent. The lowest female WPR of 25 per cent could be seen in Koliyanur. The reason for the high Female Worker Participation in Kalrayan Hills may be explained. Kalrayan Hills is the residence of 80 per cent of the tribal population in the district. The hill area affords choices for women to do work such as collection of firewood, cultivation, piggery, collection of minor forest produce, tending cows, etc.

Box No: 3.1

Child Labour Decline in the District

Child labour is generally referred to as work by children that harms them or exploits them in some way (physically, mentally, morally, or by blocking their access to education). Child labour has negative impact on the Human development status. It also deprives these children of the equal opportunity for education and development. Childlabour isclassifiedintothreecategories:

- **Within the Family:** Children are engaged without pay in domestic household tasks, agricultural work, farm work, work in handicraft/cottage industries etc.
- **Within the Family but outside the Home:** Children do agricultural/pastoral work which consists of (seasonal/ full-time) migrant labour, local agricultural work, domestic service, construction work and informal occupation (e.g. recycling of waste-employed by others and self employed).
- **Outside the Family:** Children are employed by others in bonded labour work, apprenticeship, skilled trades (Carpet, embroidery, and brass/copper work, manufacture of match boxes), industrial unskilled occupations/ mines, domestic work, commercial work in shops and restaurants, begging, etc.

Child labour in Villupuram district is non-existent.

Sectoral Composition of Workers

Workers may be divided into four broad categories of economic activities viz., Cultivators (CL), Agricultural Labourers (AL), Workers in Household Industries (HHI) and Other Workers (OW). Workers in the household industries are those who belong to the same household involved in economic activities such as production of flour, pickle making, footwear making, repairing of transport vehicles, etc. The other workers are those engaged in economic activities other than the first three categories, e. g., government servants, wage labourers in oragainzations (Formal / informal) self employed in secondary sector etc.

Table 3.3
Composition of Workers

Sl. No	Block/District	Total workers	Cultivators	Agri. Labourers	HH, Industries	Others Workers
		2011	2011	2011	2011	2011
1	Chinnasalem	95978	25248	45249	2137	23344
2	Gingee	91126	22694	41720	2930	23782
3	Kallakurichi	99457	22144	45115	2418	29780
4	Kalrayan Hills	32678	12212	18005	537	1924
5	Kanai	70612	13293	41294	1580	14445
6	Kandamangalam	71182	7173	42941	1396	19672
7	Koliyanur	115541	9305	35967	3260	67009
8	Mailam	85597	11782	36874	2212	34729
9	Marakkanam	91064	15583	33652	1512	40317
10	Melmalayanur	78567	31238	33103	1378	12848
11	Mugaiyur	98851	19200	52227	2275	25149
12	Olakkur	45002	10427	26116	692	7767
13	Rishivandiyam	74881	20414	42865	1518	10084
14	Sankarapuram	80444	20463	39496	2356	18129
15	Thirukoilur	78138	16045	37253	1734	23106
16	Thirunavalur	67996	14985	41747	967	10297
17	Thiruvennainallur	72625	12808	46127	1546	12144
18	Thiyagadurgam	61470	14443	32695	1081	13251
19	Ulundurpet	81450	23362	36700	1448	19940
20	Vallam	62557	24270	27126	1545	9616
21	Vanur	81509	12553	37859	1706	29391
22	Vikravandi	66524	10004	38082	2009	16429
Villupuram District		**1703249**	**369646**	**832213**	**38237**	**463153**

Source : Census 2011

The distribution of the workforce (2011) shows that agricultural labourers constitute the major chunk (48.86%) of the total workforce followed by other workers (27. 19%) cultivators (21.70%) and household industries (2.24%).

Thus, the agricultural labourers are predominant the workforce in the district). In proportionto the total workers in the block, Thiruvennainallur has the largest per centage of agricultural labourers (63.51%) and Koliyanur, the lowest (31.13 %) inthe district.

Koliyanur has the highest share of its workforce (58%) in "other workers" category which includes workers like government servants and other labours. Koliyanur has the largest number of literates. Its literacy rate is 87.63 per cent. The district is named after Villupuram which is situated in Koliyanur block. Thus, the urban setting with large number of educated mass enables more "other workers" to come up. Kalrayan hills with less literacy could have the least proportion of "other workers" (5.89 %).

Block-wise, analysis of the share of cultivators to the total workers in the block indicates that; Melmalayanur (40%), Vallam (39%) and Kalrayan hills (37%) have higher proportion of cultivators; and Koliyanur (8%), Kandamangalam (10 %), Vanur (15%), and Vikkiravandi (15%) blocks have recorded the lowest share of cultivators to the total worker force of the block.

The district average of the industries is 2.24 per cent and Gingee with 3.22 per cent tops the blocks and Thirunavalur is the last with 1.42 per cent.

Micro and Small Enterprises and Artisan units in the district

Agro Based	704
Soda Water	21
Woollen, Silk and artificial thread based Clothes	2
Ready - Made garments & embroidery/hosiery	746
Cotton textiles	86
Wood/ Wooden based furniture	217
Paper & Paper products	85
Leather based	127
Chemical/ Chemical Based	33
Rubber, Plastic & Petro based	94
Mineral Based	103
Metal based (Steel Fab.)	169
Engineering units	87
Electrical Machinery and transport equipment	135
Others	4124

Box 3.2

Agriculture in Villupuram district in Fertile and Dry areas

Agriculture is a predominant livelihood sector in Villupuram district. The majority of the population in the district depends on agriculture for their sustenance. This case study just poses two different blocks which contrast each other in agricultural productivity and profits. One is Kandamangalam, the most fertile area in Villupuram district and the second oneis the arid Melmalayanur block.

Kandamangalam block

Kandamangalam block is the most fertile block in Villupuram district thanks to the rivers Thenpennaiyaru , Malattaru and Sankaraparani, which flow from the west through the block to the east. The major source of irrigation is bore wells. Though the monsoon failure often affects agriculture in general, Kandamangalam block continues to perform better because of its geographical location pertaining to the rivers. Even during the dry seasons, the ground water is preserved. Farmers have adopted new methods of cultivation like SRI (System of Rice Intensification) method, integrated farming, Vermi compost and Organic farming. Machineries are used for planting and harvesting, pesticide spraying, etc., The farmers at the panchayat level have formed "Farmers Clubs". They avail seeds and agriculture materials through these clubs in subsidized price. Water availability, conservation of ground water, utility of water for irrigation purposes, adoption of modern irrigation methods, linkages with cooperatives and collective power of farmers are the promoting causes for successful and sustained agricultural productivity and profits. Despite these factors, migration takes place from this block due to use of machineries in agriculture and cultivation of long term cash crops. But agriculture continues to be the livelihood of more people in Kandamangalam block.

Melmalayanur block

Melmalayanur block consists of 55 panchayats, located on the northern side of the district, border with Kancheepuram district. Majority of the people are traditionally farmers, mostly small and maginal.. Though river Varaga flows through the block, water scarcity remains to be a bugging problem for the farmers. The geological formation of the block is hard rock. Even during the rainy season, there is not much water flow in the Varaga River. At times of monsoon failure it becomes a threat especially to the small and marginal farmers. All these end in drought. This water scarcity affects the drinking water sources also. Majority of the people engaged in agriculture, search for alternate employment sources such as quarry work, brickmaking, construction, etc. Thus migration becomes inevitable and also affects related activities such as vegetable vending, livestock rearing and food production.

Registration and placement

Unemployment is the major economic problem especially in the rural and unorganized sectors of Tamil Nadu. The problem of educated unemployment and underemployment, particularly in the rural (and unorganized) area is of great concern. This is because the educated remain unemployed or underemployed and this deprives the district economy of the possible contribution skilled and knowledgeable persons could make to economic development.

Table 3.4
Registration and Placement

Sl. No	Year	Registration	Placement	% of placement
1	2007	46126	821	2%
2	2008	49641	961	2%
3	2009	65097	1453	2%
4	2010	67118	1116	1%
5	2011	75324	681	2%
	Total	303306	5032	2%

Source: State Statistical Hand Book. 2007 - 2011

Around 3 lakh educated youth have registered in District employment office over a period of five years (2007-11). Of them, only two percent got placement indicating the very large number of unemployed educated youth. It should be noted that the number of educated youth seeking employment through DEO has also been increasing over a period.

BOX 3.3
Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The Mahatma Gandhi Rural Employment Guarantee Act was conceptualized and enacted as an Act in the Parliament in September 2005. MGNREGA aims at enhancing the livelihood security of the BPL households in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. Villupuram district has the distinction of being one of the districts which had implemented in the first phase itself, i.e., from the year 2005 - 2006. This Scheme was first notified in Tamil Nadu on 2.2.2006 in 6 districts including Villupuram.. The scheme is subsequently extended to other districts in the State.

The details on the number of households provided with employment under MGNREGA are presented in Annexure II- Table 3.1. Of the 6.72 lakh households in the District, 3.84 lakh households (57%) have got employment under the scheme. However, variations could be observed in regard to the extent of utilization of the scheme by the households across the blocks. Thirukovilur block leads in utilizing the scheme to the extent of 84 per cent of the households receiving guaranteed employment under the scheme followed by Vikiravandi (82%); Gingee (76%); and Kallakurichi blocks (73%). The blocks with the least coverage of households under MGNREGA are Kalrayan Hills (35 %), Thirunavalur (36%), Rishivandiam (40%), Chinnasalem (44%) and Mugaiyur (45%).

Income

Per capita income

Per capita income is the most common economic measure. It helps in measuring the average standard of living of the people.

The per capita income of the district in 2008-09 was Rs. 27577 which increased and stood at Rs. 35295 in 2011 - 12.

Table 3.5
Per Capita Income

Sl. No	District / State	Percapita Income (In Rupees)			
		2008 – 09	2009 – 10	2010 -11	2011 -12
1	Villupuram	27577	29895	33029	35295
2	Tamil Nadu	48473	53359	59967	63996

Source: Deputy Director of Statistics, Villupuram.

The per capita income of the district in 2008-09 was Rs.27577 which increased to Rs.35295/- in 2011-12 recording an increase of 21.86 percent. However, the per capita income of the district is much less than the State per capita income.

Percapita income of the State at current prices for the given years shows that the net addition is more than Rs.4500 each year. But in the case of Villupuram district the growth is below Rs. 3500 each year. The growth in district PCI is much less than that of the State.

The district is predominantly agriculture based. A vast majority of the farmers are marginal and small farmers. Industrial activities are very minimum in the district, thus unemployment remains to be a major problem in the district. As a result, the per capita income of the district remains low when compared to the State average.

Poverty and inequality

The government has initiated and implemented several schemes and programmes to eradicate poverty. The causes of poverty are many and they are inter-related. The eradication of poverty requires a multi-pronged approach. The measures initiated towards removing poverty are of many types. Some are income and employment oriented; some are production oriented; and some are welfare oriented.

Poverty levels

The concept of 'Below Poverty Line' (BPL) is an economic benchmark. It is also known as economic threshold level which enables the households/individuals to be identified as beneficiaries of subsidies and other assistances provided by the Government of Tamil Nadu and the Government of India. The Government stipulates parameters with scores. The households with a score of 17 marks and less (out of 53 marks) are identified as households living below poverty line.

Table 3.6
Trends in Poverty Level

Sl. No	Block / District	Total No. of HHs	Total No. of BPL HHs	% of BPL families
1	Chinnasalem	45222	15709	34.74
2	Gingee	40066	10702	26.71
3	Kallakurichi	48760	15168	31.11
4	Kalrayan hills	12507	5037	40.27
5	Kanai	32079	13839	43.14
6	Kandamangalam	34478	15220	44.14
7	Koliyanur	66108	13687	20.70
8	Mailam	44831	12503	27.89
9	Marakanam	47187	16052	34.02
10	Melmalayanur	34241	11198	32.70
11	Mugaiyur	44930	11873	26.43
12	Olakkur	20864	10174	48.76
13	Rishivandiyam	30948	14916	48.20
14	Sankarapuram	37974	14637	38.54
15	Thirukoilur	35388	10615	30.00
16	Thirunavalur	29565	16004	54.13
17	Thiruvennainallur	32526	15454	47.51
18	Thiyagadurgam	28536	9651	33.82
19	Ulundurpet	37932	14007	36.93
20	Vallam	26123	12117	46.38
21	Vanur	38710	17736	45.82
22	Vikkiravandi	31393	12712	40.49
Villupuram District		800368	289011	36.11

Source: DRDA, Villupuram 2013

Accordingly the district as a whole has about 36 per cent of the households rated as living below the poverty line. However, the proportion of households living below the poverty line ranges from 20.70 per cent to 54.13 per cent across the blocks, indicating a vast inter-block variation. The blocks viz., Koliyanur(20.70%), Mugaiyur(26.43%), Gingee,(26.71%), and Mailam(27.89%) are the blocks with relatively less number of BPL households. They are better off than the blocks which have relatively large number of BPL households.

These blocks include Thirunavalur (54.13 %), Olakkur (48.76 %), Rishivandiyam (48.20%), Thiruvennainallur (47.51%) and Vallam (46.38%).Out of total households living in the rural areas, 57 percent of the households are covered with MGNREGA works. Most of the households benefitted from MGNREGA fall on the BPL families. Thus, MGNREGA play a crucial role in reduction of poverty among the rural BPL Families.

Family card holders

Public distribution System is the lifeline for the poor households. It provides safety net for the poor. The District has 1192 PDS outlets for 1104 villages (Ref. Annexure II-Table 3.2). Each village has PDS outlet which ensures supply of essential goods to the poor households in rural and urban areas. Each household is provided with Familycards to receive the assistance for which it qualifies.

Table 3.7
Family Card Holders

Sl. No	Block /District	HH provided with Family Cards
1	Chinnasalem	46999
2	Gingee	48057
3	Kallakurichi	53099
4	Kalrayan Hills	12182
5	Kanai	46006
6	Kandamangalam	38366
7	Koliyanur	67638
8	Mailam	35719
9	Melmalayanur	36888
10	Merkanam	41063
11	Mugaiyur	51852
12	Olakkur	35711
13	Rishivandiyam	41905
14	Sankarapuram	45772
15	Thirukoilur	39886
16	Thirunavalur	32446
17	Thiruvennainallur	36368
18	Thiyagadurgam	27997
19	Ulundurpet	38960
20	Vallam	31559
21	Vanur	48733
22	Vikravandi	34526
Villupuram District		**891732**

Source: District Supply Officer, Villupuram– 2011

With reference to the table 3.7., the total number of households is 800368 but the cards distributed exceed the number of households specified. It is because of the tradition that still exists that sons, who form their families after marriage, live with their parents in the same household and avail the family card facility. The blocks which are yet to distribute/provide the family cards to all the households are Melmalayanur, Mailam, Kalrayan hills and Thiyagadurgam.

As per the dat 2013 - 14, 900385 family cards were provided in the district which comprise of Villupuram taluk (186451), Vanur taluk (49082), Tindivanam taluk (118904), Gingee Taluk (116323),Tirukoilur taluk (112683), Ulundurpet taluk (88262), Kallakurichi taluk (71842), Sankarapuram taluk (98534) and Chinnasalem taluk(58304).

Box 3.4

Challenges of Women Salt Pan Workers

Tamil Nadu is one of the few States that produce salt in India. Salt is produced in the State primarily in the three districts including Villupuram. Salt pans extend from Buckingham in Andhra Pradesh to Marakkanam in Villupuram district. The working condition of a woman salt pan workers and their families play a role in the micro-unit. Qualitative factors under pin a salt pan worker's life, mode of salt production, the interplay of worker's economic and non-economic conditions and gender disparity cuts across all these aspects.

Health conditions of both men and women who are engaged in the salt pan works remains poor. Particularly women suffer lot in the salt making process. Their work in the salt field like other women's work is tedious and tiresome. It involves pedaling that raises one foot and press is the salt mud with the other foot and this manual exertion continues for 12 hours a day for months together till the monsoon rains start. After that no rest for them. They have to take up errand jobs. Women are paid Rs. 150/- as a day's wage where as men earn Rs.300/-.

Their work is mostly manual and continuous for twelve hours, while the harsh sun beats on them mercilessly. Mostly men are involved in preparatory process of salt and women are engaged in the collection and transportation of salt. Since the entrie work is carried out in sunlight, the predominant requirement of the work is sunlight. There is no shade to take rest in the salt pans. Many times women have fainted in the pans due to the extreme heat of the sun.

No Insurance coverage is provided to the workers by the companies. Even resting sheds are not provided to the workers in the salt pans.

Conclusion

This chapter has made an attempt to analyze the various aspects related to employment, income and poverty. The workforce population of the district has recorded a decadal increase by 1.4 per cent. The total workforce of the district is 17.03 lakh, of which around 58 percent are male workers and the rest are female workers. Main workers constitute almost three- fourth of the workers (74 per cent) and one-fourth (26%) are marginal workers. Non-workers have recorded a slight decrease of 0.42 per cent. Variations could be observed across the blocks. The highest male workforce participation could be seen in Melmalayanur and the lowest in Thirukoilur. The highest female worker participation is recorded in Kalrayan hill which is mainly due to the geographic location of the block where the forest area affords small tasks for women. Koliyanur is very close to the district head quarters and also to the Puducherry union territory where the avenues for employment are varied and vast. But Koliyanur has the lowest female worker participation. Poverty is still prevalent in the district with a considerable proportion of households (36%) living below the poverty line, inspite of continuous implementation of various anti-poverty programmes including the very effective PDS.The dominant characteristic of Villupuram district is that it is primarily agricultural and industrially needs to be improved by utilizing the existing infrastructural facilities and its advantageous geographical location.

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

Chapter - 4
Demography, Health and Nutrition

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. Health and capability to live longer are integrated human development factors. Health status is influenced by the range of personal, social, economic, and environmental factors, known as determinants of health. Demographic profile, health and nutritional status are the prominent deciding factors of human development. These factors are closely related to each other. Factors taken into account to sketch the demographic profile of the district are population, sex ratio, density of population, proportion of SC/ST population to total population, population in the age bracket of 0-6 years, child sex ratio, infant mortality rate, maternal mortality rate and still birth rate. The factors associated with the health status are institutional delivery, HIV positive cases, positive TB / Leprosy cases, provision of IFA tablets, Immunization, etc. The indicator for assessing the nutritional status is the malnourishment rate of children under 6 above category. This chapter presents a detailed block-wise analysis of demography, health and nutritional status of households in Villupuram District with reference to select variables.

Demographic trends

The decadal growth of population in Villupuram district from 2001 to 2011 census is higher with 16.8 per cent compared to the State of Tamil Nadu with 15.6 per cent (Director of Census Operations, Tamil Nadu, 2013). This is due to the prevalence of higher fertility rate in Villupuram district. Among the 22 blocks in the Villupuram district, Koliyanur has the highest and Kalrayanhills has the lowest population. The population has registered a decline between 2001 and 2011 in Vanur (1.12%). Except Vanur, all other blocks have registered relatively higher percentage of increase ranging from 4.11 per cent (Olakkur) to 32.51 per cent (Marakkanam). The population increases in these blocks are mainly attributable to the increasing urbanization and migration of rural people towards urban centres. These blocks are located on the national highways with scope for relatively faster development of economic and educational infrastructure. This may also be due to higher birth rate and low level of use of contraceptive methods compared to other blocks.

Table 4.1

Demographic Profile

Sl. No	Block / District	Population		Sex ratio		Density	
		2001	2011	2001	2011	2001	2011
1	Chinnasalem	154770	182032	986	989	479	563
2	Gingee	150820	173517	993	982	357	411
3	Kallakurichi	163027	202086	963	972	553	685
4	Kalrayan Hills	49081	56327	967	989	85.8	98
5	Kanai	124998	139738	974	977	475	531
6	Kandamangalam	129398	145181	980	1005	642	720
7	Koliyanur	239671	280592	988	1003	447	523
8	Mailam	177820	190235	990	998	387	414
9	Marakkanam	152042	201473	992	1002	501	664
10	Melmalayanur	122448	141155	1003	999	356	410
11	Mugaiyur	178413	204937	977	978	515	592
12	Olakkur	83279	86700	998	999	310	323
13	Rishivandiyam	118665	143242	981	976	328	396
14	Sankarapuram	139910	167038	971	985	458	547
15	Thirukovilur	132350	163671	987	973	498	616
16	Thirunavalur	103005	132567	989	966	342	440
17	ThiruvennaiNallur	118080	144927	985	973	526	646
18	Thiyagadurgam	100472	121217	990	1000	308	372
19	Ulundurpet	136266	173788	1003	996	389	496
20	Vallam	100970	109270	992	975	342	370
21	Vanur	166567	164696	963	981	370	366
22	Vikkiravandi	118321	134484	972	986	489	556
Villupuram District		2960373	3458873	984	987	412	481

Source: Census 2001 and 2011

Density

The density of population (per Sq.km) has increased from 412 in 2001 to 481 in 2011. Of the 22 blocks, Kandamangalam block with the highest density of population (720 per sq. km) occupies the top position and Kalrayan Hills (98 per sq. km) occupies the least in 2011 due to scattered settlements in the vast expansion of hill ranges. Out of 22 blocks, 12 blocks have more density than the district average of 481 in 2011. This may be due to increase out-migration and population growth.

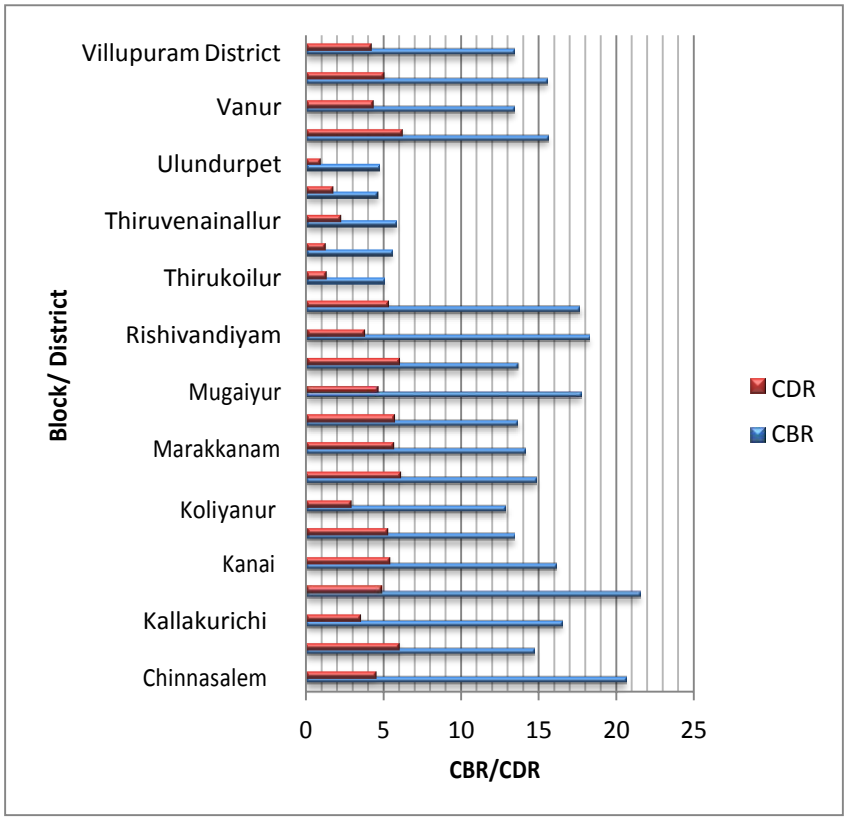
Crude birth rate (CBR) and crude death rate (CDR)

Crude birth rate

Crude Birth Rate (CBR) and Crude Death Rate (CDR) indicate the level of fertility and mortality respectively. While CBR of the district is 13.4, it ranges from 4.6 in Thiyagadurgam to 21.5 in Kalrayanhill in 2014 in the block wise comparison. CBR in 6 blocks namely Koliyanur, Thirukoilur, Thirunavalur, Thiruvennainallur, Thiyagadurgam and Ulundurpet are less than the district average (13.4). CBR is Equal or more than the district average in other 14 blocks. Kalrayanhills has the highest CBR of 21.5 followed by Chinnasalem (20.6) which is mainly attributed to the fact that majority of the families inhabiting the Kalrayan hills belong to ST and their relatively poor literacy level has been the main cause of the highest CBR. The proportion of SC population is also 30 percentage and above in the blocks which holds highest CBR. This also could be another reason for the highest CBR (See Annexure IITable 1.3)..

Figure 4.1

Trends in CBR and CDR for Villupuram District



Source: DD Health, Kallakurichi and Villupuram, 2014.

Comparing CBR of 2014 with that of 2009, it is found that 19 blocks have recorded decrease of one or more points. Among these blocks, Thirukoilur, Thirunavalur, Thiruvennainallur, Thiyadurgam andUlundurpet are the 5 blocks which has recorded highest decrease of CBR. Increase is found to be lower in 3 blocks, namely, Kallakurichi, Sankarapuramand Chinnasalem.

Crude death rate (CDR)

CDR of the district was 4.2. It ranged from 0.9 in Ulundurpet block to 6.2 in Vallam block in 2014 in block wise analysis. 8 blocks namely Kallakurichi, Koliyanur, Rishivandiyam, Thirukoilur, Thirunavalur, Thiruvennainallur, Thiyagadurgam and Ulundurpet had recorded lower CDR than the district average. The other 14 blocks records CDR more than the district average. Low standard of living and availability, accessibility and utilization of health services may be some of the causes for the high CDR (See Annexure II Table 1.3).

A comparison of CDR between 2009 and 2014 shows that there is no major change in the CDR values in Sankarapuram block during the period of reference. Decrease in CDR is found in 18 blocks; whereas CDRincreasedin Olakkurblock.

Sex ratio

The sex ratio indicates the relative position of women in the society. It is an assessment of the number of women in the society per 1000 males. If the number of women is less, it signifies “absence” of women who have disappeared due to a number of deprivations and discriminations that women suffer in the society. These gender disparities cut short the life span of women which otherwise should be longer than men.

Table

4.2 Sex Ratio

Sl. No	Block /District	General		Change (+/-)
		2001	2011	
1	Chinnaselam	986	989	3
2	Gingee	993	982	-11
3	Kallakurichi	963	972	9
4	Kalvarayan Hills	967	989	22
5	Kanai	974	977	3
6	Kandamangalam	980	1005	25
7	Koliyanur	988	1003	15
8	Mailam	990	998	8
9	Marakkanam	992	1002	10
10	Melmalayanur	1003	999	-4
11	Mugaiyur	977	978	4
12	Olakkur	998	999	1
13	Rishivandhiyam	981	976	-5
14	Sankarapuram	971	985	14
15	Tirukoilur	987	973	-14
16	Thirunavalur	989	966	-23
17	T.V.Nallur	985	973	-12
18	Thiyagadurgam	990	1000	10
19	Ulundurpet	1003	996	-7
20	Vallam	992	975	-17
21	Vanur	963	981	18
22	Vikkiravandi	972	986	14
	Villupuram District	984	987	3

Source : Census 2001 and 2011

The sex ratio has not increased significantly as it is more or less at the same level of 984 in 2001 and 987 in 2011. The decennial increase (2001- 2011) in sex ratio is by three points only. Decrease in sex ratio is observed in Thirunavalur (-23), Vallam (-17), Thirukovilur (-14), Thiruvennainallur (-12), Gingee (-11), Ulundurpet (-7), Rishivandiyam (-5) and Melmlalayanur (-4%) from 2001 to 2011 indicating the increasing gender disparity in these blocks.

The sex ratio has increased in the remaining blocks. The decennial growth in sex ratio by more than 2 percent is seen in two blocks viz., Kandamangalam (25) and Kalrayan hills (22). The other blocks which registered increase in the sex ratio are Vanur(18), Koliyanur (15),Sankarapuram(14), Vikkiravandi(14), Marakkanam(10), Thiyagadurgam(10), Kallakurichi(9), Mailam(8), Kanai(3), Chinnasalem(3), Mugaiyur(4) and Olakkur(0.1). The traditional unfavourable cultural practices particularly in terms of survival of women and girl children and their nutritional and health status, utilisation of health services, etc., may be the reasons for declining female population, resulting in decrease in the sex ratio.

Population 0-6

Proportion of population in the age group 0-6 years indicates the fertility level as well as mortality level in the past six years.

There is a decadal increase of 8.2 per cent in the 0-6 population in Villupuram district on the whole, from 373175 in 2001 to 404106 in 2011. Increase in the population of 0-6 years is observed in 18 blocks and decrease is recorded in four blocks -Chinnasalem, Gingee, Koliyanur and Thiyagadurgam.

Table 4.3
Child Sex Ratio

Sl. No	Block/ District	Populationin the age group of 0-6						Child Sex-ratio	
		2001			2011			2001	2011
		Male	Female	Total	Male	Female	Total		
1	Chinnasalem	10764	10486	21250	10377	9423	19800	974	908
2	Gingee	9910	9650	19560	9486	8831	18317	974	931
3	Kallakuruchi	9895	9813	19708	12144	11059	23203	992	911
4	Kalrayan Hills	3697	3217	6914	4224	3863	8087	870	915
5	Kanai	7936	7678	15614	8483	8008	16491	967	944
6	Kandamangalam	6521	6237	12758	8326	7881	16207	956	947
7	Koliyanur	15910	15287	31197	15760	15123	30883	961	960
8	Mailam	10246	9911	20157	10337	10150	20487	967	982
9	Marakkanam	10115	9779	19894	11671	11325	22996	967	970
10	Melmalaiyanur	6640	6211	12851	7738	7151	14889	935	924
11	Mugaiyur	11956	11739	23695	13174	12532	25706	982	951
12	Olakkur	4657	4431	9088	4804	4462	9266	951	929
13	Rishivandiyam	7602	7450	15052	9160	8704	17864	980	950
14	Sankarapuram	9712	9388	19100	10453	9869	20322	967	944
15	Thirukoilur	8869	8605	17474	11060	10052	21112	970	909
16	Thirunavalur	7699	7437	15136	8961	8232	17193	966	919
17	Thiruvennainallur	8895	8623	17518	9299	8709	18008	969	937
18	Thiyagadurugam	7808	7331	15139	7699	7142	14841	939	928
19	Ulundurpet	9608	9222	18830	11643	11052	22695	960	949
20	Vallam	6052	5477	11529	5715	5440	11155	905	952
21	Vanur	8640	8055	16695	9642	9296	18938	932	964
22	Vikkravandi	7125	6891	14016	8090	7556	15646	967	934
Villupuram District		190257	182918	373175	208246	195860	404106	961	941

Source: Census 2001 and 2011

Child sex ratio

The child sex ratio is the number of female children per 1000 male children in 0-6years age group. While an increase in child sex ratio implies greater protection and survival of female children, the decreasing trend signals increasing neglect and mortality of female children.

The child sex ratio in the district has decreased from 961 (2001) to 941 in 2011. The district average has been 941 (2011). It ranged from 908 in Chinnasalem block to 982 in Mailam block in 2011. Eleven blocks have child sex ratio above the district average of 941. The remaining 11 blocks have recorded child sex ratio lower than the district average.

The child sex ratio is found to have increased in 5 blocks, viz., Vallam(4.7%), Kalrayan hills(4.5%), Vanur(3.2%), Mailam(1.5%) and Marakkanam(0.3%).(See Table 4.3). Buttherestofthe 17 blocks show a decrease in the child sex ratio. The decrease in sex ratio may be due to increase in the female mortality in 0-6 years and lower number of girl children born is these blocks

While the general sex ratio of the villupuram district in 2011 is 987, the child sex ratio is 941. Large difference is seen among general sex ratio and child sex ratio.

Life expectancy at birth (LEB)

Table 4.4
Life Expectancy at birth

District	2001		2011	
	Male	Female	Male	Female
Villupuram District	62.2	67.6	70.4	75.7

Source: Deputy Director of Health Services Villupuram.

Life expectancy is higher for female (67.6 years) than male (62.2 years) in 2001 with a difference of 5.4 years as against the difference of 5.3 in 2011 with the life expectancy of 75.7 years for female and 70.4 years for male in Villupuram district. This corroborates with the universal observation that women have higher life expectancy than men. The life expectancies of both men and women show almost equal rise (Male -8.2 years and female -8.1years) from 2001 to 2011. As of 2013-14 life expectancy of the female is 74.5 years and male is 70.2 years. On the whole it is 72.2 years.

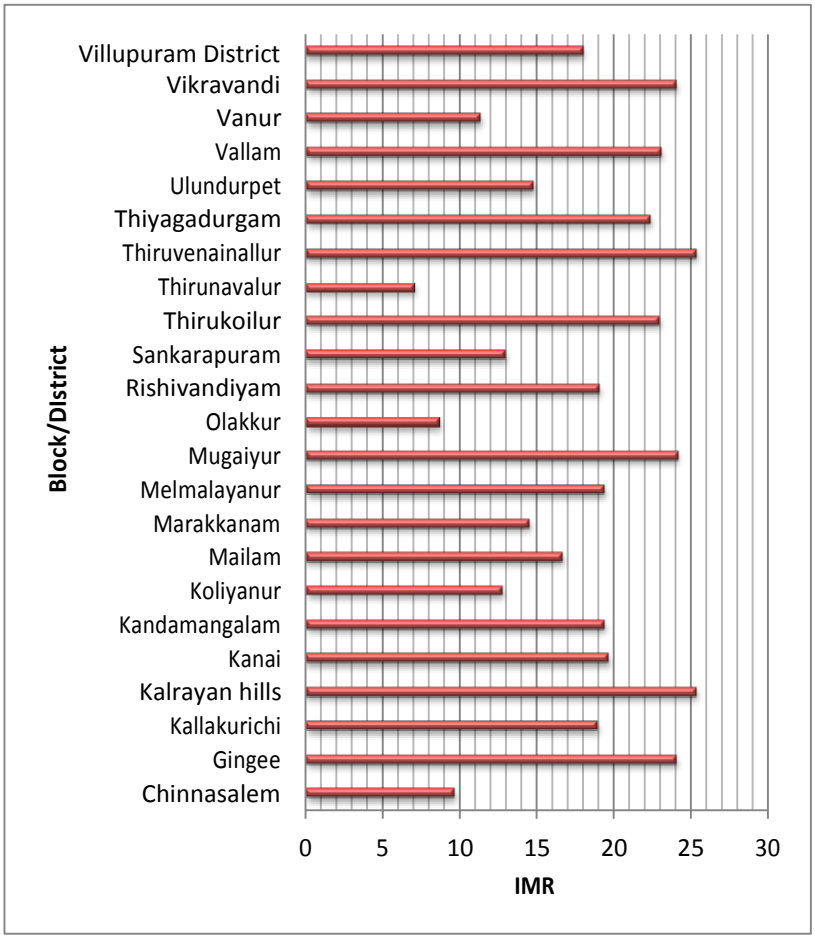
Infant mortality rate (IMR)

The Infant Mortality Rate (IMR) is measured as number of infants who died within 12 months of their birth, calculated for 1000 live births that occurred in one year. This measure reflects the level of socio-economic development of the place.

IMR of Villupuram district in 2007 was 21.7 which reduced to 18 in 2014. It has reduced 3.7points over a period of 8 years. The trend in IMR for a period from 2007 to 2014 indicates that it has increased in 6 blocks Kalrayanhills (25.3), Melmalayanur (19.3), Mugaiyur (24.1), Thirukovilur (22.9), Ulundurpet (14.7) and Vallam (23.0) with fluctuations. However, Kalrayanhills has registered a continuous upward trend in IMR.

Figure 4.2

Infant Mortality Rate



Source: Vital Events Survey Data, 2014.

The remaining 16 blocks in the district have recorded decrease in IMR. The lowest IMR could be observed in Thirunavalur (7.0) followed by Chinnasalem (9.6) and Vanur (11.3). (See Table 1.4).

The causes for this trend in the mortality of children as listed by health officials of the district are:

- Non - availability of nutritious food
- Intake of imbalanced diet through out the day
- Low awareness level on proper food and health issues of infants among mothers
- Lack of awareness about Government's health schemes among mothers and children (e.g. Polio, Vitamin A liquid, ANC and PNC services)

Maternal Mortality Ratio (MMR)

The Maternal mortality rate (MMR) is the annual number of deaths per 100,000 live births by any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes).

Table 4.5
Maternal Mortality Ratio

Sl. No	Blocks	2009	2014
1	Chinnasalem	71	50
2	Gingee	220	120
3	Kallakurichi	107	30
4	Kalrayan hills	10	220
5	Kanai	166	10
6	Kandamangalam	90	50
7	Koliyanur	78	30
8	Mailam	56	110
9	Marakkanam	150	10
10	Melmalayanur	98	10
11	Mugaiyur	184	110
12	Olakkur	10	10
13	Rishivandiyam	121	40
14	Sankarapuram	178	170
15	Thirukoilur	105	70
16	Thirunavalur	10	10
17	Thiruvenainallur	106	180
18	Thiyagadurgam	95	10
19	Ulundurpet	30	60
20	Vallam	52	60
21	Vanur	179	10
22	Vikravandi	140	10
Villupuram District		114	59

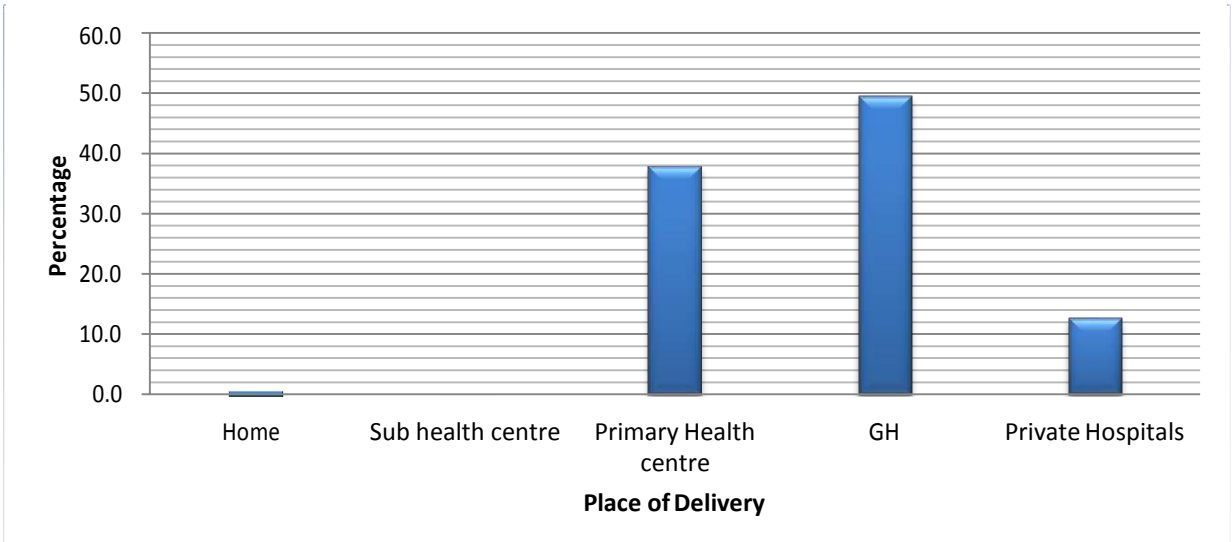
Source: Vital Events Survey 2009 and 2014

Change in the Maternal Mortality Ratio (MMR) from 2009 to 2014 is listed in the table 4.5 above. There is a remarkable variation in MMR across the 22 blocks. In 2009, MMR ranged from 10 in Kalrayan hills, Olakkur and Thirunavalur blocks to 220 in Gingee. The data for 2014 shows maternal deaths are less (10) in 8 blocks namely Kanai, Marakkanam, Melmalayanur, Olakkur, Thirunavalur, Thiyagadurgam, Vanur and Vikkiravandi. And in the remaining 14 blocks it ranges from 10 to 220. The highest MMR is in Kalrayanhills (220) followed by Thiruvennainallur (180) and Sangarapuram (170). The district health sector provides ante - natal and post natal services to women before and after delivery. The effective utilization of delivery system and availability of 108 mobile ambulance services are the important interventions for the reduction in MMR.

Place of delivery

Institutional delivery which includes delivery at Health Sub Centre, Primary Health Centre, Government Hospital and Private Hospitals is universal in all the blocks of Villupuram district except in Kalrayan hills, Thiyagadurgam and Ulundurpet blocks where home delivery is 0.7, 0.4 and 0.7 per cent respectively. (See Annexure II Table 4.1).Efforts needs to be taken to eliminate home delivery in these two blocks.

Figure 4.3
Percentage of Institutional Delivery



Source: DD Health, Kallakurichi and Villupuram.2013-14.

Still birth rate (SBR)

The Still Birth Rate is defined as the number of still births per 1000 live births occurred in a particular geographical area in a given year.

It ranged from 9.6 in Marakanam to 54.7 in Kalrayan hills during 2007, whereas the still birth rate in 2014 ranged from 8.5 (Chinnasalem) to 22.3 per cent (Kalranhills). This shows a sharp decline in the still birth rate. The decrease in still birth rate from 2007 to 2014 is witnessed in 17 out of 22 blocks. The decrease is quite glaring in Kalrayan hills where the still birth rate has decreased from 54.7 in 2007 to 22.3 in 2014.

The SBR is less than 10 in Chinnasalem block. However, the rate has increased in four blocks where the increase registered ranges from 0.2 points (Ulundurpet) to 4 points (Kanai) These four blocks include Kanai, Mailam, Marakkanam and Ulundurpet. This trend demands the need for initiating steps to bring down the still birth rate through behavioural change and by increasing the nutritional status of women before and during pregnancy.

Table 4.6
Still Birth Rate

Sl.No	Block/ District	2007	2008	2009	2010	2011	2012	2014
1	Chinnasalem	23.6	0.3	1.5	0.7	1.42	0.4	8.5
2	Gingee	19.3	22.7	18.3	23.9	18.02	20.7	15.6
3	Kallakurichi	38.2	1.5	1.5	1.8	1.39	0.8	11.8
4	Kalrayanhills	54.7	0.7	2.3	0.8	0.70	2.9	22.3
5	Kanai	16.9	20.1	13.5	19.9	18.17	14.1	20.9
6	Kandamangalam	13.0	17.5	13.4	23.7	13.83	15.3	12.5
7	Koliyanur	13.1	17.6	21.3	16.1	13.51	11.3	12.3
8	Mailam	15.7	20.4	18.2	26.2	25.65	22.9	19.0
9	Marakkanam	9.6	14.6	13.3	6.8	16.12	15.2	12.6
10	Melmalayanur	17.8	20.4	15.0	24.8	19.13	19.8	15.9
11	Mugaiyur	25.9	1.6	1.6	1.5	0.69	2.2	14.2
12	Olakkur	12.1	14.8	15.5	15.0	7.77	13.0	12.1
13	Rishivandiyam	23.8	1.2	0.9	1.3	0.76	0.4	20.9
14	Sankarapuram	43.8	1.8	1.9	2.9	2.09	0.0	15.9
15	Thirukoilur	22.0	0.7	1.1	1.1	0.00	0.8	13.3
16	Thirunavalur	19.7	1.7	1.8	1.2	1.15	2.0	17.9
17	Thiruvenainallur	19.4	1.4	0.4	1.1	0.67	0.7	16.2
18	Thiyagadurgam	21.5	0.0	0.9	0.0	0.00	0.4	11.8
19	Ulundurpet	13.6	0.3	0.6	0.6	0.59	0.9	13.8
20	Vallam	16.0	15.2	16.5	20.1	23.07	10.8	15.9
21	Vanur	15.0	11.1	12.4	14.5	16.86	18.2	14.1
22	Vikravandi	19.4	17.0	15.7	15.9	10.68	19.2	15.7
Villupuram District		21.5	9.2	8.5	10.0	8.7	8.7	15.1

Source: DD Health, Kallakurichi and Villupuram.2007-14.

There is an imminent need to strengthen the existing services of ICDS in all the blocks particularly in the blocks where the still birth rate is high in order to improve the nutritional status of the pregnant mothers.

Immunisation

Immunization for children under 5 years various from 82 per cent in Thiyagadurgam to 112.5 in Kalrayanhills block in the year 2014. Near Universal immunization (99.5 to 100%) could be seen in eleven blocks of which more than 100 per cent coverage is reported in two blocks viz., Ulundurpet and Kalrayanhills where the services of the PHCs are being utilized by the villages coming under the administrative control of neighbouring blocks. Immunization programme needs to be strengthened further in the district. (See annexure II Table 4.2).

Female infanticide

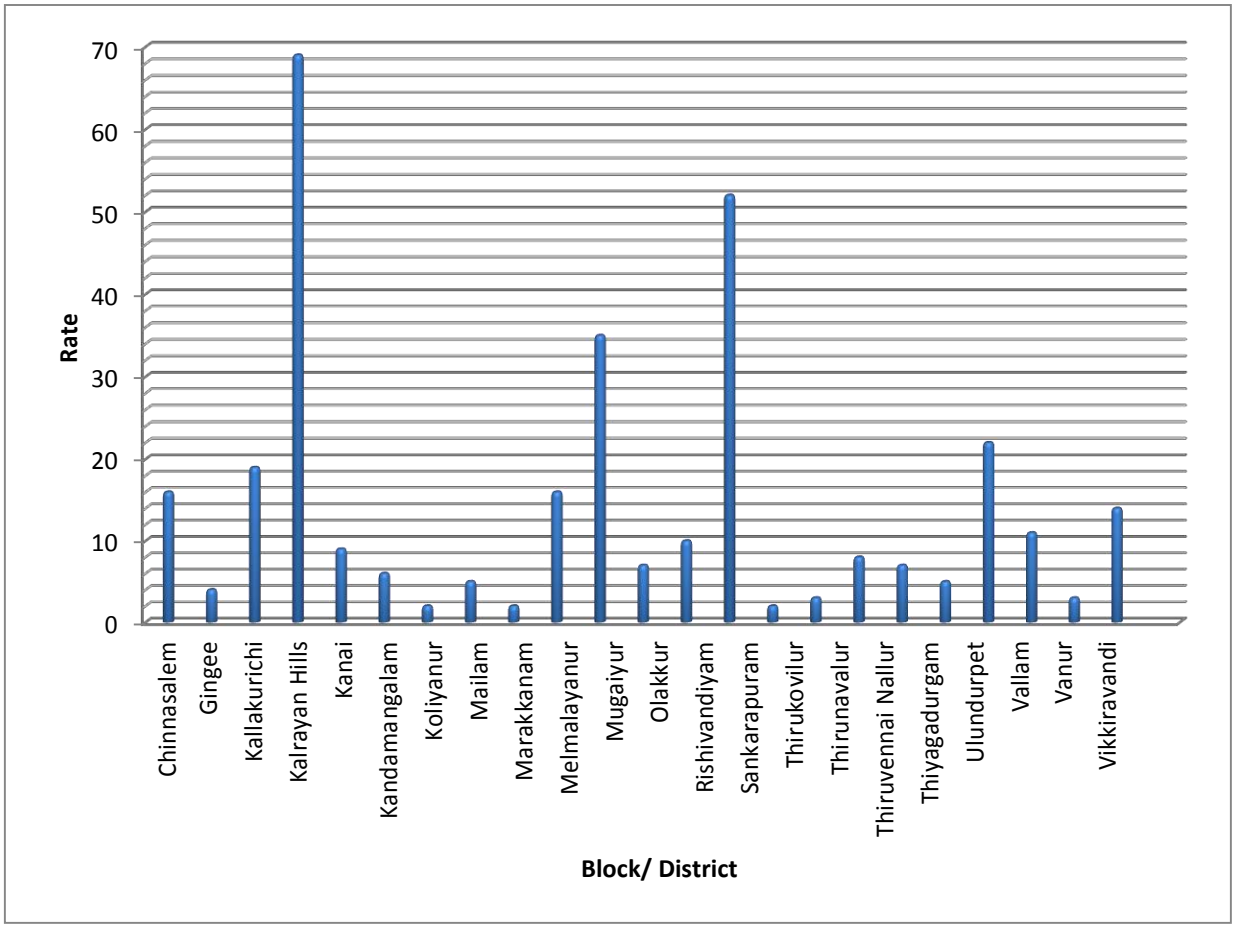
No female infanticide is reported in the district. Though there are no reported cases, apart from the girl children fall under IMR and U5MR, unreported foeticides and infanticides were found to be prevalent, since the sex ratio reveals gender disparity. To save any female child from being killed due to traditional prejudices against a female child and the entrenched son preference, Tamil Nadu has a special scheme called the Cradle Baby Scheme, for female children found abandoned are brought up by the government with special care under this scheme. There is however, need for increasing awareness on the importance of girl child.

Nutritional status

If under-nutrition occurs during either pregnancy or before the age of two years, it may result in permanent problems with physical and mental development. Extreme undernourishment, known as starvation, may have symptoms that include: a short height, thin body, very poor energy levels, and swollen legs and abdomen, frequent affliction to infections and cold.

Figure 4.4

Trend in Nutritional Status- (0-5 years)(Malnourishment rate)



Source: ICDS, VPM 2014

Malnourishment rate of children below 5 years in 2013 -14 is found to have ranged from 2 per cent in Koliyanur, Marakkanam and Thirukoilur to 69 per cent in Kalrayan hills. The district average has been 14 percent (Annexure II Table 4.3).

This range is classified into three categories: Normal (2-16), MUW (17-35) and SUW (36-69). The higher the rate of malnourished children; the lower is the health status of children. Alternatively the lower the rate of malnourished children; the higher is the health of children. Seventeen blocks are in normal range in nutritional level; in three blocks Children are Moderately Underweight; and in two blocks children are Severely Underweight.

Reasons for malnutrition among children may be explained thus: The parents who are daily wage earners are not aware of nutritious food needs of their children. Feeding children available food particularly rice, for three times a day makes the child weak and deprived of required nutrients. This coupled with insanitary living conditions, open defecation and inaccessibility to safe drinking water, emaciates the children further.

Anaemia affects the functioning of every organ and the health system. It makes children dull and they start losing energy and do not remember what they studied in their class rooms. Frequent sickness depletes their strength and makes them chronically ill. Tamil Nadu schools provide Nutritious Mid Day Meal Scheme for children up to 10^{th} Std.in all Government and Government Aided Schools. Nutritious meal is served with vegetables, egg and dhal for children. Noon meal centres function inside the school campus and are supervised for regularity, cleanliness and neat operation.

Provision of IFA tablets

Adolescent girls are given IFA tablets in the schools to address anemia, which is more prevalent among girls than boys because of their low access to nutritious food in the family. Theproportion of women who have taken Iron Folic Acid (IFA) Tablets ranges from 33.6 in Kallakurichi block to in Kandamangalam block. The blocks can be classified into low performing (33-55%) moderately performing (56-77%) and better performing (78-99%) based on intake of IFA tablets. There are 3 low performing blocks, 7 moderately performing blocks and 12 high performing blocks. Kandamangalam is the best performing block.

Table 4.7
Provision of IFA Tablets

Sl.No	Block / District	Percentage of women taken IFA tablets	Percentage of childrentaken IFA tablets	Percentage of adolescent girls taken IFAtablets
1	Chinnasalem	50.1	48.3	60.3
2	Gingee	107.5	112.3	75.6
3	Kallakurichi	33.6	44.6	57.2
4	Kalrayanhills	95.1	52.6	65.3
5	Kanai	99.7	141.1	99.2
6	Kandamangalam	121.4	98.2	98.1
7	Koliyanur	57.1	34.0	86.4
8	Mailam	93.9	94.4	90.3
9	Marakkanam	104.4	79.3	96.0
10	Melmalayanur	89.5	90.9	85.5
11	Mugaiyur	87.1	52.1	58.2
12	Olakkur	57.3	46.8	87.5
13	Rishivandiyam	117.5	40.3	52.2
14	Sankarapuram	40.3	44.1	58.2
15	Thirukoilur	58.3	46.5	57.6
16	Thirunavalur	74.1	43.5	60.1
17	Thiruvenainallur	75.2	41.2	56.4
18	Thiyagadurgam	75.6	48.2	61.2
19	Ulundurpet	65.8	44.2	55.1
20	Vallam	92.8	175.5	95.6
21	Vanur	91.9	81.6	87.7
22	Vikravandi	91.0	93.5	77.5
Villupuram District		81	71	74

Source :DD Health Kallakurichi and Villupuram – 2013-14

The proportion of children who had taken IFA tablets is low at 34.0 per cent in Koliyanur block. Eleven blocks were in the range of 34.0 to 48.3 per cent; other eight blocks are in the range of 52.6 to 98.2 per cent. In Gingee, Kanai and Vallam blocks coverage of children in provision of IFA tablets is more than100 percent.This is due to higher coverage than the targeted population. The district average is 71 per cent. The performance of children taking IFA tablets has to be improved to a large extent in all the blocks of Villupuram district.

The proportion of adolescent girls who had taken IFA tablets range from 52.2 per cent (Rishivandiyam) to 99.2 per cent (Kanai). The blocks in the district can be classified into three categories viz low performing (52.2 -65.3 per cent), moderately performing (75.5-87.7 per cent) and better performing (90.3-99.2 per cent). 11 blocks are in low performing category, six blocks are in moderately performing category and 5 blocks are in high performing category. Kanai (99.2%), Kandamangalam (98.1%) and Marakkanam (96.0) blocks were in very high performing category.

Box 4.1

Nutritional Programme of Government

1. Mid Day Meal Scheme

Tamil Nadu's mid day meal scheme is lauded as the best Scheme in the country for school children. Children from 1st to 10th standard in Government Schools, Government Aided Schools, Education Guarantee Scheme and Alternative and Innovative Education Centre and National Child Labour Programme are provided with nutritious noon meal. It motivates them to attend the school regularly.

The children are given hot cooked rice, sambar, and boiled egg within the school campus. Boiled black Bengal gram or green gram is given on all Tuesdays and on all Fridays; boiled potatoes are given to supplement carbohydrate requirements. Thus protein, vitamins and calorific needs of the children are met. Eggs are given five days and for the children who do not take eggs, bananas are provided. As a pilot project, millets in the form of ladoos and pakkoda are introduced in Ariyalur and Perambalur districts.

Schools in Villupuram district follow the State Government norms and provide children with additional supplementary nutritional food of 553.30 kilo calories and 18.12 gm protein for primary school children and 733.86 kilo calories and 21.64 gm protein to upper primary school children.The Scheme functions in 2746 schools, benefiting 390925 children and the total number of students enrolled in the Programme are 327767.

2. Integrated Child Development Services (ICDS)

Integrated Child Development Services Scheme under Social Welfare Department in the Government of Tamilnadu is to serve the children below 6 years, Ante-natal mothers, and Post-natal mothers and Adolescent Girls.There are 2938 Anganwadi centres in Villupuram District and 64520 children are enrolled in these centres. 186996 adolescent girls are also enrolled in these centres. In Villupuram District there are 23 projects under ICDS (21 Rural, one Urban (Villupuram& Tindivanam) one Tribal (Kalvarayan Hills). Apart from the child care, Anganwadi centres also guide pregnant women to take care of new born babies and provide awareness regarding health and Nutrition during Pregnancy and post natal care. Counselling and guidance are given to Adolescent Girls by the AWW in the AWC.

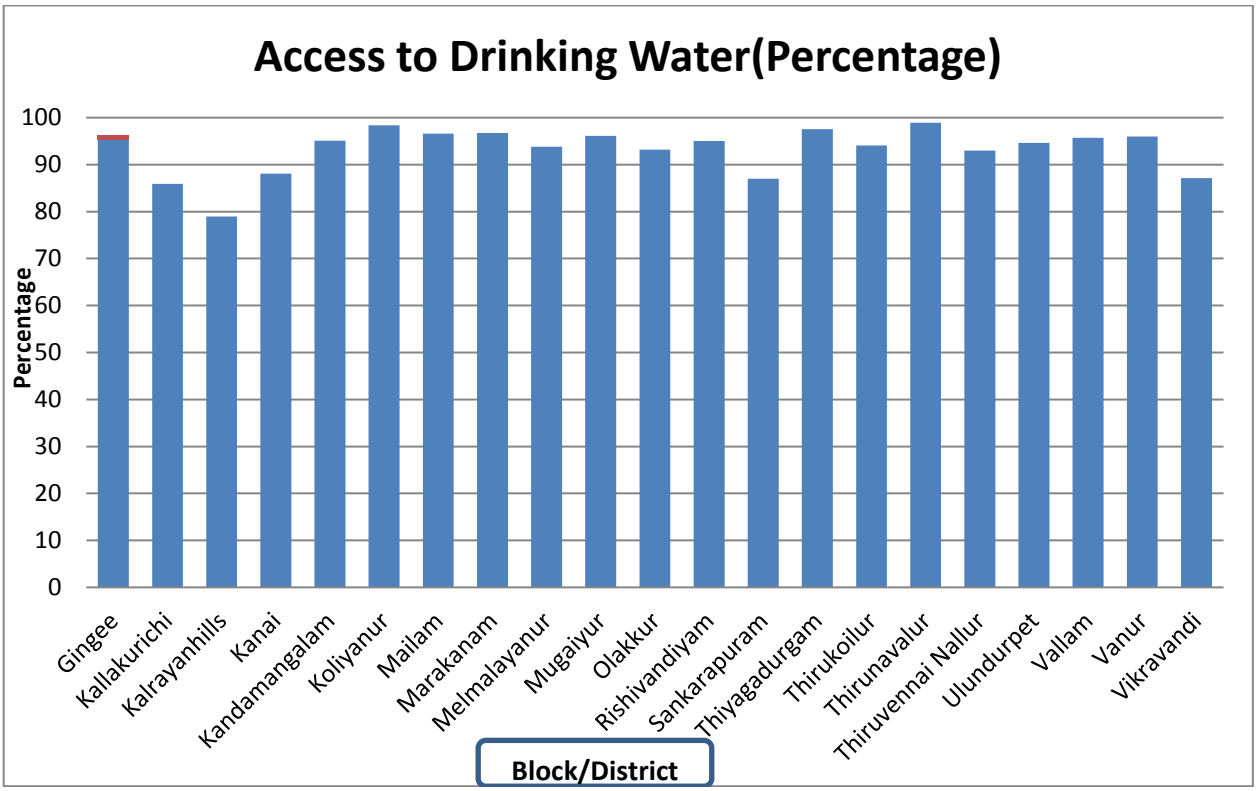
Non - nutritional factors and their impact on nutrition

Habitations provided with safe drinking water

Water is a fundamental human need. Each person requires at least 20 to 50 liters of clean, safe water a day for drinking, cooking, and simply keeping themselves clean. If the water we drink is not safe, it leads to the danger of risking our lives. We get sickened with a host of ailments through various infections such as protozoal, parasitic, bacterial and viral. When drinking water gets contaminated by open sewage and dirty water, it results in abdominal discomfort, vomiting, fatigue, weightloss, diarrhoea, bloating, fever, cramps, worm infections, etc.

The UN has declared that access to clean water is a basic human right, and an essential step towards improving living standards. Water-poor communities are typically economically poor as well, their residents trapped in an ongoing cycle of poverty.

Figure 4.5
Access to Drinking Water



Source: www.mdws.gov.in , 2013-14

93 per cent of habitations in 22 blocks of Villupuram district are provided with safe drinking water. It ranges from 78.95 per cent in Kalrayan hills block and 98.90 per cent in Thirunavalur block. 12 blocks in Villupuram district is able to provide safe drinking water to 95 percentages of their habitations. Except Kalrayanhills, the other 9 blocks are able to provide safe drinking water to 85 -95 per cent of their habitations (Annexure II Table 4.4).

The major rivers of the district are Gadilam, Malattar, Pennar (Thenpennai), Sankaraparani and Komuki. Gadilam River flows through Thirukoilur Taluk. Malattar River joins Gadilam before flowing into the Bay of Bengal. Pennar River flows through Thirukoilur and Villupuram Taluks. Sankaraparani rises in Gingee Taluk and flows through Villupuram Taluk. The rivers are mostly seasonal, carrying flood waters. None of them are perennial. These rivers are not at present being used for irrigation purposes to the expected level because of low precipitation. Veedur, Manimuktha and Komuki reservoirs are located in this district. Water from these reservoirs is used for drinking as well as irrigation purposes.

Sanitation

Water, sanitation and health are closely interrelated for a healthy long life. Improper disposal of human excreta and improper management of environmental sanitation are the main causes of many diseases. As mandated by the Right to Education Act, all children are required to spend six hours in school every day. Hence the need for a functional toilet in the school to educate children whether they have a toilet at home or not for their bio-breaks.

Table 4.8
Provision of Toilet

Sl. No	Block / District	Total Number of HHs	% of HHs Provided with Toilets
1	Chinnasalem	45222	50.77
2	Gingee	40066	37.42
3	Kallakurichi	48760	32.42
4	Kalrayan Hills	12507	26.92
5	Kanai	32079	35.68
6	Kandamangalam	34478	46.95
7	Koliyanur	66108	33.61
8	Mailam	44831	38.10
9	Melmalayanur	47187	49.81
10	Marakanam	34241	29.91
11	Mugaiyur	44930	36.44
12	Olakkur	20864	52.60
13	Rishivandiyam	30948	29.80
14	Sankarapuram	37974	36.87
15	Thirukoilur	35388	56.48
16	Thirunavalur	29565	38.56
17	Thiruvennainallur	32526	37.78
18	Thiyagadurgam	28536	39.68
19	Ulundurpet	37932	31.90
20	Vallam	26123	41.37
21	Vanur	38710	41.37
22	Vikravandi	31393	42.46
Villupuram District		800368	39.40

Source: www.mdws.gov.in , 2013-14

In Villupuram district, access to toilet extends from 26.92 per cent in kalrayanhills to 52.60 per cent in Olakkur. The district average is 39.40 per cent. There were 9 blocks above the district average 13 blocks below district average are 11 blocks were found to have low level of access (26.92 to 37.78 per cent); 9 blocks had medium level of access (38.10 - 50.77%) and 2 blocks had a high (52.60 to 56.48%) level of access to toilet facility. Kalrayan hills, Marakkanam and Rishivandiyam have low accessibility. Accessibility is comparatively higher in Chinnasalem (50.77), Olakkur(52.60) and Thirukoilur(56.48).

In spite of government sanitation schemes and compulsion for construction and use of toilets in households and schools, it is disheartening that only 39.40 per cent of households have toilets.

Box 4.2.

Utilisation of Govt. Health Care Services and Health Programmes of State and Central Government

Sinceindependence, major publichealthproblemslikemalaria, tuberculosis, leprosy, highmaternalandchild mortality and lately, Human Immuno Deficiency Virus (HIV) have been addressed through concerted action of the government. Social development coupled with scientific advances and health care has led to a decrease in the mortality rates and birth rates.

The Central and State Governments design health programmes to create a health system which is highlyaccessible, equitableand effective for people, especiallyto meet thehealthneeds of theunaffordable poor. Tamil Nadugovernmentimplementedseveralhealthprogrammeswhichinclude:

- Chief Ministers Comprehensive Health Insurance scheme - Every member of a family whose annual family income is less than Rs. 72,000 is eligible to get thebenefit of health insurance cover.
- Pregnantwomenavailtheservicesof Emergency Transportservices.
- Mobile health units
- Ambulanceservice on dialing 108 for emergency healthneeds
- Tamil Nadu Health Helpline was launched on Dec.30, 2013. On dialing 104, the caller is helped with medical advice, First aid information, complaints against government hospitals and private health centre, HIV Aids information. It is a round the clock help line.

In Villupuram district, the highest number of out patients were reported in Mailam (517372 per year) block and lowest in Kalrayanhills (83746 per year). Number of in-patients range from 1095 in Ulundurpet blockto 7158 in Mailamper year.

Special Programmes AIDS Control

The HIV positive incidence among male has decreased from 355 in 2007 to 333 in 2011; whereas HIV positive incidents of female increased from 245 to 263 in 2011. The proportion of positive incidence was found to be low in the age brackets of 25-29, 30-39, and 40-49 for both male and female in 2007 and 2011.

Table 4.9

Persons with HIV Positive

Sl.No	Age-Group	2007		2011	
		Male	Female	Male	Female
1	0-14	12	14	17	15
2	15-19	17	23	23	20
3	20-24	26	27	37	25
4	25-29	64	27	42	43
5	30-39	118	47	88	50
6	40-49	87	68	85	89
7	50&above	31	39	41	21
	Total	**355**	**245**	**333**	**263**

Source: DD Health Kallakurichi and Villupuram. 2007 -11

The proportion of positives among females increases as age increases and reached the highest level for the age group 40-49 during 2007 (27.76%) and (33.84%) in 2011 and then decrease.

The proportion of positive incidence was higher among females than males in the age group of 0-24 years and 40 and above years, in 2007. But this pattern is reversed in the age group 25-39 years, i.e., the proportion is higher among males than females. In 2011, the proportion of positive incidents among females is higher than among males for age groups 15-19, 25-29 and 40-49 years. It is higher among males than females for age groups 20-24, 30-39 and 50 and above years...

Considering the same age groups of men and women, it seems that younger (0-24 years) and older (40 and above) females are more likely to be positive cases compared to males. Males in 25-39 years were more likelyto be positive compared to females.

The HIV persons were helped by TANSACS (Tamil Nadu State AIDS control Society), Chennai and related Agencies established in all government and select NGO run health facilities throughout the State.

Tuberculosis and Leprosy patients

In Villupuram district, the TB incidents decreased from 2325 in 2007 to 1496 in 2011 registering a decrease of 35.66 per cent. The leprosy incidents also decreased from 328 in 2007 to 247 in 2011 recording a decrease of 24.69 per cent.

Table 4.10
TB and Leprosy Cases

District	Positive TB cases		Leprosy	
	2007	2011	2007	2011
Villupuram District	2325	1496	328	247

Source: DD Health, Kallakurichi and Villupuram. 2007 and 2011

The patients receive treatment in Tambaram Sanatorium mainly and in the special TB wards in the government hospitals in the district and taluk headquarters. The follow-up schemes are available even at the Primary health Centres.

Box 4.3
Vital role of village health nurses

In hilly areas like Kalrayan hills in Villupuram district, the reproductive health of women is at great risk. In the case of pregnant women, the ragged and uneven hilly surface without proper link road-networks and inadequate transportation increases the risks of infant and maternal mortality. Two decades ago, home deliveries assisted by untrained women were common which resulted in loss of life of the child and mother. But change has come for good. Now institutional deliveries are sought after. The catalyst for this health transformation in Kalrayan hills is the Village Health Nurse (VHN) who plays a vital role in connecting pregnant women with government health programmes.

Village Health Nurses (VHNs) attached to Primary Health Centres (PHCs) was highly valuable to the pregnant women in hilly hamlets. The VHN visits the villages, even the distant villages, entrusted to her. Under the Government's Pregnancy and Infant Cohort Monitoring and Evaluation (PICME) system, the VHNs have to ensure that the pregnant women get the facilities provided to them by the State government. They also track health information on pregnant women and infants till they are one year old. Their job is also to immunize infants. The major task of VHNs is to give regular medical check-up and convince the pregnant women to go to hospitals for delivery and not to give birth at home. They put women who are anemic on iron and other nutritional supplements. All this requires one-on-one interaction with the villagers.

When public transport connectivity was scarce in Kalrayan hills, the VHNs walk for hours together, even 10 miles at a stretch, to reach a village and stayed overnight in that village and then resumed walking to go to the next village. There was no mode of transport available between the remote villages. The awareness on the maternal health care among the tribal community has increased considerably which has witnessed reduction of home based deliveries over a period of time. The massive role of VHN also contributed a lot to the improvement of maternal health in Kalrayan hills. If proper tribal health initiatives are provided, it quietly improves the lives of thousands of neglected tribals. The concentration has to be given to the health care services apart from the services provided as per population.

Conclusion

From the above analysis, it is clear that the district has shown considerable progress in demography, health and nutritional aspects compared to general growth trends for the district as a whole. But when it comes to the performance of the blocks in these respects, we notice inter block variations indicating inequality in growth and development disparities. Certain blocks are lagging behind in health and certain other blocks in the nutritional status of the people. Programmes for inclusive growth are required in blocks such as Kalrayanhils, Vanur, Thiyagadurgam, Mailam, Thiruvennainallur and Olakkur are required to initiate programmes for bringing inclusive growth. Outreach programmes should be strengthened to promote health and nutrition, reaching the last person in both urban and rural areas. Awareness level of the people needs to be improved to such an extent that people develop proper health seeking behavior and start demanding quality health services from the existing health systems. Household and community sanitation needs to be improved to a greater extent for assuring healthy life to every citizen of the district.

CHAPTER 5

LITERACY AND EDUCATION

Chapter -5
Literacy and Education

Education provides a very solid foundation for the overall development of the nation. One cannot imagine development without education. Education is inseparable from development. The well- being of the nation largely depends on education. Jean Dreze and Amartya Sen (1995) have very eloquently argued the importance of education. They say education is desired for itself as it opens up a vast world of opportunities and ideas to the educated person. It is also of great instrumental value in the process of economic growth and development. Education plays a critical role in demographic transition; female education in particular, is seen to be important in the process of lowering fertility and mortality. There is a strong correlation between literacy and life expectancy. Skills of literacy and numeracy can improve worker productivity and affect the allocation of inputs. Recognizing the indispensable role of education, the Central and State Governments have launched plethora of schemes and programmes to cater to the educational needs of the people of the country.

Education has been declared as a right to the children up to the age of 14. The efforts initiated by the State and Central Governments have completely changed the educational scenario in the country. This chapter makes an attempt to sketch the status of literacy and education in Villupuram District.

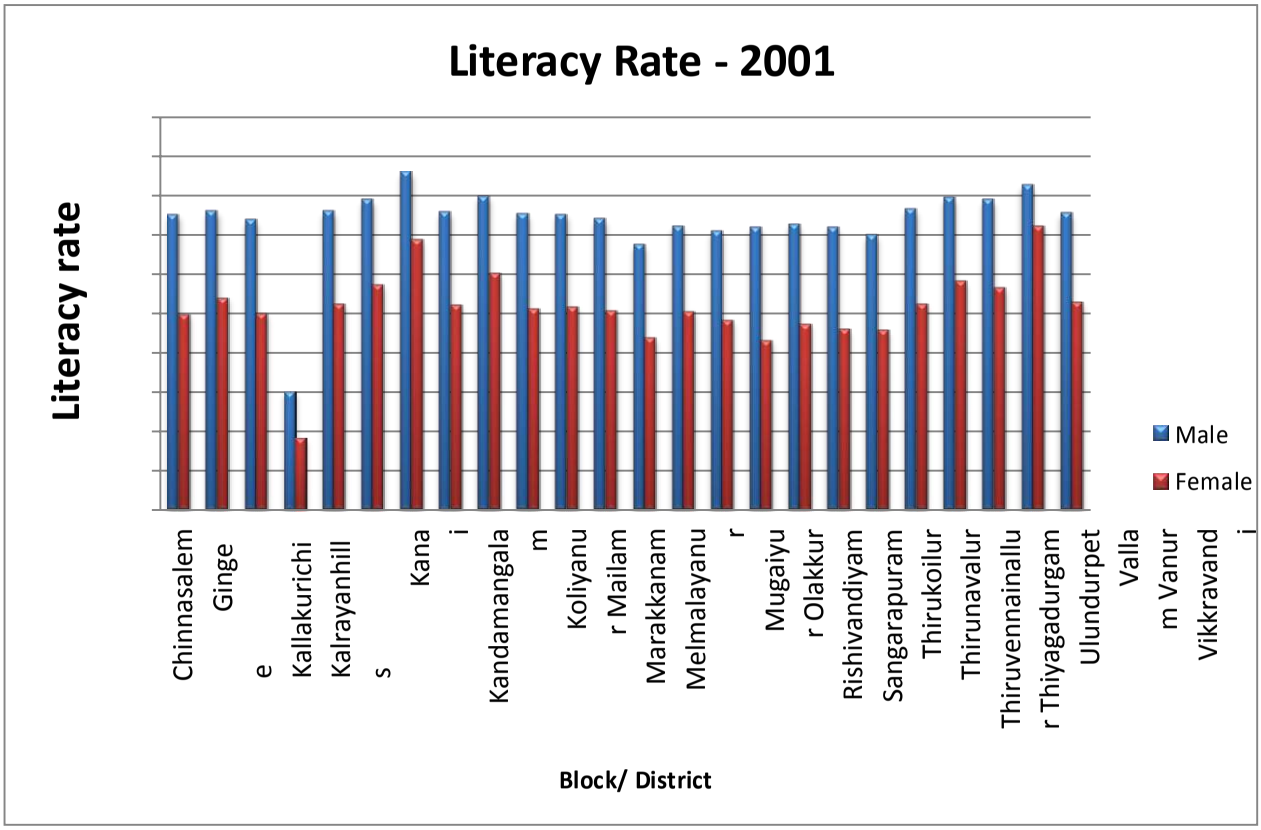
Literacy

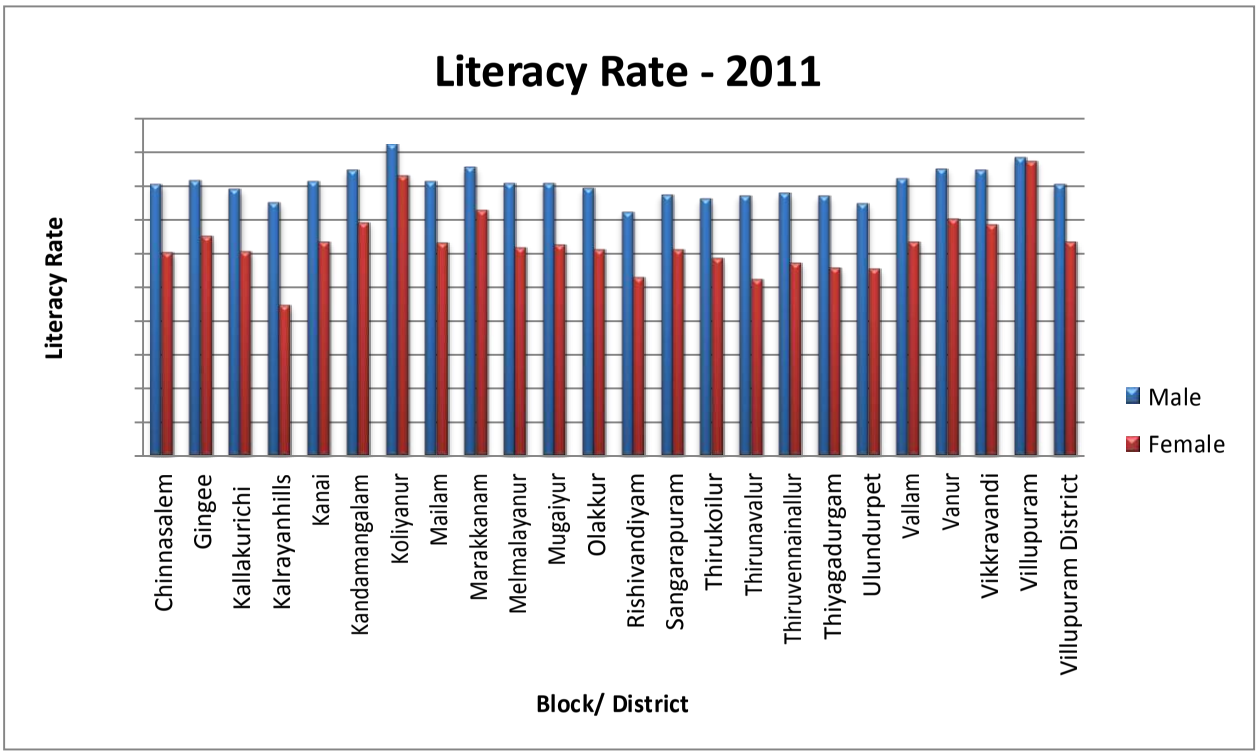
Literacy performance of the Villupuram district

The literacy rate for the district as a whole as per 2011 census is 71.9. It has the second lowest literacy rate among the district next to Ariyalur - 71.3. The literacy rate of the district is also less than the State literacy rate 80.1. However, gender-wise analysis shows a considerable difference in the literacy rate. It shows that the male literacy rate was 80.5 per cent, whereas, the female literacy rate was only 63 per cent.

Block-wiseanalysis ofthe literacyrateshowsthat Koliyanurhasthehighest literacyrate with 87.63 per cent which is much higher than the district average. The blocks, which have higher literacyrate than the district average, are: Marakkanam (79.08%), Vanur (77.70%), Kandamangalam (76.88%), Vikravandi (76.48%), Gingee (73.35%), Vallam (72.76%), Kanai (72.35%), and Mailam (72.19%). All the other blocks have literacy rate less than the district average. Kalrayan hills block has a poor record of being the block with the lowest literacy rate of 59.75 (Annexure II Table 1.5).

Figure 5.1
Literacy Rate Male/ female





Source: Census. 2001 and 2011

Gender-wise analysis shows that the female literacy rate is less than 60 per cent in one-third of the blocks. Around 55 per cent of them have the female literacy rate varying from 60 to 70 per cent. The blocks with high female literacy rate are: Villupuram (87.36%), Koliyanur (83.11%), Marakkanam (72.20%) and Vanur (70.31%). The blocks with low female literacy rate are Kalrayan hills (44.44%), Thirunavalur (52.17%) and Rishivandiyam (52.93%).

A comparison of literacy rate between 2001 and 2011 shows that 95 per cent of the blocks have a literacy rate of less than 70 per cent in 2001: where as it is only 40 per cent of the blocks in 2011 (with literacy rate of less than 70 per cent in 2011). This means that many blocks which have low literacy rate in 2001 have improved in literacy. The primary reason that could be attributed are the effective implementation of various central and State government schemes and the concerted efforts of the State Government to promote education among the deprived sections of the community.

Gender wise comparison indicates that most of the blocks with low female literacy rate have moved into high literacy zone. Thus, there is a marked improvement in the literacy rate at the block levels. However, the district has to go a very long way in improving the literacy rate especially the femaleliteracyrateinmanyblocks.

Primary education

All the children irrespective of the gender should be in schools as per the policy of the government. No one should be denied the opportunity of schooling. In other words, it is the duty of the parents, teacher's local bodies and government departments concerned to ensure that the children are enrolled in schools.

Table 5.1
Enrolment in Primary Education

S. No	Block/ District	Primary								
		Boys			Girls			Total		
		2003	2011	2013-14	2003	2011	2013-14	2003	2011	2013-14
1	Chinnasalem	97	99.88	100.62	96	99.75	99.93	96.50	99.82	100.28
2	Gingee	99	99.88	100.43	99	99.65	100.43	99.00	99.77	100.43
3	Kallakurichi	97	99.88	100.28	97	98.95	99.89	97.00	99.42	100.09
4	Kalrayan hills	97	99.96	100.26	95	99.44	99.86	96.00	99.70	100.08
5	Kanai	98	99.18	100.23	98	98.95	100.21	98.00	99.07	100.22
6	Kandamangalam	99	99.68	100.27	98	99.75	99.92	98.50	99.72	100.1
7	Koliyanur	98	99.58	100.36	98	99.75	99.84	98.00	99.67	100.1
8	Mailam	97	99.38	100.44	97	99.35	99.93	97.00	99.37	100.19
9	Marakkanam	98	99.88	100.62	98	98.95	99.9	98.00	99.42	100.26
10	Melmalayanur	98	99.48	100.14	97	99.65	100.02	97.50	99.57	100.08
11	Mugaiyur	99	99.58	100.62	99	98.95	100.43	99.00	99.27	100.53
12	Olakkur	98	99.48	100.63	99	99.65	100.06	98.50	99.57	100.35
13	Rishivanthiyam	88	99.48	100.34	83	99.45	99.93	85.50	99.47	100.14
14	Sankarapuram	93	99.18	100.44	96	99.56	99.92	94.50	99.37	100.18
15	Thirukoilur	94	99.88	100.27	94	99.85	99.96	94.00	99.87	100.12
16	Thirunavalur	98	98.98	100.47	98	99.54	100.06	98.00	99.26	100.27
17	Thiruvennainallur	97	99.48	100.57	97	99.75	100.12	97.00	99.62	100.35
18	Thiyagadurgam	98	99.69	100.36	98	99.54	99.9	98.00	99.62	100.13
19	Ulundurpet	99	99.09	100.39	99	99.36	100.12	99.00	99.23	100.26
20	Vallam	95	99.68	100.13	95	99.35	99.94	95.00	99.52	100.04
21	Vanur	88	99.88	100.17	87	99.75	99.96	87.50	99.82	100.07
22	Vikaravandi	97	99.88	100.39	94	99.85	100.21	95.50	99.87	100.3
23	Villupuram	99	99.88	100.62	99	99.85	99.92	99.00	99.87	100.27
Villupuram district		**97**	**99.79**	**100.18**	**97**	**99.60**	**100.12**	**97**	**99.70**	**102.27**

Source: SSA, Villupuram. 2003 and 2011

The enrolment for the district as a whole for the year 2013-14 was 102.27 percent. The enrolment rate at the primary level for the year 2013-14 was above per cent across the blocks indicating that the primary schools in all the blocks have done commendable task in enroling the students at the primary level. Gender-wise analysis shows that there is a marginal difference in the enrolment of boys and girls. The enrolment rate for the boys was slightly higher than the enrolment rate for the girls which is mainly due to community based culture and the lack of awareness in the community in interior villages and their poverty level.

A comparison of enrolment rate at the primary level between 2003 and 2013-14 shows that almost all the blocks with an enrolment rate of less than 99 per cent have moved into the enrolment rate of 100 per cent. The minimum enrolment rate in Rishivandiyam was 85.50 per cent in 2003, whereas, the same was 100.14 per cent in 2013-14 an evidence of the phenomenal growth in the enrolment rate. (See Table 5.1).

The GER of the district in 2013 - 14 was 102.27 percent. The reason for 100 per cent enrolment is the consistent and concerted drive initiated by the various stakeholders under the SSA scheme to see that all the eligible school age children are enrolled. There is also a strong desire on the part of the parents to educate their wards. The major inference that can be drawn from the analysis is that enrolment rate at the primary level among both the boys and the girls across the blocks have witnessed a steady increase over a period of eight years.

Completion rate and drop out rate in primary education

All the students who are enrolled should continue and complete their studies. Of the total students enrolled, a few of them may not continue due to various socio-economic reasons. The Central and State Governments have launched various schemes and programmes to ensure that the students who get enrolled do not drop out. Yet, a few students may drop out. We examine the extent of drop-outs at various levels across the blocks.

Completion rate: The completion rate at the primary level across the block indicates that 50 per cent of the blocks registered a completion rate of 99 to 100 per cent. Around 30 per cent of the blocks have recorded a completion rate of 98 to 99 per cent. Thus, a vast majority of the blocks have witnessed a higher completion rate at the primary level.

Gender-wise analysis of completion rate at the primary level provides a similar picture. The maximum completion rate for the boys is 99.89 per cent (Vallam) and for the girls is 99.81 (Vallam).

Thus, the completion rate at the primary level can be rated as good; and a sort of parity could be seen between boys and girls in this regard. The reason for good completion rate may be attributed to the flagship noon-meal programme of the State government; appointment of well qualified and experienced teachers; innovative teaching methodologies like ABL mind mapping method, adopted in teaching the school children and other initiatives that facilitate the children to complete schooling.

Table 5.2
Completion and Dropout Rate at Primary level

S. No	Block/District	Completion						Dropout					
		Boys		Girls		Total		Boys		Girls		Total	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	Chinnasalem	99.22	99.32	99.55	99.45	99.38	99.38	0.21	0.21	0.08	0.08	0.15	0.15
2	Gingee	99.54	99.64	99.28	99.18	99.41	99.41	0.25	0.25	0.59	0.59	0.42	0.42
3	Kallakurichi	98.25	98.35	99.09	98.99	98.67	98.67	1.51	1.24	0.54	0.54	1.03	0.89
4	Kalrayan hills	-	97.87	-	98.55	-	98.21	-	1.83	-	1.15	-	1.49
5	Kanai	98.79	98.89	98.95	98.85	98.87	98.87	0.66	0.65	0.4	0.4	0.53	0.53
6	Kandamangalam	99.44	99.54	99.41	99.31	99.42	99.42	0.37	0.37	0.33	0.33	0.35	0.35
7	Koliyanur	99.41	99.51	99.01	98.91	99.21	99.21	0.54	0.54	0.77	0.77	0.65	0.65
8	Mailam	99.4	99.5	99.29	99.19	99.35	99.35	0.17	0.17	0.64	0.64	0.4	0.4
9	Marakkanam	99.39	99.49	98.58	98.48	98.99	98.99	0.22	0.22	0.53	0.53	0.37	0.37
10	Melmalayanur	99.57	99.67	99.26	99.16	99.41	99.41	0.43	0.43	0.68	0.68	0.56	0.56
11	Mugaiyur	98.63	98.73	98.57	98.47	98.61	98.61	1.05	1.04	1.08	1.08	1.06	1.06
12	Olakkur	99.81	99.91	99.88	99.78	99.85	99.85	0.06	0.06	0.02	0.02	0.04	0.04
13	Rishivandiyam	98.42	98.52	98.6	98.5	98.52	98.52	1.41	1.4	0.94	0.94	1.17	1.17
14	Sankarapuram	99.12	99.22	99.71	99.61	99.41	99.41	0.52	0.52	0.02	0.02	0.27	0.27
15	Thiruvennainallur	98.16	98.26	98.7	98.6	98.42	98.42	1.01	1.78	1.73	1.21	1.37	1.51
16	Thirunavalur	98.6	98.7	98.01	97.91	98.31	98.31	0.91	0.9	1.55	1.55	1.23	1.23
17	Thiyagadurgam	98.00	98.1	97.45	97.35	97.73	97.73	1.57	1	0.74	1.73	1.16	1.37
18	Tirukoilur	98.02	98.12	98.88	98.78	98.45	98.45	1.8	1.56	1.21	0.74	1.51	1.16
19	Ulundurpet	97.36	97.46	98.21	98.11	97.78	97.78	1.65	1.63	1.04	1.04	1.35	1.35
20	Vallam	99.79	99.89	99.91	99.81	99.86	99.86	0.12	0.12	0.01	0.01	0.06	0.06
21	Vanur	99.25	99.35	99.25	99.15	99.25	99.25	0.28	0.28	0.3	0.3	0.29	0.29
22	Vikkravandi	98.94	99.04	99.33	99.23	99.14	99.14	0.97	0.96	0.51	0.51	0.74	0.74
23	Villupuram	97.75	97.85	97.02	96.92	97.38	97.38	1.56	1.55	2.24	2.24	1.9	1.9
Villupuram District		98.86	**98.66**	**98.91**	98.63	**98.88**	**98.65**	**1.09**	1.08	**0.91**	**0.91**	1.00	1.00

Source: SSA, Villupuram. 2011 -12 & 2013 -14.

Drop out rate: The dropout rate for the district is 1.0 per cent. Block-wise analysis shows that Olakkur block has registered the minimum drop out ratio of 0.04 per cent; whereas Villupuram block has recorded a maximum dropout rate of 1.9 per cent for the year 2013-14. Scattered settlements, Lack of road connections, Transport facilities, less infrastructure facilities are major reasons for the high dropout rate in the backward blocks.

Though being the district head quarters dropout rate is Villupuram is high. Cost of educating children is urban areas is high comparing to the rural areas, when the family suffers on poor income, automatically it results the dropout of the children. Employment opportunity is also little higher in the urban areas for the dropout students. They will be given employment in stationary store, mechanic shop, hotels, etc. This is also another major reason for the higher dropout rate of Villupuram. Dropout rate is less than one in 13 blocks.

Gender – wise analysis for the dropout rate across the blocks shows that drop out ratio is slightly higher among boys than girls. It should be reiterated that there is marginal difference between boys and girls with regard to drop-out rates at the primary level.

Dropout rate of girls is higher in Villupuram, Kalrayan hills, Thiruvennainallur, Thirunavalur, Thirukoilur and Mugaiyur. Eduational expenditure is high in Villupuram since it is an urban area. Due to less income of the family, girls are discontinuing their education. Mostly it happens in the slums in Villupuram town. Migration is commonly observed in Kalrayan hills, Thiruvennainallur, Thirunavalur, Thirukoilur and Mugaiyur blocks. When the parents migrate to other places, the local domestic works are commonly done by the girl children of the family. This could be the main reason of higher girl's dropout rate in these blocks.

Upper primary/ middle school education

The enrolment rate at the upper primary level in 2011 varies from 90.48 (Kalrayan hills) to 99.90 per cent (Chinnasalem) across the blocks. The enrolment rate was more than 99 per cent in little less than two-thirds of the blocks. In the remaining blocks it ranges between 90 per cent and 99 per cent indicating the need for putting in extra efforts to enroll all the children at the upper primary level.

Table 5.3
Enrolment in Upper Primary Education

S. No	Block/District	Upper Primary					
		Boys		Girls		Total	
		2003	2013-14	2003	2013-14	2003	2013-14
1	Chinnasalem	98	102.92	97	102.88	97.50	102.9
2	Gingee	99	100.95	99	109.5	99.00	105.23
3	Kallakurichi	98	102.37	97	101.07	97.50	101.72
4	Kalrayan hills	98	102.34	95	101.03	96.75	101.68
5	Kanai	98	105.38	98	106.12	98.00	105.75
6	Kandamangalam	99	101.44	99	105.29	99.00	103.37
7	Koliyanur	99	104.37	98	103.61	98.50	103.99
8	Mailam	99	102.08	99	106.98	99.00	104.53
9	Marakkanam	98	100.46	97	101.07	97.50	100.77
10	Melmalayanur	99	100.75	99	100.1	99.00	100.43
11	Mugaiyur	99	101	99	99.96	99.00	100.48
12	Olakkur	99	102.14	98	99.47	98.50	100.81
13	Rishivanthiyam	99	105.47	98	99.74	98.50	102.61
14	Sankarapuram	93	105.08	86	99.85	89.50	102.47
15	Thirukoilur	95	99.86	93	103.37	94.00	101.62
16	Thirunavalur	98	100.91	98	98.49	98.00	99.7
17	Thiruvennainallur	98	100.47	96	104.39	97.00	102.43
18	Thiyagadurgam	98	101.44	97	104.39	97.50	102.92
19	Ulundurpet	99	102.23	99	106.12	99.00	104.18
20	Vallam	99	100.47	98	99.5	98.50	99.99
21	Vanur	90	100.46	84	99.56	87.00	100.01
22	Vikaravandi	98	100.46	96	103.61	97.00	102.04
23	Villupuram	100	100.46	99	102.76	99.50	101.61
Villupuram district		**98**	**101.02**	**97**	**101.2**	**97.50**	**101.11**

Source: SSA: 2003 and 2013-14

Gender-wise analysis of the enrolment rate at the upper primary level for the year 2013-14 shows that enrolment rate was equal among both boys (101.02%) than girls (101.20%). Except Thirunavalur (99.7) and Vallam (99.99) all other blocks have recorded enrollment rate more than 100 percent. A comparison of enrolment rate at the upper primary level between 2003 and 2013-14 indicates that majority of the blocks (60 per cent) with an enrolment rate of 97 to 99 per cent have moved into higher enrolment of 100 per cent, which evidence the impact of various schemes and the efforts taken by various stakeholders.

Establishment of separate hostels for boys and girls by the welfare department also improved the enrolment rate. An important reason for the higher enrolment ratio at the upper primary level is the establishment of new schools and up gradation of primary schools in the middle schools in the recent years.

Completion rate and drop out rate in upper primary/middle school

Completion rate: The completion rate at the upper primary level (2013-14) varies from 93.4 to 99.27 Percent across the blocks. Around one - third of the blocks have registered a completion rate of less than 95 per cent in 2013-2014. In the rest of the blocks, it varied from 95 to 99 per cent. Gender-wise analysis indicates that girls had performed better than boys with a difference of 0 .88 percent. For instance, Thiyagadurgam recorded the minimum completion rate for both boys and girls (boys: 93.92%; girls 92.87%). Villupuram recorded the maximum completion rate in upper primary for boys and girls, 99.39 per cent and 99.14 per cent respectively. Only one-third of blocks had registered a completion rate of more than 95 per cent for girls. The families which were involved in the daily laboring look at their son or daughter as a income earner after a particular age. They are trying to put them in some income earning activities or laboring.This was a main reason for the shortfall of completion rate in some of the blocks.

Table 5.4
Completion Rate in Upper Primary

Sl. No	Block / District	Completion Rate					
		Boys		Girls		Total	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	Chinnasalem	96.16	97.19	97.25	98.39	96.7	97.78
2	Gingee	95.61	96.63	96.9	98.03	96.25	97.33
3	Kallakurichi	96.48	97.51	97.19	98.33	96.84	97.92
4	Kalrayanhills	-	95.73	-	95.45	-	95.59
5	Kanai	95.98	97.01	96.8	97.93	96.4	97.48
6	Kandamangalam	96.07	97.1	97.35	98.49	96.7	97.78
7	Koliyanur	96.42	97.45	94.83	95.94	95.63	96.7
8	Mailam	95.49	96.51	94.46	95.57	94.97	96.03
9	Marakkanam	94.22	95.23	93.59	94.69	93.9	94.95
10	Melmalayanur	93.8	94.8	94.1	95.2	93.96	95.01
11	Mugaiyur	98.08	99.13	93.37	94.46	95.72	96.79
12	Olakkur	95.22	96.24	94.05	95.15	94.64	95.7
13	Rishivandiyam	94.59	95.6	92.76	93.85	93.68	94.73
14	Sankarapuram	94.72	97.78	94.35	97.37	94.53	97.57
15	Thirukoilur	96.36	97.39	92.13	93.21	94.25	95.31
16	Thirunavalur	94.91	95.93	93.22	94.31	94.06	95.11
17	Thiruvennainallur	92.34	93.33	92.54	93.62	92.44	93.48
18	Thiyagadurgam	92.93	93.92	91.8	92.87	92.37	93.4
19	Ulundurpet	92.89	93.88	94.82	95.93	93.86	94.91
20	Vallam	96.88	97.92	96.11	97.23	96.49	97.57
21	Vanur	95.32	96.34	91.85	92.92	93.58	94.63
22	Vikkravandi	96.85	97.89	95.7	96.82	96.28	97.36
23	Villupuram	98.34	99.39	97.99	99.14	98.17	99.27
Villupuram District		**95.44**	**93.9**	**94.69**	**94.87**	**95.06**	**94.39**

Source: SSA Villupuram. 2011-12, 2013-14.

Dropout rate: The drop-out at the Upper Primary level was comparatively higher (when compared to primary level). The minimum dropout rate is 0.75 (Villupuram) and the maximum is 2.34 (Thiyagadurgam). Dropout rates across the blocks indicate that 3 blocks have a dropout rate of 0 to 1 per cent. Remaining 13 blocks recorded a dropout rate of 1 to 3 percent. Thus, in a vast majority of the blocks, the drop out ratio varies from 1 to 3 percent. Gender-wise analysis shows that drop-out rate among the girls is lower than the dropout rate among the boys in a few blocks; it was more than two in six blocks viz., Kalrayan hills, Rishivandiyam, Thirukoilur, Thiruvennainallur, Thiyagadurgam and Ulundurpet. The higher drop-out rate is attributed to the longer distance the students have to cover to access secondary education. Due to limited number of middle schools in the hills certain areas of the block have poor transportation facility. A comparison of drop-out rate between 2011-2012 and 2013-2014 showed that there was a marginal fall in the drop outs across the blocks.A similar trend could be observed among boys and girls.

Table 5.5

Dropout Rate in Upper Primary

S. No	Block/ District	Drop out					
		Girls		Boys		Total	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	Chinnasalem	1.17	1.23	1.56	0.7	1.39	0.97
2	Gingee	1	1.06	1.34	0.6	1.19	0.83
3	Kallakurichi	1.72	0.7	0.88	1.03	1.23	0.86
4	Kalrayanhills	-	2.13	-	1.92	-	2.03
5	Kanai	2.43	0.93	1.17	1.45	1.69	1.18
6	Kandamangalam	1.86	0.65	0.82	1.11	1.26	0.88
7	Koliyanur	1.72	1.38	1.75	1.03	1.73	1.21
8	Mailam	1.74	0.78	0.99	1.04	1.3	0.91
9	Marakkanam	2.05	1.65	2.09	1.23	2.07	1.44
10	Melmalayanur	1.48	0.83	1.05	0.88	1.22	0.85
11	Mugaiyur	2.4	2.35	2.98	1.43	2.72	1.89
12	Olakkur	2.56	1.32	1.67	1.53	2.04	1.42
13	Rishivandiyam	2.4	4.14	5.25	1.43	4.02	2.8
14	Sankarapuram	2.05	1.4	2.37	0.92	2.23	1.16
15	Thirukoilur	2.59	2.58	3.27	1.55	2.97	2.07
16	Thirunavalur	2.02	2.23	2.83	1.21	2.48	1.73
17	Thiruvennainallur	3.71	2.22	2.82	2.22	3.18	2.21
18	Thiyagadurgam	2.28	4.22	5.35	1.36	4.02	2.8
19	Ulundurpet	2.41	3.21	4.08	1.44	3.36	2.34
20	Vallam	1.49	0.67	0.85	0.89	1.12	0.78
21	Vanur	3.15	1.94	2.46	1.88	2.75	1.91
22	Vikkravandi	0.94	1.31	1.66	0.56	1.35	0.94
23	Villupuram	1.92	0.38	048	1.15	1.08	0.75
Villupuram District		**2.06**	**2.07**	**2.25**	**2.01**	**2.16**	**2.04**

Source: SSA Villupuram. 2011-12. 2013-14

Transition rate from primary to upper primary and upper primary to secondary

The transition rate from primary to upper primary varies from 96.98 per cent (Ulundurpet) to 99.31 per cent ((Kandamangalam) across the blocks during 2013-14. The transition rate for a vast majority of the blocks ranges from 99 to 100, indicating a vast majority of the students move from primary to upper primary. Gender-wise analysis of the transition rate shows that both boys and girls have equal transition rate. A comparison of transition rates for the year 2011-12 and 2013 -14 shows that there is a marked improvement in the transition rate among both boys and girls across the blocks.

Table 5.6
Transition Rate

S. No	Block/ District	Primary to Upper Primary						Upper Primary to Secondary					
		Boys		Girls		Total		Boys		Girls		Total	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	Chinnasalem	99.49	98.65	99.29	99.04	99.39	98.85	90.56	99.49	90.79	99.71	90.67	99.6
2	Gingee	99.63	98.79	99.53	99.28	99.58	99.04	70.09	97.86	67.87	99.02	83.70	98.44
3	Kallakurichi	99.73	98.89	99.51	99.26	99.62	99.08	68.77	98.94	60.02	99.05	79.77	99
4	Kalrayan hills	-	97.58	-	97.89	-	97.74	-	96.5	-	95.8	-	96.15
5	Kanai	98.73	97.9	99.53	99.28	99.13	98.59	88.75	98.78	88.91	98.89	94.22	98.84
6	Kandamangalam	99.94	99.1	99.76	99.51	99.85	99.31	77.85	99.59	80.68	99.83	79.26	99.71
7	Koliyanur	98.28	97.45	98.20	97.95	98.24	97.7	61.10	98.98	60.08	99.09	60.09	99.04
8	Mailam	99.33	98.49	98.41	98.16	98.87	98.33	89.34	99.75	90.77	99.83	90.05	99.79
9	Marakkanam	99.63	98.79	99.76	99.51	99.70	99.15	83.74	98.8	83.91	98.98	83.82	98.89
10	Melmalayanur	99.33	98.49	99.18	98.93	99.25	98.71	88.18	98.64	84.87	98.76	86.52	98.7
11	Mugaiyur	98.73	97.9	98.08	97.83	98.40	97.87	85.03	98.8	84.66	97.78	84.84	98.29
12	Olakkur	99.97	99.13	99.05	98.8	99.51	98.97	80.60	99.42	76.73	99.42	87.89	99.42
13	Rishivandiyam	98.78	97.95	96.51	96.27	97.65	97.11	75.05	99.58	71.81	99.89	84.16	99.74
14	Sankarapuram	98.53	97.7	98.41	98.16	98.47	97.93	90.63	99.9	81.87	99.67	90.14	99.96
15	Thirukoilur	99.73	98.89	99.53	99.28	99.63	99.09	96.57	99.7	98.77	99.16	99.15	99.61
16	Thirunavalur	98.73	97.9	99.53	99.28	99.13	98.59	65.54	97.96	62.58	98.08	81.06	98.02
17	Thiruvennainallur	98.70	97.87	98.41	98.16	98.56	98.02	71.12	97.58	73.99	98.75	72.55	98.17
18	Thiyagadurgam	98.68	97.85	98.46	98.21	98.57	98.03	73.59	96.6	86.52	96.7	92.49	96.65
19	Ulundurpet	97.46	96.64	97.57	97.32	97.51	96.98	95.18	97.75	86.06	97.88	91.82	97.82
20	Vallam	99.63	98.79	98.52	98.27	99.08	98.53	71.79	99.68	76.80	99.81	74.29	99.75
21	Vanur	99.52	98.68	99.09	98.84	99.30	98.76	87.01	99.99	88.91	99.22	94.00	99.61
22	Vikkravandi	99.73	98.89	99.53	99.28	99.63	99.09	97.65	98.88	87.88	98.71	92.76	98.8
23	Villupuram	95.71	94.9	97.01	96.76	96.35	95.83	97.79	99.06	98.85	99.16	96.43	99.11
Villupuram District		**99.00**	**98.76**	98.77	**98.75**	98.88	**98.76**	81.34	**98.95**	**80.21**	**98.95**	**85.39**	**98.95**

Source: SSA, Villupuram. 2011-12, 2013 -14.

Transition rate from upper primary to secondary

The transition rate for the year 2013-14 varies from 96.15 per cent to 99.96 per cent. However, 56 per cent of the blocks have a transition rate ranging from 99 to 99.96 per cent. Thus, a vast majority of the blocks have witnessed a higher transition rate from upper primary to secondary level. A vast majority of the blocks had a transition rate less than 90 in 2011, all the blocks have moved into the transition rate of above 95 per cent and many of them were with the transition rate of 99 to 100 per cent in 2013-14. Gender-wise analysis indicates a similar trend. Thus, there has been a good progress in transition rate; and there has been no gender discrimination in this respect across blocks in the district.

The reasons that could be attributed are: i) adequate number of teachers with better qualification and experience; ii) continuous training such as orientation and refresher training conducted by block-level resource team; iii) application of modern tools of learning and teaching such as activity based learning; iv) establishment of residential hostels and welfare board hostels for boys and girls in all semi-urban and urban centres facilitated the boys and girls from remote villages and poor socio-economic background to continue their education.

Access to primary and upper primary schools

There are 2435 primary schools and 866 upper primary schools catering to the needs of 3581 habitations in the district. The district, on an average, has one primary school for 2 habitations and one upper primary school for every 4 habitations. Block-wise analysis shows that the number habitations served by each primary school varies from 1.17 to 4.54. In other words, each primary school serves on an average one to five habitations. Similarly the number of habitations served by an upper primary school range from 1.13 to 22.13. Kalrayan hills presents a unique case in the ratio of habitations vs. upper primary schools. One upper primary school serves 8 habitations on an average. Kalrayan hillshas the least population of 56327 in the district and stands at the sixth place in terms of habitations (177). The habitations are remote from each other with uneven population. Hence the numberof habitations accessing one upper primary school are not proportionate.

Table 5.7
Availability of Schools

Sl.No	Block/ District	2002-03			2013-14		
		Habitation	Primary Schools	Upper Primary Schools	Habitation	Primary Schools	Upper Primary Schools
1	Chinnasalem	125	74	35	102	110	41
2	Gingee	152	92	39	229	134	48
3	Kallakurichi	178	98	50	84	122	56
4	Kalrayanhills	171	35	10	177	66	20
5	Kanai	90	76	27	99	109	42
6	Kandamangalam	159	83	22	209	96	29
7	Koliyanur	108	79	29	193	120	48
8	Mailam	87	63	30	88	91	29
9	Marakkanam	187	89	29	280	124	39
10	Melmalayanur	179	98	32	256	128	34
11	Mugaiyur	121	96	36	155	135	41
12	Olakkur	123	84	40	175	114	31
13	Rishivandiyam	96	80	18	137	99	44
14	Sankarapuram	187	74	33	94	105	36
15	Thirukoilur	81	69	24	186	92	51
16	Thirunavalur	94	68	21	176	119	36
17	Thiruvennainallur	189	83	28	162	91	37
18	Thiyagadurgam	98	65	29	88	88	27
19	Ulundurpet	188	93	30	136	128	45
20	Vallam	123	89	21	180	105	27
21	Vanur	108	90	34	228	125	47
22	Vikkravandi	81	63	32	105	91	33
23	Villupuram	52	17	31	42	43	25
Villupuram District		**2681**	**1649**	**635**	**3581**	**2435**	**866**

Source: DISE and DSE. 2002-03, 2013-14

There has been no improvement in the number of habitations served by primary schools and the number of schools remained more or less constant between 2002-03 and 2013-14. ii) There is substantial increase is the number of upper primary schools from 635 schools in 2002-03 to 866 schools in 2013-14.

Encouraging higher transition rate from primary to upper primary and also better progress in the enrollment rate at the upper primary level. The whole analysis indicates that the children living in various blocks of Villupuram district have better access to primary and upper primary school education which is primarily due to the State government's efforts to provide education to various sections of the community through enlarging the educational infrastructure and improving the quality of teaching in the schools.

Pupil teacher ratio in primary, upper primary and secondary

An ideal pupil teacher ratio is essential for better learning and better performance.

Table 5.8 Pupil Teacher Ratio

S.No	Block / District	2002-03		2013 -14	
		Primary	Upper Primary	Primary	Upper Primary
1	Chinnasalem	42:1	59:1	30:1	34:1
2	Gingee	40:1	62:1	27:1	28:1
3	Kallakurichi	50:1	51:1	37:1	37:1
4	Kalrayanhills	33:1	46:1	32:1	43:1
5	Kanai	40:1	66:1	32:1	33:1
6	Kandamangalam	33:1	50:1	26:1	24:1
7	Koliyanur	31:1	46:1	31:1	27:1
8	Mailam	36:1	53:1	30:1	32:1
9	Marakkanam	43:1	75:1	25:1	29:1
10	Melmalayanur	38:1	59:1	27:1	30:1
11	Mugaiyur	46:1	61:1	33:1	40:1
12	Olakkur	44:1	64:1	26:1	30:1
13	Rishivandiyam	51:1	84:1	35:1	37:1
14	Sankarapuram	39:1	83:1	36:1	43:1
15	Thirukoilur	44:1	80:1	38:1	41:1
16	Thirunavalur	48:1	64:1	37:1	34:1
17	Thiruvennainallur	46:1	64:1	38:1	33:1
18	Thiyagadurgam	47:1	58:1	35:1	40:1
19	Ulundurpet	49:1	79:1	34:1	43:1
20	Vallam	37:1	60:1	25:1	27:1
21	Vanur	34:1	52:1	26:1	24:1
22	Vikkravandi	39:1	67:1	34:1	31:1
23	Villupuram	32:1	76:1	26:1	35:1
Villupuram District		**41:1**	**64:1**	**32:1**	**33:1**

Source: SSA Villupuram. 2002-03, 2011-12

The pupil teacher ratio at the primary school level across the blocks varies from 31:1 to 51:1 and at the upper primary level it varies from 46:1 to 84:1 in 2002-03. The high pupil teacher ratio has changed over a period of time. The pupil student ratio for the year 2013-14 across the blocks shows that it varies from 25:1 to 38:1 at the primary level, and from 24:1 to 43.1 at the upper primary level.

This clearly points to the fact that there is a tremendous improvement in the pupil student ratio. Most of the blocks are found to have reasonably good pupil student ratio of 20:1 which may be mainly attributed to appointment of teachers in government schools. Establishment of schools in the habitation which are having a larger quantum of students is the major reason for the good teacher pupil ratio, since it avoids over crowding in limited schools.

Secondary education

Table 5.9
Enrolment in Secondary Education

Sl. No	Block/ District	Gross Enrollment rate		
		Male	Female	Total
1	Chinnasalem	149	128	138
2	Gingee	54	63	58
3	Kallakurichi	107	99	103
4	Kalrayanhills	53	38	46
5	Kanai	93	84	89
6	Kandamangalam	45	49	47
7	Koliyanur	118	119	119
8	Mailam	81	73	77
9	Marakkanam	62	67	65
10	Melmalayanur	72	75	74
11	Mugaiyur	90	80	85
12	Olakkur	136	133	134
13	Rishivanthiyam	87	85	86
14	Sankarapuram	89	96	92
15	Thirukoilur	96	118	107
16	Thirunavalur	82	72	77
17	Thiruvennainallur	105	98	102
18	Thiyagadurgam	151	134	142
19	Ulundurpet	145	140	142
20	Vallam	55	55	55
21	Vanur	69	65	67
22	Vikaravandi	88	94	91
23	Villupuram	165	171	168
Villupuram District		97	94	96

Source: Chief Educational Officer, Villupuram District. 2013-14

The average gross enrolment rate at the secondary school level in Villupuram district is 96 per cent in which boys' share 97 and girls 94 per cent. Block-wise, the enrolment in secondary schools varies from 46 to 168 per cent across the blocks. The block with the highest enrolment rate is Villupuram with 168, followed by Thiagadurgam (142 %), Ulundurpet (142%) and Olakkur (134%).

The analysis, therefore, indicates that i) the enrolment rate at secondary school level does not exhibit an encouraging sign; and ii) the enrolment rate for the girls at the secondary level was less than that of boys.

Box 5.1

Initiatives for Improvement in Quality of Education

Having provided the access and necessary physical infrastructure, it is the duty of the Government to impart quality education in all the schools. A landmark initiative, the Continuous and Comprehensive Evaluation (CCE) System was introduced for classes I to VIII in order to enable the children acquire analytical thinking, problem solving skills and life skills and build their capabilities them to face the challenges in a more competent manner when they step out of the school.

The aim of the Government is to move the children away from mere rote learning to understanding concepts and acquiring knowledge. Hence, at the primary level itself the children would be introduced to a Simplified Activity Based Learning (SABL) methodology, incorporating the required quantum of Reading, Writing and Arithmetic skills. The continuous evaluation inbuilt in the SABL will assist the teacher and parent to help the child perform better.

The Trimester Pattern in the schools is another innovative initiative to improve the quality of education as this would help the children learn the syllabus of the term with more intensity and better understanding. Learning is not merely a test of memory but should be more of grasping, retaining and understanding the concepts. In the Trimester pattern, the book load has been reduced by 50% of the weight that was carried earlier, thereby saving the children from musculoskeletal problems like kyphotic posture, scoliosis, etc.

Access to higher education

The District has reasonably good number of Higher Educational Institutions to cater to the needs of the students who aspire to pursue higher education. The district has 11 Arts and Science Colleges where 6089 students pursue their higher education. There are 29 Engineering Colleges with 11322 students pursuing education in engineering subjects. The district has to its credit 7 Polytechnic colleges with student strength of 2968. There are also other professional and technical colleges / institutions like Industrial Training Centres, Hotel Management Institutes, Teacher Training Institutes and College of Education etc. where 3331 students are on roll.

Basic infrastructure in school

The school should be endowed with adequate infrastructural facilitation which is essential for developing an enabling environment for the children to learn and for the teachers to teach effectively. Basic infrastructure would include adequate class rooms with proper ventilation, adequate number of toilets for boys and girls, protected drinking water, electricity, adequate furniture like desks, tables, benches, chairs and so on.

Table 5.10
School Infrastructure

S. No	Block / District	Total No. of schools	with 3 classroom	more than 3 class room	without toilet	without girls toilet	without electricity	without compound wall	Without Drinking water	Without desk and chair
1	Chinnasalem	140	54	86	8	33	-	99	2	123
2	Gingee	157	63	94	30	70	1	105	23	127
3	Kallakurichi	167	65	102	40	67	5	104	21	119
4	Kalrayan hills	72	24	48	28	35	11	62	13	37
5	Kanai	125	53	73	12	29	-	80	10	87
6	Kandamangalam	108	57	52	6	37	2	81	1	92
7	Koliyanur	134	58	76	4	32	-	94	8	90
8	Mailam	108	52	56	14	49	4	82	30	78
9	Marakkanam	140	63	81	28	55	1	104	13	107
10	Melmalayanur	147	80	67	22	76	1	113	7	119
11	Mugaiyur	152	61	91	20	57	7	103	21	114
12	Olakkur	133	57	76	15	42	5	70	30	90
13	Rishivanthiyam	115	32	83	16	34	-	78	9	74
14	Sankarapuram	161	47	114	24	56	5	111	21	115
15	Thirukoilur	107	21	86	11	26	1	59	4	60
16	Thirunavalur	131	70	61	4	26	1	106	17	97
17	Thiruvennainallur	112	36	76	14	53	1	74	9	78
18	Thiyagadurgam	100	42	58	6	27	1	59	6	71
19	Ulundurpet	144	63	82	34	67	2	95	14	101
20	Vallam	114	70	44	15	39	3	85	11	90
21	Vanur	145	77	69	30	64	-	108	15	105
22	Vikaravandi	106	49	57	13	41	1	76	8	71
23	Villupuram	50	6	44	1	3	-	5	3	30
Villupuram District		**2868**	1200	1676	395	1018	52	1953	296	2075

Source: SSA, Villupuram. 2013-14.

A look at the infrastructure facilities available in the schools across the blocks reiterates the fact that quite a good number of schools are yet to be provided with all the required facilities. There are schools without toilets; there are schools without adequate number of class rooms; there are a few schools even without electricity; there are schools without drinking water and without furniture for the staff and students. But teachers and parents who communicated on the adequacy of the facilities in the schools expressed their satisfaction over the development happening in the last few years. Conditions of the schools are much better now than what it has been some years back. The conditions are improving and physical environment has become more and more conductive for learning.

Hostel facilities

Table 5.11
Hostels

Sl. No	District	No. Schools	Total Number of students	No. of students in hostels
1	Villupuram District	136	17082	5766

Source: Adi Dravidar & B.C Welfare Office, Villupuram. 2013-14

There are 136 schools with hostel facilities in the district with the student's strength of 17082. Among them, 5766 students are staying in the hostels provided by the schools. Hostel facilities have to be improved to benefit more number of students.

Box 5.2
Technology initiatives in school children

Learning with joy and without burden is what every child wants to do. From the year 2012-13, the children going to the Government and Government Aided schools are not only be learning with joy but will also have their own identity with their SMART CARDS and will be proud owners of four sets of uniforms, a pair of footwear, schoolbag, geometrybox, etc.

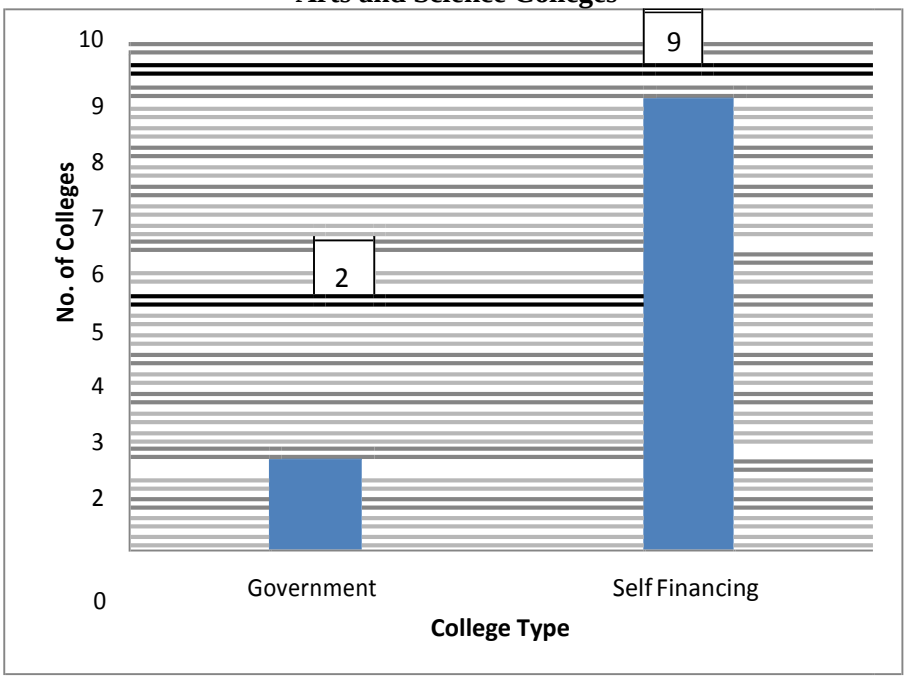
Presently, all the high and higher secondary schools in Tamil Nadu are provided with computers, printers, multimedia projectors, UPS along with required furniture. All these schools have also been given internet connectivity. Educational software and CD ROMs, CD and application software have also been provided as an integral part of the ICT package. During the higher secondary course, the students in government schools and government aided schools, are provided with laptops which help them to move forward. The students are also provided with cycles to reach the schools safety. This helps children reach school on time particularly those who are coming from the rural areas.

The purpose of providing the above ICT package is to establish an enabling environment in the school to promote the use of computers so as to help children to think analytically and use self-learning skills for understanding the subjects. The online facility enables the students to assimilate information from various sources for better understanding.

Higher education

Arts and science colleges

Figure 5.2
Arts and Science Colleges

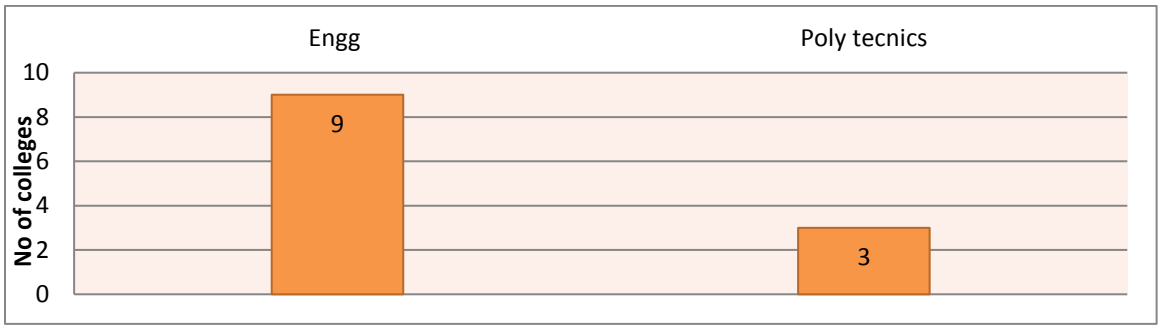


Source: Regional Joint Director, Trichy. 2013 - 14

Of the 11 Arts and Science colleges in the district, 2 colleges are Government Colleges and all the remaining 9 colleges are self financingcolleges. There isno aided college in the district (Annexure II Table 5.1).

Technical Education

Figure 5.3
Engineering Colleges and Polytechnics



Source: Regional Joint Director, Trichy. 2013 - 14

There are 29 engineering and 7 polytechnic colleges in the district. Of them, only one college is run bythe government; theremaining 35 areself financingcolleges (Annexure II Table 5.2).

Box 5.3

Community Participation in Educating Rural Children

The Right of Children to Free and Compulsory Education Act was enacted by the Parliament of India on 4 August 2009. The Act has made education free and compulsory for children between 6 and 14 in India under Article 21a of the Indian Constitution. It is like the tiny seed whose dreams unfold into a big banyan tree, this happened in Sornavur Keezhpathy, an ordinary village in Kandamangalam block. The whole village has 100 per cent Scheduled Community, a socially and economically underprivileged category. Today the village can flaunt three to five graduates every year. As onthe academic year 2013-14, around 110 graduates in various disciplines have hailed from this tiny village. Two students have achieved district level ranks and two students have participated in athletics at national level. So far, 75 students have been given computer education.

In the year 2000 three young graduates from the village joined together and deliberated on the educational situation of their village. They wanted to empower the boys and girls of the village through education which alone will open the windows to refreshing development outside. This noble band planned to start a coaching centre for the students. Initially neither the parents nor the children showed any interest about a coaching centre. Kids ran away and parents didn't understand the magical impact of education. These young men campaigned from door to door; spoke to everyone in the village. They impressed the village panchayat president to give a place where they can set up their centre. Initially, they got a few students whose improvement drew some more students. Parents were convinced and more children joined. Thus, all school going children joined the coaching centre.

In course of time, the coaching centre succeeded in having a building of its own. Donations were collected. Students who have already benefitted took the younger ones under their wings. Apart from the regular academic subjects, an interest in extra curricular activities also was developed. Vocational coaching classes in computer and spoken English were conducted. Summer camps were held each year and Sports materials were added and utilized for sports training. Health education and disaster management were the new areas taught. At present 150 school going students are there in the centre. Up -gradation is still going on both in vision and mission.

Conclusion

The literacy rate of the district is 71.89 (2011) which is much less than the State average. The literacy rate among the women (63%) is almost 17 per cent less than the male literacy rate (80.5%). The district has witnessed marked improvement in literacy rate both among men (75% in 2001 and 80.5% in 2011) and women (52.7% in 2001 and 63.2% in 2011) over a period of 10 years.

The enrolment rate at the primary level is 100 per cent in all the blocks. The district average enrolment rate at the upper primary level is 101.11per cent.The district average of enrolment rate at secondary level is 96per cent. The completion rate at the primary level across the block indicates that 50 per cent of the blocks registered a completion rate of 99 to 100 per cent. Around 30 per cent of the blocks have recorded a completion rate of 98 to 99 per cent. The completion rate at the upper primary level(2013-14) varies from 93.4 to 99.27 percentacrosstheblocks.

The drop-out at the Upper Primary level is comparatively higher (when compared to primary level). The minimum dropout rate is 0.75 (Villupuram) and the maximum is 2.34 (Thiyagadurgam). A better enrolment rate, reduction in dropout rate, and a better transition rate are possible only when the school aged boys and girls have better access to schooling.

The pupil teacher ratio has drastically come down from 41:1 (2002 – 03) to 18:1 (2013-14) indicating the sincere attempts made by the State Government to fill up the vacancies in schools. Around 82 percent of the children are enrolled in noon-meal programme which is an important contributing factor for better enrolment, transition and completion rate.

The district has registered marked improvement in the literacy rate at the block level. However, the female literacy needs to be improved in many blocks. The enrolment rate has registered a phenomenal increase at the primary level. Marginal difference could be noticed in the enrolment rate of boys and girls. Similar trend could be noticed in the enrolment rate at the upper primary level which was also an evidence of the impact of various schemes and the efforts taken by the various stakeholders.

The enrolment rate at the secondary level has not been uniform across the blocks and therefore did not exhibit an encouraging trend. The enrolment rate for the girls at the secondary level was less than that of the boys. Though the percentage of children never enrolled in schools is quite negligible, it is a matter of concern in the context of ensuring the right of children to free education. The drop out rate at the primary level is quite low; whereas at the upper primary level it was slightly higher. An important reason for the minimum dropout rate is operation of noon-meal scheme. There is a marked improvement in the transition rate of both boys and girls across the blocks. Completion rate at the primary level can be rated as good for both boys and girls. However, the completion rate at the upper primary level is not satisfactory in view of the no detention policy up to the upper primary level and the completion rate for girls is less than boys. An important factor that helps in better enrolment, better transition rate and better completion rate is the accessibility of schools at easily reachable and affordable distance. The Government has really done commendable work in establishing schools in rural and urban areas which can be easily accessed by boys and girls.

The quality of education, to a certain extent, depends on ideal pupil teacher ratio. The district has registered a tremendous improvement in pupil teacher ratio in the recent year. Majority of the blocks have a good pupil teacher ratio. Infrastructure facilities available in schools indicate that quite a good number of schools are yet to be endowed with basic facilities such as drinking water, toilets, classrooms, electricity, furniture, etc. An important measure that needs to be taken is the creation of facilities in the schools for children with special needs.

CHAPTER 6

GENDER

Chapter -6
Gender

In contrast to "Sex" which is biologically determined by reference to genetic and anatomic characteristics, "Gender" refers to the socially and culturally assigned roles, responsibilities, privileges, relations and expectations, to men and women based on their sex. It establishes a practice of granting or denying rights or privileges to a person by virtue of being a male or female. Nevertheless, there is an intermesh of gender with social institutions and social relationships. Gender relations are constituted by a range of institutions - Family, Marriage, Kinship, Work, Politics, Legal systems, Market, etc. As a power relation, gender derives from institutional arrangements, greater capacity and power for men than women from that group.

No society in history has so far been perfectly gender equal. It is because gender systems are often dichotomous and hierarchical that accord privileges to men greater than women by virtue of them being born as men. This unequal treatment or perceptions of individuals based on their gender has given rise to gender inequalities. Gender inequality is an expression of power in the social relationships between men and women. It is multidimensional and the axial barrier to human development. Hence, any issue relating to human development has to be subjected to gender analysis. "Development, if not engendered, is endangered". (UNDP -HDR 1995: 1) Analysis of gender segregated data not only reveals inequalities between men and women but also takes us to the next step to define gender equality.

The intention of this Chapter is to analyze whether women in Villupuram district have the same opportunities in life as men including the ability to participate in public sphere. It also denotes the equivalence in life's outcomes for women and men, recognizing their different needs and interests, and requiring a redistribution of power and resources.

The comparative indicators selected for analysis in this chapter cover three main components of inequality/ equality:

1. Basic human capabilities(Health and Knowledge)
2. Opportunities to apply these capabilities (Access to employment and income)
3. Components referring to empowerment and ability to influence outcomes (Political decision making and collective women power)

Status of women

The proportion of women and men in the population can tell a lot about the level of gender inequality in the district. Biologically, women are the stronger sex. In societies where women and men are treated equal, women outlive men so that there are more women than men in the adult population. Typically, one can expect to find 1030 -1050 women for every 1000 men in the population. Table 6.1 shows the status of women in Villupuram district.

Table 6.1 Comparative Status of Women

S.No	Particulars	District
1	Female Population	1718054
2	Percentage in Total population	49.67
3	Sex-ratio	987
4	Female literacy rate	63.2
5	School Enrollment(Primary)	100.12
6	MMR	59
7	% of women worker in agriculture	32.51
8	% of women in non-agri. Sector	7.76

Sources: Census: 2001 and 2011, SSA, Villupuram: 2013-14, Vital Events Survey Data-2014

Population: As per 2011 Census, Villupuram district has a population of 3458873, which includes 1740819 males and 1718054 females, women less by 22765. Women constitute 49.67 per cent and men 50.32 per cent of the total population.

Sex ratio: The general sex ratio of Villupuram district has a slight decadal increase by three points from 984 in 2001 census to 987 in 2011 census. It is less than Tamil Nadu State level sex ratio of 996 (2011). Any adverse female sex ratio can be explained by the fact that women are still not regarded and are not given equal value and opportunities to enjoya long, healthy life.

Sex ratio of ST population has increased by 14 points from 979 in 2001 to 993 in 2011. Tribal communities are noted traditionally for the equality their women enjoy compared to women in other socio-economically advanced communities, which practice unscrupulously feticide, infanticide and negligence of female children in health, education and care.

Female 0–6 population: Women and children are interdependent in all developmental issues. Children are not free from any issue that governs women's life. The child population in the age group of 0-6 years in Villupuram district stands at 404106 in 2011. Compared to 2001, the child population has increased by 30,931 in the district (Annexure II-Table 6.1). In contrast, the child sex ratio in the district isdisconcerting.

As per Annexure II-Table 6.2, Census 2011 records a considerable decrease in child sex ratio from 961 in 2001 to 941 in 2011. It is found to have decreased by 20 points. It is far lower than the general sex ratio of the district. Son preference has been a persistent phenomenon in India. Besides that, the net result of negligence of girl babies, growing malnutrition and ill effects on women lead to theunfavorablechildsexratio.

Literacy and enrollment: Literacy of women is the basis for improving health, nutrition and education in the family and promotes empowerment of women. Female literacy is negatively related with the fertility rate, population growth rates, and infant and child mortality rates; and shows a positive association with female age at marriage, life expectancy, participation in modern sector of economy and above all female enrolments in schools and colleges.

While male literacy is 80.5 per cent for the district as a whole the female literacy is 63.2 percent. The enrolments in Villupuram district for both boys and girls have a near achievement of 100 per cent enrolment. The enrolment rate in upper primary classes in the district for both boys and girls is almost similarly high. Entry into secondary school poses a great challenge for girls, especially for girls from rural and backward areas. The socio-customary attitudes prevent girls from pursuing their education after the age of 13 - 14. Most families retain girls at home after their puberty with marriage expectations and do not relate education with far reaching socio economic benefits.

Women in agri, non-agri sectors: The composition of female workers in agricultural sector in Villupuram district is 32.51 per cent and male workers in agriculture are 38.05 per cent. Male workers are higher in agriculture sector than women workers. Here the farm related work that women do in their own backyard is unpaid and taken for granted. Hence, the counted work excludes women and thus many women are missed from workforce in agriculture.

Considering workers in the non-agricultural sector (business and services) in the district, women workers constitute 7.76 per cent and male workers in non-agriculture constitute 21.68 per cent, i.e. women workers are only one-third of male workers in non-agriculture sector. It also means that women are not provided with work possibilities where they could earn wages.

Longevity of the female

The life expectancy of women in Villupuram district in 2001 was 67.6 years and that of men 65.2 years. The longevity of life is on the rising scale as per 2011 census. The decadal increase of life expectancy of men has increased by 5.2 points and that of women by 8.1 points. Both in 2001 and 2011 Census, the life expectancy of women has been higher than men. It is clear that women have longer life than men. Given the tangible progress made in health care and nutrition for women and children in the State, one could expect a steady increase in the life expectancy of females. (See Annexure II Table 6.3)

Gender inequality

Box 6.1

Status of Gender Inequality Index in the District

In the equity level ranking, Kalrayanhills leads the district holding the 1st place with the index value 0.085. Thiruvennainallur (0.107), Sankarapuram (0.108), Mailam(0.117) and Gingee (0.122) are the other four blocks holding the ranks 2,3,4,5 respectively. The least rank (22) among the blocks goes to Marakkanam with the GII index value 0.252. Olakkur, Melmalayanur, Thiyagadurgam and Thirunavalur are the other blocks whose ranks are 18, 19, 20, and 21 low at the equity level respectively(See also Annexure 1.2).

The better performance of Kalrayan hills block as the first ranking block in GII may be attributed to its cultural practices. Kalrayan hills which is predominantly of tribal population, maintains the culture of involving the women in decision making. Also women are equally respected in the tribal population. These are the reasons which contribute for its best position in Gender equity. It is also seen that the block has lower income and standard of life indicators showing a higher degree of improvisation and this could be the reason for lower inequality.

Box 6.2

Koovagam –Carnival to mainstream transgenders

Koovagam is a tiny, nondescript village in Ulundurpet block in Villupuram district. It is located 25 km. from Villupuram and 15 km. from Ulundurpet. This, otherwise, sleepy village is galvanised into the biggest carnival site for tens of thousands of trans-genders from all over the country. India's largest Transgenders festival lasts for 18 days, culminate on chitra pournami (April-May), the full moon day in the Tamil month of Chithirai. The celebrations revolve around the village temple dedicated to the deity "Koothandavar". The very basis of the festival, its associated rituals and the people involved make it the weirdest possible celebration on earth. The festival recreates the history of Aravan in the epic the 'Mahabharata'. In the Mahabharata, Aravan (son of Arjuna and Ulupi, the Naga Princess) was sacrificed to ensure the victory of the Pandavas in the Kurukshetra war with the Kauvravas. However, it was the death wish of Aravan that before giving up his life, he ought to get married, even for a night. But as no woman came forward to marry him, Lord Krishna was believed to have taken the form of Mohini to become his wife. Reenacting this episode, Aravanisfrom all over the country will congregate in Koovagam for the 18 days carnival. The day before the final day, trans-women would troupe into the Koothandavar temple to symbolically get married to Aravan (Koothandavar), the presiding deity. The priests will assume the role of Aravan and tie the thali or 'mangal sutra', the traditional symbol of marriage to the trans-genders. The whole night is spent jubilantly by the trans-women in singingand dancingand celebratingtheir nuptial night.

The next morning, Aravan dies and the entire temple is filled with wailing sounds as trans-genders mourn Aravan. All of them would be "widowed", their 'tali' removed and bangles broken; it recreates the death of their husband. With a heavy heart, they would return to their places. The festival is celebrated with an annual beauty pageant and several other contests are held. Basic rights of transgender and transvestite individuals and health care are discussed in seminars. It creates a positive environment for the trans-genders, since they are respected most in the feast. The top level officials of the district administration like the district Collector inaugurate the feast every year. All arrangements for the festival are being done by the Koovagam village committee in collaboration with the Transgender Welfare Association, Villupuram. AIDS Awareness campaigns and programmes are carried out as important events of this festival.

Koovagam is a unique festival in the sense opportunities are created for the trans-genders during the festival to meet together and find their strength and identity in fellowship. The general community also has started to understand transgenders beyond fixing a sexuality mark on them and accord equal humanrights. Such efforts have lead to a landmark judgement on 14th April 20I4 when the Supreme Court created the "third gender" status for hijras or trans-genders. Earlier, trans-genders were forced to write male or female against their gender. The SC said that trans-genders will be treated similar to the socially and economically backward and will be allowed admission in educational institutions and given employment on the basis that they belonged to the third gender category.

Access and control over resources

Box – 6.3
Women Self-Help Groups

Women Self Help Groups have become a movement in Tamil Nadu. A group of 12 - 20 women join together and cooperate on thrift and credit basis. Self Help Group saves poor women from money lenders and helps them get loan from the banks on low interest on group basis. This has given them freedom to make decisions to avail opportunities to upgrade their socio economic status. SHG has become the most successful collaborative and cooperative, and collective initiative among women below poverty line. As a credit+ venture, it motivates SHG members to open development paths in various sectors, namely Health, Micro finance, Entrepreneurship, Education of children and income of the family. Most SHGs have ventured into micro-enterprises with the help of SHPIs and the financial assistance from the government under schemes such as SGSY/NRLM and have won self-confidence and decision making power. Their social and family respect has scaled up.

As seen in Annexure II –Table 6.4, there is a growth of 16684 Self Help Groups in Villupuram district with 269344 members and the total credit availed was Rs.192.60 crore. On an average, one group consists of 15 members and each member enjoys the credit of Rs.12, 000/- at the minimum.

Employment – work participation rate

Work participation rate can be used as a proxy for access to employment, ownership of assets, access to credit and markets, etc. Work participation rate for women is used here for measuring equal opportunity to economic roles and employment arenas in society.

Productive work refers to all activities that are traded in the market place and contributes to a country's Gross Domestic Product. The unpaid work activities of women related to home have been marginalized in economic rendering of production and they are non-monetized. As a consequence, most of the work that women do in the reproductive subsistence economy, in the collection of water, fuel and fodder; cleaning and care of the children and elderly; and unpaid work on family land or in family enterprises, are made invisible and removed from paid jobs.

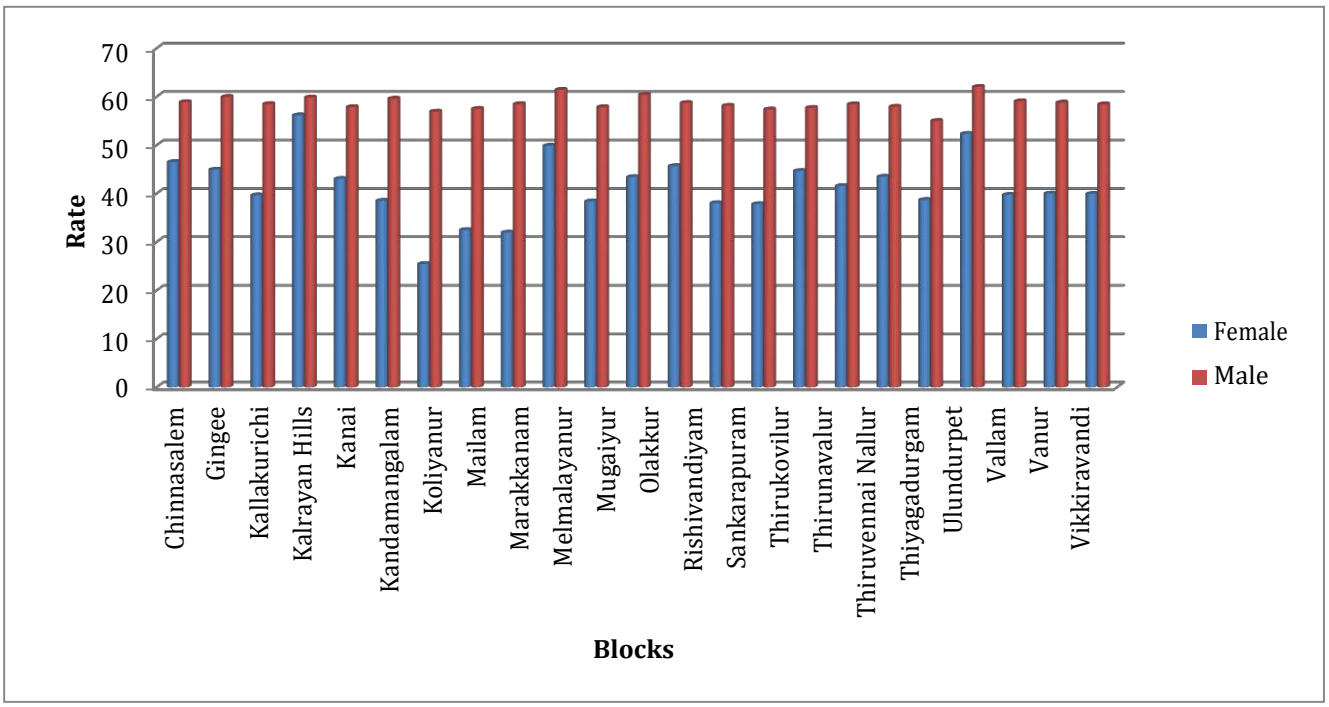
Monetized works are paid jobs. Many economists have pointed out that a higher workforce participation rate does not always signal greater autonomy or higher status for women. Mostly, it is women from poor families and oppressed communities that formed the bulk of the workforce.

Women work force participation, i.e., the percentage of adult women who are actually working, is an accepted indicator of women's status and a component of the gender empowerment. The ratio of females of certain age group say, 15 - 55, who work to the total number of women in that age group, is called the participation rate.

Inclusive of all the various sectors where male and female workers are involved, the work participation rates of women and men are 40 per cent and 58 per cent respectively. Their distribution block-wise is given below:

Figure 6.1

Worker Participation Rate(Male/ Female)



Source: Census 2011

It is found that the total male workers' participation rate in the Villupuram district is higher than that of women in all 22 blocks of Villupuram district. It is not because women do not work but because women are mostly involved in household duties and responsibilities which are unpaid and not considered as work at all in the computation of NDP.

Female agricultural wage rate

Wage work is considered as an improvement in women's lives because such employment is instrumental to lose the patriarchal controls. Rural areas in India being agricultural, women mostly work as agricultural labourers outside their household. Gender disparity is glaring when it comes to the agricultural wage rate.

Female agricultural workers are paid low (See Annexure II. table 6.6). While the wage rate for men per day is Rs.266/-, women on the average are paid only less than (Rs.91/-) male wages. While the highest wage rate for men in agriculture is Rs. 350/- the lowest wage for men (Rs.200/-). The highest wages of women in agriculture is Rs. 110/- and Rs. 80/- is the lowest. Women agricultural workers earn is almost half of what men receive in the relevant block. It is because even in agricultural jobs, many jobs are demarcated as male tasks and female tasks and the latter are supposed to be less tenuous and less important among the processes of work. The employers diligently sustain this demarcation to take advantage of cheap labor of women.

In the social hierarchy of market place, women's paid work has not eroded the gender inequalities. Women's share of paid employment has added to their overall work burdens since women continue to bear the main burden of domestic work. Women still continue to do the lowest paid and insecure jobs.

Trends in political participation

Since independence, women have moved into professions and civil services, but their entry into the upper echelons seems to be restricted. India is one of the first countries to enact legislation to create opportunities for women's political participation at the grass roots. The 73rd and 74th Amendments have resulted in the entry of nearly million women into Panchayat and local bodies. At the national level, more than a third of these women are chairpersons of panchayats.

Table 6.2
Membership in Assembly, Local Bodies

Sl. No	Member ship of women in State Assembly and local Body	Number of Male	Number of Female	% of female participation
1	Member of Parliament	3	0	0
1	Member of Ligislative Assembly	10	1	9
2	District Panchayat	27	20	43
Village Panchayat Councilors				
1	Chinnasalem	30	20	40
2	Gingee	37	23	38
3	Kallakurichi	31	15	33
4	Kalrayan Hills	7	8	53
5	Kanai	31	20	39
6	Kandamangalam	28	17	38
7	Koliyanur	26	22	46
8	Mailam	28	19	40
9	Marakkanam	36	20	36
10	Melmalayanur	34	21	38
11	Mugiayur	40	23	37
12	Olakkur	30	22	42
13	Rishivandiyam	32	20	38
14	Sankarapuram	30	14	32
15	Thirukoilur	34	18	35
16	Thirunavalur	27	17	39
17	Thiruvennainallur	35	14	29
18	Thiyagadurgam	26	14	35
19	Ulundurpet	31	22	42
20	Vallam	37	29	44
21	Vanur	35	30	46
22	Vikravandi	30	20	40
Panchayat Union Councilors				
1	Chinnasalem	12	9	43
2	Gingee	14	10	42
3	Kallakurichi	15	8	35
4	Kalrayan Hills	4	3	43
5	Kanai	14	9	39
6	Kandamangalam	13	12	48
7	Koliyanur	15	8	35
8	Mailam	16	5	24
9	Marakanam	15	11	42
10	Melmalayanur	15	9	38
11	Mugiayur	15	16	52
12	Olakkur	10	6	38
13	Rishivandiyam	14	7	33
14	Sankarapuram	17	7	29
15	Thirukoilur	12	7	37
16	Thirunavalur	15	5	25
17	Thiruvennainallur	11	11	50
18	Thiyagadurgam	8	8	50
19	Ulundurpet	13	8	38
20	Vallam	14	7	33
21	Vanur	19	8	30
22	Vikravandi	13	8	38

Source: Revenue and Panchayat Development, Villupuram(2011-12)

As in other parts of the country, the local bodies in Villupuram district have one third (33.3 per cent) of their members as women mandatorily and a few blocks Viz., Koliyanur, Mailam, Olakkur, Ulundurpet, Vallam, Vanur and Vikkiravandi have 40 per cent and more women. Kalrayan hills which is predominantly of tribal population, tops the list with 53 per cent female members in its local bodies. Women members need to strengthen the capabilities enough to execute their responsibilities and merit their status. Most of them depend on the male members of their families who work as proxy leaders.

Box 6.4

Political Empowerment of Women

Tmt. Jeya is a veritable leader both for the Panchayat Level Federation (PLF) of Women Self-Help Groups for which she is the President for the Panchayat of Aasoor village in Vikkiravandi block. She has been the Village Panchayat President for two terms. Born in an ordinary family, she was extraordinary in establishing herself as a leader among her peers.

SHG was a spring board for her success. Women in her group encouraged her to contest for Panchayat election. It was in 1996 she competed with another woman candidate and won. But the opposite party managed to create a situation for drawing lot. Tmt. Jeya demanded recounting and refused to go out of the building till her demand was accepted. After the recounting she was declared the winner with a difference of eight votes. In 2006, she stood for election the second time. She won by 99 votes.

As a President, she encouraged planting of trees in her Panchayat and helped construction of household toilets. She was all supportive of continuous education and preventing dropouts. She handled the inflammable issue of caste discrimination very strategically. Once when she was asked to collect funds for a temple work, she agreed to do so from among her SHGs but on condition that all communities should be allowed to enter the temple as the fund would be collected from all communities. She was happy to receive the consent of the elders in the village.

Tmt. Jeya was excited when her SHG was selected for the Manimekalai Award by the State for its best performance. The SHG ran the village ration shop; collected 700 litre of milk every day for sale; rented vessels for big functions and helped promoting small scale industries. Jaya is eloquent and could convincingly argue with government officials and local men for the cause of women. Jaya is an ex-President now. But she works amicably with the present President.

Reservation for women in political participation has a favorable impact. The changing gender perspective scenario is witness of the same. Though the women were able to hold the leadership through reservation, they were not functional and the husband or father looks after all the regular during in the case of certain performance. The initiatives of government to make the elected women play their roles without interventions will prove way for real empowerment of women.

Conclusion

Within the scope of this Chapter and with the available data on gender disparities relating to Villupuram district, a comprehensive picture of the gender status is offered. Sex Ratio and literacy are used as the basic human capability indicators. There is a decennial increase (2001 - 2011) in the sex ratio, which is however, lower than the State level sex ratio. In contrast, the child sex ratio in the district is lower than the adult sex ratio, indicating the painful reality that the son preference is still persistent and intervention including awareness creation are required to address their issue. One of the key messages is that there is a gender parity in the access to school education, retention and completion till primary and upper primary. Gender gap starts widening with enrolment in the secondary school level. Gender disparity is visible in the work participation rate and wage rates earned by men and women. Women's participation in agriculture and non-agriculture work is ranked below the male participation both in number and wages. Thanks to the 73rd and 74th amendments which awareness mandatory representation of women among the members of local bodies, at least one-third of them are women. This has given constitutionally sanctioned right to increase women's power to make decisions in governance and take up leadership. Moreover, the rural women's initiative to form collaborative and collective Self-Help Groups has augmented their self-confidence and collective power through thrift and credit promotion and micro enterprises to heighten their socio-economic power.

Gender inequalities will disappear only when men and women work together to ensure rights and freedom due for all concerned. Women must continue to have voice and space to lead quality life, with freedom of choice and capabilities. Gender equality is not a women's issue but people- centered issue and hence cuts across every human development aspect.

CHAPTER 7

SOCIAL SECURITY

Chapter - 7
Social Security

Social security and social safety nets are very crucial in a country like India where a vast section of the population is surviving at subsistence level. The issues pertaining to social security assume overwhelming significance in the context of the new economic policy regime of market-driven growth. Social security or social protection refers to "a set of policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks and enabling their capacity to protect themselves against hazards and interruption / loss of income" (UNDP). In other words, social security comprises those measures which aim at preventing, reducing and eliminating economic and social vulnerability to poverty and deprivation.

Another way of classifying social security is: i) social assistance; and ii) social insurance provisions. Social assistance is intended to ensure a minimum level of economic support to those who have no other income. Social insurance schemes, on the other hand, seek to replace income loss by employees in the organized sector as a consequence of inability to work due to risk ofunemployment, invalidationoroldage.

Social security can also be categorized as: i) basic; and ii) contingent. Basic social security is defined as a means of access to minimum resources to lead an economically dignified life in society. Contingent social security refers to provisioning for adversities that may result from human life and work such as injuries, sudden unemployment and ill health as well as old age, death. In this chapter the social safety and security measures of the Vilupuram district are presented.

Demographic profile of aged in the district

Table7.1
Demographic Profile of the Aged

Sl. No	District	Total Population	Population aged above 60		
			Male	Female	Total
1	Villupuram	34,58,873	1,13,650	1,03,571	2,17,221

Source: Special Deputy Collector (SSS), Villupuram– 2011

The aged account for7.44 percent of the total population of the district. Of the 2, 17,221 aged, 52.32 percent are male and the rest are female. Male are found to be more in number than Female.

Financial Security of the aged

Table 7.2
Financial Assistance to Old Age People

S.No	Category	Coverage
1	OAP	130048
2	Differently abled	17340
3	Destitude Widows	46248
4	Agricultural Labourers	-
5	Destitute Deserted Wives	2307

Source: Special Deputy Director (SSS), Villupuram – 2012- 13

The Government of Tamil Nadu has implemented various social protection schemes for the aged / destitute / deserted. Around 62 percent of the aged (130048) receive old age pension in the district. 17340 aged were assisted in the categoryof differently abled. 46248 aged women were provided with destitute widows' pension. 2307 aged women were assisted in the category of Destitude deserted wives during the year 2012 – 13.

Despite strong implementation of the old age pension sheme, there are aged still not benefitting from the scheme. In order to make hundred percent successes in old age pension scheme, service centres can be established in rural areas to facilitate the process for the aged.

Differently abled

The district has 66071 differently abled persons (2011 census) constituting 2.27 percent of the total population. 49.49 percent of them are visually challenged, 28.07 percent of them are orthopedically challenged, 15 percent are hearing impaired and the rest (7.47%) are mentally challenged. The Government has various schemes for the children who are differently abled.

Children who are differently abled have been given scholarship at the rate of Rs.1000/- in primary school, Rs.3000/- for the children in the middle school, and Rs.4000/- for the children in the High and Higher Secondary School. Besides scholarship to the disabled, school going children, the district authorities have provided assistance in the form of tricycle, hearing aid, spectacles, walking sticks for the visually challenged and soon.

Table 7.3
Assistance to Differently Abled

Categories	Total
Maintenance Scholarship	2388
Marriage assistance	69
Educational Scholarship	823
Purchase / Fitting of Aids/ Appliances	391
Provision of Tricycle	12
Provision of Tailoring machine	100
Other Assistance	1350
Total	5133

Source: District Differently Abled Welfare Officer, Villupuram – (2012 – 13)

The district has been selected for the implementation of poverty reduction programme (Pudhu Vazhvu). The programme is being implemented in 5 blocks covering 196 villages. The programme has specific activities for differently abled which include: i) Distribution of National ID cards to all the differently abled; ii) Distribution of financial assistance to start livelihood projects; iii) Promotion of SHGs among the differently abled and iv) Distribution of aids and appliances.

Box 7.1

Marriage and maternity Assistance Programme

Marriage and maternity assistances are provided under various schemes. These schemes include:

1. Annai Theresa Ninaivu Orphan Girls Marriage Assistance Scheme
2. Dr. Dharmambal Ammaiyar Ninaivu Widow Remarriage Scheme
3. E.V.R. Maniammaiyar Ninaivu Poor Widow Daughter's Marriage Assistance Scheme
4. Dr. Muthulakshmi Reddy Ninaivu Maternity Benefit Scheme
5. Marriage Assistance to Normal Person Marrying Orthopaedically Handicapped Person
6. Marriage Assistance to Normal Person Marrying Speech and Hearing Impaired Person
7. Moovalur Ramamirtham Ammaiyar Ninaivu Marriage Assistance Scheme

As of 2013, a total number of 5322 persons were assisted with marriage assistance and 15,917 persons were provided with maternity assistance.

Crime status against women

Women should be protected from the crimes committed against them. Women should be able to move without fear. We may claim to have achieved the freedom only when the women are safe and secure under all circumstances. However, the crimes against women continue unabated. Villupuram District is no exception.

Table 7.4
Crime against Women

Sl. No.	Category	No. of Cases
1.	Rape	67
2.	Dowry Death	4
3.	Sexual Harassment	-
4.	Cruelty by husband and his realties	80
5.	Kidnapping & abduction of women	155
6.	Dowry prohibition	23
7.	TNPWH Act	163
	Total	**494**

Source: District Police Officer, Villupuram. 2013 - 14.

A total number of 494 crimes against women were registered in the district during the year 2013-14. No dowry death and sexual harassment were reported in the district. A majority of the cases were of the nature of kidnapping and abduction of women and those coming under the purview of TNPWH Act.

Conclusion

The development goal of 'well-being' or 'quality life' can be achieved only when all sections of the community have free access to social protection scheme. The Government which positioned as a welfare State should protect the interests of the isolated, powerless, deprived and marginalized sections of the society. The government duly has recognized its role and has launched specific social protection schemes to safeguard the interests of various groups. The schemes have, by and large, reached the needy.

The government has also created the required structure, institutions and processes to ensure that the schemes benefit the targeted group. The District has performed reasonably well in the field of social security and social protection.

CHAPTER 8

INFRASTRUCTURE

Chapter - 8
Infrastructure

Infrastructure plays a pivotal role in the economic development of the region. It is more so in the case of States in economic transition where the service sector is emerging as the leading contributor to the GDP. Economists and development scientists strongly believe that more and more development of infrastructural facilities in the rural areas bring the rural economy closer to the main stream economy and thereby it helps bridging the gap between the rural and urban economies. In other words, it can be stated that the infrastructural development could remove the rural-urban disparities in the economic and social development by bringing equity and parity in the development process. This chapter is designed to present the status and development attained by this district in the various components of infrastructure which aid economic development.

Roads

The most prominent physical infrastructure which provides physical connectivity is different forms of roads which enable intra and inter village connectivity as well as rural and urban linkages. By facilitating regular flow of goods and services, the road facilities aid in the progress of economic activities and promote employment opportunities to the people in a given area. Villupuram district is located in strategic location and relatively nearer to the head quarters of the State. It is well linked with the neighbouring districts and the nearby union territory viz., Pondicherry. The National Highways linking the State capital with the southern and south western districts are passing right through the headquarters of the district. The State highways also link the headquarters and other major cities in the Villupuram district with the neighbouring districts.

Road transport has a dynamic role in the strategic and economic, development because of its built-in flexibility and adaptability to a variety of operating conditions and ability to extend its services to the vast rural areas.With the people formed policies of the government, road transport is becoming more and more a social instrument for the development of the people.

Table – 8.1
Distribution of Total Road Length

Sl. NO	Block/District	Mud	WBM	BT	CC	Total(km)
1	Chinnasalem	274.025	91.200	288.602	0.000	653.827
2	Gingee	98.850	70.650	150.940	6.880	327.320
3	Kallakurichi	507.612	37.830	188.294	1.535	735.271
4	Kalrayan Hills	746.680	15.800	94.650	0.000	857.130
5	Kanai	148.520	21.119	136.399	3.979	310.017
6	Kandamangalam	75.496	39.392	117.572	68.731	301.191
7	Koliyanur	90.895	56.055	152.387	8.938	308.275
8	Mailam	34.925	36.325	136.250	10.370	217.870
9	Marakkanam	66.070	5.130	189.025	14.900	275.125
10	Melmalayanur	58.180	91.800	186.420	17.650	354.050
11	Mugaiyur	167.312	8.300	193.971	5.179	374.762
12	Olakkur	60.100	30.100	167.420	5.770	263.390
13	Rishivandiyam	386.644	7.280	201.495	1.500	596.919
14	Sankarapuram	276.470	41.970	159.000	0.000	477.440
15	Thirukoilur	302.273	11.250	132.170	7.185	452.878
16	Thirunavalur	113.855	20.070	160.313	10.997	305.235
17	Thiruvennai Nallur	65.000	23.900	122.805	9.050	220.755
18	Thiyagadurgam	207.360	22.320	217.814	2.140	449.634
19	Ulundurpet	279.925	23.850	160.101	3.211	467.087
20	Vallam	82.645	70.545	132.069	21.195	306.454
21	Vanur	138.918	46.711	179.578	10.319	375.526
22	Vikkiravandi	50.250	69.600	157.840	8.960	286.650
Villupraum District		**4232.005**	**841.197**	**3625.115**	**218.489**	**8916.806**
Percentage		**47.46**	**9.43**	**40.65**	**2.45**	**100**

Soruce: DRDA, Villupuram (2013– 14)

`The district has a total road length of 8840 km consisting of 2278 km mud roads; 464km of WBM; 5504km of bituminous roads and 193km long CC roads. Of the different types of roads, mud roads accounts for 47.46 per cent of the total length of the roads in the district followed by bituminous roads (40.65 per cent); and WBM roads (9.43per cent). CC roads with it 193 km length accounts for a very negligible proportion of the total roads.

In the block wise analysis, road length ranged between 217.870 km in Mailam block and 857.130km in the case of Kalrayanhills block. The blocks having a total road length of less than 300 km are Thiruvennainalur (220 km), Olakkur (263 km), Marakanam (275 km) and Vikkiravandi (286 km).

The blocks such as Kalrayanhills (857 km), Kallakuruchi (735 km), Chinnasalem (653 km), Rishivandiyam (596 km) and Sankkarapuram (477 km) thoughbeing rated as having comparatively very long road coverage, had more than 60 per cent of the total as mud roads which were not suitablefortravelduringextremeweatherconditions.

Electricity

Electricity is the most critical input for economic development. The industrial and service sector activities depend to a greater extent on the availability of electricity. The district has the following electricity distribution infrastructure. 48 transformers; 30 substations; 7279 numbers of distribution transformers.

Table – 8.2
Status of Electrification

Sl. No	Block/District	Revenue Village	Hamlets	Population covered	No. of street lights
1	Chinnasalem	50	102	154770	3918
2	Gingee	60	229	150820	4581
3	Kallakurichi	46	71	163027	3973
4	Kalrayan hills	15	177	49081	1240
5	Kanai	51	99	124998	4219
6	Kandamangalam	45	209	129398	7307
7	Koliyanur	48	193	144216	4893
8	Mailam	47	88	110083	5442
9	Marakkanam	56	280	152042	6476
10	Melmalayanur	55	256	122448	5336
11	Mugaiyur	63	155	178413	5448
12	Olakkur	52	142	83279	7307
13	Rishivandiyam	53	137	118665	3556
14	Sankarapuram	44	86	139910	4411
15	Thirukovilur	52	186	132350	3483
16	Thirunavalur	44	176	103005	3097
17	Thiruvennai Nallur	49	162	118080	2374
18	Thiyagadurgam	40	88	100472	2928
19	Ulundurpet	53	136	136266	4426
20	Vallam	66	180	100970	3946
21	Vanur	65	228	166567	10559
22	Vikkiravandi	50	105	118321	5557
District Total		**1104**	**3485**	**2797181**	**104477**

Source: DRDA, Villupuram (2013-14)

The district has the record of covering all the villages and hamlets with electricity connectivity. About 1,21,038 huts were given electricity connection under the government sponsored single lamp scheme. The district also has 8181 number of industries with L.T. power supply connection.

Street light provision is the important responsibility of the local panchayats. The district has a total of 104477 lamp posts in 3485 hamlets covered under 1104 revenue villages. The average number of lamp posts per block are 4749, which when compared to the actual number of lamp posts in the blocks indicates that there are considerable differences among these 13 blocks. Thirteen Blocks have lamp posts less than the block level average 4748.9 and 9 blocks had more than the average number of lamp posts.

Communication system

It is an era of knowledge and information. The changes that have taken place in the communication sector are unimaginable. The mobile services have reached almost every village and almost everyone in one way or other uses the phone services in his or her day-to-day life. Besides BSNL, the private mobile players are expanding their operations in a very competitive manner to reach everyone.

Table: 8.3

Tele communication

Sl. No	Block / District	No. of Tel. exchange	No. of pco	No. of land line	Number of Mobile Phone towers
1	Chinnasalem	1	4	791	11
2	Gingee	9	4	1954	14
3	Kallakurichi	5	3	3102	19
4	Kalrayan hills	2	2	91	4
5	Kanai	4	41	458	5
6	Kandamangalam	1	11	160	5
7	Koliyanur	3	60	763	21
8	Mailam	1	10	93	9
9	Marakkanam	1	3	380	12
10	Melmalayanur	2	2	413	7
11	Mugaiyur	1	3	68	13
12	Olakkur	1	3	124	8
13	Rishivandiyam	2	2	156	8
14	Sankarapuram	7	3	1967	8
15	Thirukovilur	6	5	1979	6
16	Thirunavalur	3	4	163	9
17	Thiruvennai Nallur	2	28	252	8
18	Thiyagadurgam	1	4	166	9
19	Ulundurpet	3	7	1381	10
20	Vallam	1	3	43	6
21	Vanur	1	4	224	9
22	Vikkiravandi	8	93	1211	10
Villupuram District		**65**	**299**	**15939**	**211**

Source: BSNL, Villupuram 2013-14

In the District as a whole, 15939 land line connections, 65 telephone exchanges and 299 PCOs are there. Mobile tower is the exact indicator for the use of mobile phones by the people. There are 211 mobile phone towers in the district.

As per the census 2011, out of total households in the district 4.4 percent households only have landline connection in their houses. 60.2 percent of the households only have the mobile connection. 3.4 percent of the households in the district have both landline and mobile connections.It clearly indicates the increasing use of mobile phones in the district. Still, communication based infrastructure facilities in the hillyareasneeds to be improved more.

The changing trend among the younger generation, impact of social media and the availability of smart phones at a minimum cost are the major contributors of the increased number ofmobileusers.

Financial institutions

Cooperative societies are playing a significant role in the development of the rural economy. They are the democratically controlled member institutions covering a large number of services in the district. Their presence in the agricultural credit, rural banking, agricultural processing, marketing, consumer goods distribution, public distribution, milk procurement and supply, etc., need to be appreciated here.

Table: 8.4
Commercial and Cooperative Banks

Sl. No	Block/District	Number of co-operative societies	Number of Members	Commercial Banks	Number of account holders
1	Chinnasalem	17	40373	4	7454
2	Gingee	17	58586	3	4692
3	Kallakurichi	16	39167	4	7460
4	Kalrayan Hills	3	10602	1	1800
5	Kanai	18	21350	2	4482
6	Kandamangalam	14	28911	3	7784
7	Koliyanur	38	33040	2	15684
8	Mailam	28	27421	3	3232
9	Marakkanam	18	24907	3	2203
10	Melmalayanur	10	12537	2	3014
11	Mugaiyur	16	44404	3	3420
12	Olakkur	16	11720	3	2110
13	Rishivandiyam	11	30391	2	2164
14	Sankarapuram	15	24655	3	3152
15	Thirukovilur	8	27514	4	8479
16	Thirunavalur	12	19846	3	2238
17	Thiruvennai Nallur	11	43260	3	2168
18	Thiyagadurgam	10	15228	2	4796
19	Ulundurpet	14	39810	5	7742
20	Vallam	13	21068	2	2645
21	Vanur	17	29377	2	3541
22	Vikkiravandi	18	26169	4	3684
Villupuram District		**340**	**630336**	**63**	**103944**

Souce: Concerned Office, 2013 -

The district has a District Central Cooperative Bank with 340 primary level member agricultural cooperative credit societies with a total membership base of 630336 members and 63 commercial banks with a membership base of 103944 representing all 22 blocks in the district. In addition to the cooperative banking institutions and societies, almost all commercial banks and private banking institutions have their branches in the major urban and semi-urban centres in the district. Kalrayanhills is the block which has a single commercial bank with the account holders of 1800.

Insurance

Insurance is claimed as one of the non negotiable factor of Indian families as the individuals are exposed to various risks in current scenario. Insurance companies play a vital role in making people insure the lives and assets by their attractive insurance products. The establishment of insurance agencies in particular place is also a clear indicator of the accessibility of the people of the insurance products.

Table: 8.5
Insurance Companies

Sl. No	Name of the companies	No. of branches	Polices Issued
1	Life Insurance Corporation of India ,Villupuram	4	50828
2	New India Assurance company limited	1	17068
3	National Insurance company	1	10565
4	United India Insurance company	1	11498

Source: LIC, Vellore (2012 – 13)

The district has four LIC branch offices and one branch office each of the New India Assurance Company, National Insurance and United India Insurance Ltd. These agencies have covered about 90000 policy holders having their life insured or their vehicles insured. In addition to these, the private insurance companies have their presence in the Villupuram district. The statistics about such companies are not available.

Water Bodies

The major rivers of the district are Gadilam, Malattar, Pennar (Thenpennai), Sankaraparani and Komuki. Gadilam River flows through Thirukoilur Taluk. Malattar river joins Gadilam before flowing into the Bay of Bengal. Pennar River flows through Thirukoilur and Villupuram Taluks. Sankaraparani rises in Gingee Taluk and flows through Villupuram Taluk. The rivers are mostly seasonal, carrying flood waters. None of them are perennial. These rivers could not be used for irrigation purpose to the expected level because of low precipitation. Veedur, Manimuktha and Komuki reservoirs are located in this district. Water from these reservoirs is used for irrigation Purpose only.

Transport facilities Bus Services

All 22 blocks of the district are well connected by bus facilities. As the road passenger transport operations are being regulated by the State and the State-owned transport cooperation being the largest operator, the State has the least bus fare structure when compared with the neighbouring States. Besides, the State has introduced several socially relevant schemes in the transport operations for various sections of the community. The following schemes are worth monitoring.

(i) Free bus-pass for school and college students.

(ii) Concessional tickets for farmers to carry the produce to the market places.

(iii) Operating fleets even at loss to remote villages.

All the blocks are connected with main town. Government as well as private bus services are operated in the district. But when we analyse the transportation facilities of rural habitations, it is not up to the mark. Still there are a few habitations in most of the blocks which do not have bus facilities at all. It is very much observed in Kalrayan hills that, Bus facilities are very low even to the Vellimalai, block head quarters. Special attention is needed in hilly areas as well as remote habitations to improve the transportation facilities.

Railways

The district is well connected by rail and the total length of railway lines in the district is about 180kms. Barring Gingee, Sankarapuram and Vanur taluks, other taluks are connected by railway network. Villupuram Railway Junction is the main Railway Station of Villupuram district.

It serves as the distribution point of Train Traffic from Chennai towards the southern parts of the State. It is one of the top five Junctions which have earned "A Grade" in Tamil Nadu. It has about 150 trains crossing towards various parts of the State. Besides there is Cuddalore- Salem line passing through Chinnasalem.

Air port

Being situated nearer to Puducherry union territory, Villupuram is also blessed with airline services. It is 38 kilometres from Villupuram town where Puducherry airport located. Though the services are not very frequent in Puducherry airport, in future as expension happens and the airport functions well, Villupuram will also get benefit of the services which may contribute to the economic development of the district.

Industrial units

Villupuram district is the main junction which connects the southern and northern district of Tamil nadu. The national high way and the Major railway junctions are the positive element of Villupuram district. Despite its connectivity industrial establishments are very low because Villupuram district mostly depends on agriculture and the availability of skilled man power is also minimum. There are some sugar factories and other small factories around the distrct. But the employment opportunities are very low in these factories.

Conclusion

The most important resource for scaling up of infrastructure facilities is the availability of trained knowledgeable and skilled manpower. In all areas of development, training and skilling of manpower are required. As the infrastructure establishments are very low and low, the economic development of the district also gets affected. The quality of the infrastructure must be sustained for people's harmonious engagement with the environment. However in the context of Human Development, the State in central and the district administration in particular has to initiate all the required infrastructure services in the form of universal access to housing, water supply and sanitation, energy, transportation, irrigation connectivity, healthcare and education.

CHAPTER 9

SUMMARY AND WAY FORWARD

Chapter - 9
Summary and Way Forward

This Human Development Report is placed in the regional context of Villupuram District in Tamil Nadu. The approach is derived from the core principles constituted by Amartya Sen's ideas of human development in terms of people's freedom, capabilities, choices and empowerment. The contemporary development challenges of Villupuram district are discussed in the Report and each one of its nine chapters analyses one key theme of human development.

In all these Chapters is embedded the thesis on people and development that human lives are improved by expanding the range of things that a person can be and do, and such as to be healthy and well nourished, to be knowledgeable and to participate in community life. Negative aspects like illiteracy, poverty and unemployment are obstacles that prevent people from achieving their capabilities. Policies and political participation are needed for removal of such obstacles.

Thus, the whole canvas of the Report presents various aspects of quality life, highlighting standard of living, health, education, employment, income, poverty, gender inequality, social security and infrastructure. A detailed analysis of the above aspects both at the district level and at the blocks level is attempted.

The main purpose of this present chapter is to list out the major inferences drawn from the analysis of each chapter and offer certain suggestions for the betterment of human development in the district.

Chapter 1: Villupuram district - a profile

Findings:

Chapter one serves as a curtain raiser for exploration in subsequent chapters. .It provides a general understanding of the district against the background of geographical, historical and policy implementation.

- Villupuram is the second largest district in the State, with an area of 7194 sq.km situated on the Northern part of the State. The district has 22 Blocks, 15 Town Panchayats, and three Municipalities.
- The district is mostly characterized by plains. It has also vast area of hills in two blocks. The coastal line of the district extends to about 30 km.
- The district has rich historical heritage which attracts large number of tourists.
- The district has a population of 34.58 lakh. The sex ratio is 987. The child sex ratio is lo 941, lower than the general sex ratio.
- The district is predominantly agriculture-based. The cultivators are mainly small and marginal farmers owning 70 percent of the land.
- One-third of the total geographical area is net irrigated area with an irrigation intensity of one.
- The district is industrially backward in spite of its strategic location with a network roads and rails.
- The literacy rate of the district, 79.1 per cent, is low when compared to State average.
- The Government has introduced various schemes to promote education, eliminate poverty and malnutrition.
- The district, due to its historical importance and strategic location, has the potential to progress in various sectors of development.

Chapter 2: Status of human development in the district

Findings:

- **Human Development Index**: Listing the blocks in the order of overall HDI ranking, the blocks that are at the top are: Koliyanur (0.800), Chinnasalem (0.775), Olakkur (0.755), Vanur (0.682) and Thiyagadurgam (0.642). Likewise, the five blocks at the bottom are: Kalrayan hills (0.230), Rishivandiyam (0.408), Gingee (0.433), Thiruvennainallur (0.434) and Melmalayanur (0.436).
- Each one of these blocks ranks one among the top five in one or two dimensions of HDI. Koliyanur stands among the top five in Standard of Living and Education, Thiyagadurgam in Education, Olakkur in Education, Chinnasalem in Health and Vanur in Health.
- **Gender Inequality Index**: In the equity level ranking, Kalrayanhills leads the district holding the 1st place with the index value 0.085. Thiruvennainallur (0.107), Sankarapuram (0.108), Mailam (0.117) and Gingee (0.122) are the other fourblocks holdingthe ranks 2,3,4,5 respectively. The least rank (22) among the blocks goes to Marakkanam with the GII index value 0.252. Olakkur, Melmalayanur, Thiyagadurgam and Thirunavalur are the other blocks whose ranks are 18, 19, 20, and 21 low at the equitylevel respectively.
- **Child Development Index:** Block-wise, Chinnasalem ranks first (0.737) and Kalrayan hills (0.092) have the lowest rank. The CDI value among the blocks ranges from 0.092 to 0.737. It shows that child development programmes have shown better performance than other components in human development.
- **Multi-dimentional Poverty Index**: Olakkur (0.192) leads all the blocks in managing multiple poverty factors. Next to Olakkur, Koliyanur, Chinnasalem, Kandamangalam and Mailam are the blocks which manage poverty factors efficiently. Among the blocks which suffer from the multiplepoverty are Kalrayan hills, Rishivandiyam, Ulundurpet, Thiruvennainallur and Mugaiyur with the least capability to overcome multiple deprivations. They lag far behind all other blocks in the district.
- The achievement of the district in development with reference to human development, gender equity, child development and reduction of poverty can be rated as moderate. Wide variations could be noticed in the variables used to construct the Human Development Index.

Suggestions and Way Forward:

- Every household should have fair access to cooking fuel in various forms. The fuel should be available on a sustainable basis at a reasonable cost. The steps that would help households in availing fuel on sustainable basisinclude:
  - The supply of cooking gas and kerosene as promoted by government at present needs to be strengthened.
  - The social forestry in wasteland for augmenting the availability of firewood to the rural poor needs to be developed.
  - Chulahs which encourage optimal use of bio-waste without polluting the environment needs to be promoted.
  - Installation of smokeless chulahs to harvest maximum energy from fuel and to avoid drudgeryincookingcouldbeencouraged.
  - The use of solar energy in all households can also be promoted.
- The district has a long way to go in achieving the sanitation goal that toilet should be constructed and used by all the members of each and every household. The measures that can be contemplated towards this direction are as follows,
  - A systematic door-to-door campaign to sensitize the households using the existing institutional mechanism needs to be taken - up.
  - Systematic efforts to educate people on the ill-effects of open defecation on health and to promote the use of toilets are required to be initiated.
  - Convergence of various schemes particularly MGNREGA to help the poor in constructing toilets using skilled / unskilled workers needs to be encouraged, and thus ease their financial burden on toilet construction.
- The district has largely succeeded in providing drinking water to 95 per cent of the households in the district. However, it needs to be ensured that all the households should be assured of adequate safe drinking water throughout the year as water is the indispensable lifeline. Initiatives tobe taken in this regard are:
  - All sources of water should be strictly protected;
  - Old water structures and bodies should be revived;
  - Polluting of water bodies should be prohibited;
  - Water harvesting structures should be revived and protected; and
  - Participation of all people in the above tasks needs to be encouraged.

- Supply of electricity to all households is a critical and complex issue. Tamil Nadu is blessed with various sources of energy and especially with abundant solar energy. All the households can be assured of uninterrupted electricity if solar energy is tapped to supplement the existing sources of energy. The government has already initiated schemes on this line. However, people should become conscious promoters and users of solar energy schemes. Areas of concern for strategic action are:
  - Availability of cost effective energy components should be ensured.
  - Provision of adequate training to the users is to be taken- up.
  - A pool of expertise to attend to the critical problems in solar devises needs to be constituted.
  - Demonstration centres in solar devices for a cluster of villages need to be created for spreading the use of solar energy devices.
- Pucca housing refers to dwellings that are designed to be solid and permanent. Thanks to various initiatives of the government, two-thirds of the families in the district are having access to pucca housing. However, there are blocks with poor access to Pucca houses. Enough schemes have been introduced to benefit the rural poor to have better access to pucca houses. The scheme should reach the lowest rungs of the poor without any leakages. The following measures are suggested.
  - The government should take rigorous measures to ensure that the houseless should be given the top priority to own houses.
  - The district has a sizable number of households without even house sites. Without approved space or house site, households are not able to make use of the housing schemes designed by the government. Therefore, the administration has to take necessary steps to identify the households without house sites, verify their status and make them eligible beneficiaries.

Chapter 3:Employment, Income and Poverty

Findings:

- The total workforce of the district is 17 lakh (2011). The workforce accounts for 49.24 per cent of the total population. The district has higher proportion of worker population compared to the State average (45.58%)
- Main workers comprise 74 per cent (2011) whereas the marginal workers constitute 26 per cent of the total workers. The main workers registered a decadal growth of 3.74 percent where as the marginal workers witnessed a decrease of 3.74percent.
- Agricultural labourers constitute 48.86 of the total work force. Other workers constitute 27.19 per cent and Cultivators account for 21.70 per cent. Agricultural labourers predominate the workforce. Majority of the workers are in the unorganized sector.
- The proportion of male workforce is 58.4 per cent while female workforce is 39.9 per cent. However, the percentage of female workforce is high in Kalrayan hills (56%) which might be due to involvement of women in forest related works.
- Sector- wise gross domestic product (GDDP) for the district shows that tertiary sector has contributed almost 60 per cent of the gross domestic product in 2011- 12 which is less than the State average. The secondary sector has contributed 24 per cent against the State average of 30 percent. The primary sector's contribution is 16 percent which is nevertheless higher than the State average of 8 percent. District Contribution to the Gross State Domestic Product was 2.51percent.
- The industrial growth in the district is yet to pick-up in spite of strategic location and infrastructure of the district.
- The female workforce in the non-agricultural sector is less (7.76%) than the male workforce in non-agricultural sector (21.68).
- Only 2 percent of the registered graduates (3 lakh) have got placement. The district has large number of unemployed educated youth.
- The per capita income of the district in 2008-09 was Rs.27577 which increased to Rs.35295/- in 2011-12 recording an increase of 21.86 percent. However, the per capita income of the district is much less than the State per capita income.
- Among the households in the district, 36 per cent live below the poverty line in spite of implementation of the anti-poverty programme (Pudu Vazhvu) and the most popularized Public Distribution Programme (PDS).

To sum up, agriculture is the predominant source for livelihood with a large chunk of the workforce engaged in it. Marginal and small farmers are large in number. Industrial activities are mostly confined to micro and small scale industries. The average per capita income of the district is low. Povertyis pervasive and in certain blocks it is quite high.

Suggestions and Way Forward:

- The current fallow land in the district as a whole is 11.63 per cent and uncultivable wasteland is 7.84 per cent. Efforts need to be taken to utilize such lands to promote income-generating activities such as socialforestry.
- Adoption of technology, improving cropping intensity, bringing more land under cultivation and recharging ground water must be used in the land under cultivation. Besides, drip irrigationsystemmayalsobeintroduced.
- The inadequate marketing infrastructure of the district causes the confinement of the most produce to local markets, and thus resulting in poor monetary returns. The producers are deprived of good returns because of their inaccessibility to global market. Therefore, proper mechanism may be developed for the farmers to have better access to market.
- Organizing buyers' and sellers' meet will facilitate and create contract farming between the farmers and bulk purchasers.
- Dissemination of adequate information about markets could also be carried out for strengthening the marketability among various sectors.
- Promotion of dairying, poultry and piggery on a very large scale among the farmers will supplement the farming occupation.
- Training the unemployed labour force, particularly women, on different trades under various government schemes and adequate financial assistance rendered will enable them to take-up micro trades and enterprises. In this regard, the TNWD Corporation, DRDA and other line- departments have to join hands and converge their efforts to help the villagers particularly those living below povertyline to improvetheir economic conditions.
- Measures are to be taken for increasing the scope for inland fishing which is mostly carried on tanks and reservoirs owned by PWD and thus enhance the income earning capacity of coastal families.
- Promoting cottage industry on priority basis, modernization and training, funding with up gradation of skills improve the quality of life of the workers in cottage industries are essential needs for entrepreneurship from the grass root.

- Through NREGS, Social forestry can be promoted. Households will have guaranteed employment for 100 days and thereby assured income. It would also help improve the forest coverage of the district which is incidentally quite low (land 10%).
- The seasonal unemployment problem may be overcome by engaging the labour in civil construction works, viz.,construction of village roads, dispensaries and school buildings. These programmes will not only reduce the seasonal unemployment but also create national wealth.
- Creation of industrial eStates will attract formation of more small and medium scale industries in Villupuram District.
- Climate change is also viewed as a cause of poverty. Changing climatic condition requires a shift in cropping and farmingpractices which could not be immediatelyaccomplished. Stable and sustainable strategies may be formulated for bringing the shift in cropping and farming practices.
- The problem of inequality and disparity in income and economic status of the society should be seriously addressed.
- The seasonal unemployment problem can be overcome by engaging the labour in civil construction works viz., construction of village roads, dispensaries and school buildings. These programmes will not only reduce the seasonal unemployment but also create national wealth.
- Creating extensive public health measures would also provide employment to large number of people.
- There is no power generation by Electricity Board in Villupuram District. Creation of power generation unit may improve the power distribution system which may attract industries.
- A stable strategy with special reference to national policies on education and industry should be formulated to transform people into an eligible workforce irrespective of caste and religion.
- Creation of industrial estate will attract formation of more small and medium scale industries in Villupuram district.

Chapter 4: Demography, Health and Nutrition

Findings:

- Total Population of the district was 2960373 in 2001 and 3458873 in 2011. The decadal growth of the population (2001-2011) of the district is 16.8 which is higher than decadal growth of the State (15.6 percent) which may be due to higher fertility in the district. Block- wise analysis has indicated that population has declined in Vanur block while in other blocks, it has increased.
- The density of population per Sq.km has increased from 412 in 2001 to 481 in 2011. Of the 22 blocks, Kandamangalam block with the highest density of population (720 per sq. km) occupies the top position and Kalrayan Hills (98 per sq. km) occupies the least in 2011 due to scattered settlements in the vast expansion of hill ranges.
- The percentage of SC population has increased from 27.39 in 2001 to 29.37 in 2011.
- The Kalrayan hills has the highest proportion of ST population (80%).
- The crude birth rate ranged from 4.6 to 21.5 per cent across the blocks. Kalrayanhills has the highest crude birth rate of 21.5 per cent.
- The crude death rate varied from 0.9 (Ulundurpet block) to 6.1 (Mailam block) in 2013-14. .
- The sex ratio has not increased significantly as it is more or less at the same level, 984 in 2001 and 987 in 2011. The sex ratio is 1005 in Kandamangalam where it was 972 Kallakurichi.
- Decline in fertility level and increase in proportion of population in the age group of 0-6 yearsindicatesreductioninmortalityofchildrenin 0-6 years.
- The child sex ratio in the district has decreased considerably from 961 in 2001 to 941 in 2011 indicatingan unfavorableshifttowardsgirlchildren.
- The life expectancy for female is 75.7 and for male 70.4 years (2011). The life expectancy for both male and female has increased over a decade.
- IMR has decreased in several blocks. The lowest IMR could be observed in Olakkur (8.6) and Thirunavalur (7).
- There is a remarkable reduction in MMR across the blocks. There is no maternal deaths in eight blocks of the district in 2013-14.
- Institutional delivery is almost 100% in all blocks.

- There has been a sharp decline in still birth rate between 2007 and 2013. 17 blocks have registered a decline. For instance, the still birth rate has come down from 54.7 in 2007 to 22.3 in 2013-14 in Kalrayan hills.
- Universal (100%) immunization for children under-five category is observed only in 3out of 22 blocks.
- No female infanticide has been reported.
- Malnourishment rate of children below 5-years range from 0.01 per cent in Thirukoilur to 0.69 per cent in Kalrayanhills.

The district has witnessed progress in demography and health reflecting the general growth trend in the State in terms of many of the parameters for the district as a while. However, in the case of nutrition for children, the inter-block disparity is a matter of concern which requires immediate attention.

Suggestions and Way Forward:

The district has shown progress in demography, health and nutrition aspects reflecting the general growth trends in the State in terms of many of the parameters for the district as a whole. The dimension of health includes child nutrition and the health of women in the age group 15-49. The measures that need to be taken are given:

- Health Sub-Centres and Primary Health Centres in different geological areas, with special focus on the hilly area of Kalrayan hills, should be established and quality reproductive health care should be made available and affordable to women in these locations.
- Awareness creation among different communities on related health schemes launched by the government is imperative along with motivating people to make optimal use of these schemes.
- A monitoring mechanism needs to be set up to see that 100 percent deliveries are institutional and improve the quality of service delivery.
- Effective functioning of Anganwadies should be ensured in order to reduce the U5MR in blocks where the U5MR is a serious problem.
- Women should be educated about the impact of nutritional status and reproductive health and be trained in preparing affordable and nutritional food for themselves and children.
- Malnutrition increases the vulnerability of people to diseases and infections which are further exacerbated by malnutrition and increase the degree of malnutrition. Kalrayan hills, Marakkanam, Olakkur and Ulundurpet blocks which are at high level of malnutrition rate in the district need special attention in this regard.

- The performance of children taking IFA tablets has to be improved to a large extent in all the blocksofVillupuramdistrict.
- Kalrayan hills block is the most backward block in respect of health parameters. Health infrastructure needs to be improved and connectivity has to be promoted for bringing development into the health status of the people. This has to be done without affecting the ecologyofthearea.

Chapter 5: Literacy and education

Findings:

The all persuasive role of education in development need not be over emphasized. The government since independence has been making various efforts to make the Indian society a knowledge society. The performance of the district in education is presented with reference to select variables.

- The literacy rate of the district is 71.89 (2011) which is much less than the State average. The literacy rate among the women (63%) is almost 17 per cent less than the male literacy rate (80.5%). Wide variation could be seen across the blocks in the literacy status of men and women.
- The district has witnessed marked improvement in literacy rate both among men (75% in 2001 and 80.5% in 2011) and women (52.7% in 2001 and 63.2% in 2011) over a period of 10 years.
- The enrolment rate at the primary level is 100 per cent in all the blocks.
- The district average enrolment rate at the upper primarylevel is 101.11 per cent.
- The district average of enrolment rate at secondary level is 96 per cent.
- The completion rate at the primary level across the block indicates that 50 per cent of the blocks registered a completion rate of 99 to 100 per cent. Around 30 per cent of the blocks have recorded a completion rate of 98 to 99 per cent. Thus, a vast majority of the blocks have witnessed a higher completion rate at the primary level
- The completion rate at the upper primary level (2013-14) varies from 93.4 to 99.27 per cent across the blocks.

- The dropout rate for the district is 1.0 per cent. Block-wise analysis shows that Olakkur block has registered the minimum drop out ratio of 0.04 per cent; whereas Villupuram block has recorded a maximum dropout rate of 1.9 per cent for the year 2013-14.
- The drop-out at the Upper Primary level is comparatively higher (when compared to primary level). The minimum dropout rate is 0.75 (Villupuram) and the maximum is 2.34 (Thiyagadurgam).
- A vast majority of the students are found to have moved from primary to upper primary indicatinga better transition rate. Boys have slightlybetter transition ratethan girls.
- All the blocks have registered better transition rate from upper primary to secondary. There has been no gender discrimination in this regard.
- A better enrolment rate, reduction in dropout rate, and a better transition rate are possible only when the school aged boys and girls have better access to schooling.
- The pupil teacher ratio has drastically come down from 41:1 (2002 – 03) to 18:1 (2013-14) indicating the sincere attempts made by the State Government to fill up the vacancies in schools.
- The enrolment rate at the secondary level has registered wide variations across the block and does not exhibit an encouraging trend.
- The district provides vast scope for higher education in many branches of knowledge including technical and medical education.
- Around 82 percent of the children are enrolled in noon-meal programme which is an important contributing factor for better enrolment, transition and completion rate.
- A vast majority of the schools are devoid of basic facilities such as drinking water, toilet, classroom, electricity, furniture, play ground, etc.
- Schools do not have facilities to take care of the needs of the children with special needs.

To sum up the district has performed fairly well in imparting education to the different sections of the community especially in primary, upper primary and at the secondary level. Attention is required to ensure better transition and completion rate at the higher secondary level. Much attention in required to improve the infrastructure facilities in the schools.

Suggestions and Way Forward:

The educational status of the district is analyzed with reference to literacy rate, enrolment rate, completion rate, transfer rate, dropout rate, infrastructure and Teacher - pupil ratio. Enrolment rate at primary level is quite good where as at the secondary level it is not satisfactory in spite of various schemes in operation.

The strategies that could be taken to improve GER at the secondary level are:

- The parents should be motivated to enable their children to continue their educations.
- Door to door campaign may be undertaken by the teachers of the school.
- Admission drives are to be undertaken in all villages where primary schools are functioning. Admission to primary schools may be done directly from the Balwadies.
- Infrastructure and other facilities in the schools need to be improved.
- Enabling environment should be provided for the girls in the schools for continuing their secondary education.

Steps that need to be taken to check the dropouts are as follows:

- The dropouts from primary schools are to be identified either after the admission season or at the beginning of the academic year. The causes for the dropout tendency should also be identified.
- The drop-outs owing to disabilities are to be oriented to join special schools and specialized homes for such children in the nearbyarea citycentre.
- Blocks with large hilly areas may establish adequate number of residential schools that would facilitate the children to continue their school education.
- The functioning of the Parent-Teacher Association maybe strengthened.
- Skill Development programmes may be designed and initiated for the children who dropout after secondary level schooling. The SSA may be entrusted with the responsibility of identifying and enrolling of such drop-out students in the ITIs and community colleges/polytechnics.

Chapter 6: Gender

Findings:

Gender plays an important role in development. No society can think of development without providing equal space, opportunities and status to women. However, in actual practice one could come across various forms of discrimination against women which leads to different kinds of inequality. Gender inequality is multidimensional and it is a major barrier to human development. Gender inequality is measured with reference to sex ratio, literacy, maternal mortality rate, employment, political decision making etc.

- Sex ratio is 985 which is higher than all India average (940) but less than State average (995).
- The child sex ratio is quite low with 938 though there has been remarkable improvement over a period.
- Literacy rate among the female is low (62.99%) while compared to the male literacy rate of 80.63 percent. Female literacy is absolutely low in Kalrayan hills (44.44%) block.
- Gender discrimination is almost absent with regard to enrollment rate of boys and girls in primary and upper primary levels.
- The gender gap is very little in access, retention and completion of primary education.
- The gender gap is at steep in secondary school enrolment.
- The female workers participation rate (45%) is 14 points lower than the male workers participation rate (59%).
- Female agricultural workers are paid painfully low (See Annexure II. Table 17). While the wage rate for men per day is Rs.266/-, women on the average are paid only less than (Rs.91/-) of male wage. While the highest wage rate for men in agriculture is Rs.350/- the lowest wage for men (Rs.200/-). The highest wages of women in agriculture is Rs. 350/- the lowest wage for men (Rs.200/-)/ the wages of women in agriculture is Rs.110/- and Rs.80/- is lowest
- Women have a say in political decision making as 38 percent of the women are represented in RLBs and ULBs.

Gender disparity is visible in the worker participation rate and wage rate. The wage disparity existing in the different places of the district indicates the prevalence of unchallenged exploitation of women labour. This has to be addressed.

Suggestions and Way Forward:

The measures suggested to empower women are:

- Gender disparity is visible in the work participation rate and in the wage rates earned by men and women. The wage disparity existing in different pockets of the district indicates the prevalence of unchallenged exploitation of women labour. Parity in payment of wages there on needs to be ensured.
- The blocks with just 33-35 per cent representation of women in the ULBs, and RLBs, have to initiate capacity building measures to encourage more and more women to actively participate and involve in the development of the local area.
- The NGOs and VAs in the blocks may be encouraged to conduct capacity building programme in the villages in order to improve the status of the women. In this regard, the NGOs working in the most backward blocks may be given priority in the provision of assistance for conducting AGP, EGP, and other capacity building programmes.
- The rural women's initiative to form collaborative and collective Self-Help Groups have contributed much to strengthening their self-confidence and collective power needed for thrift and credit promotions and to run micro finance ventures. Their efforts should be supported further.

Chapter 7: Social security

Findings:

Tamil Nadu has been acclaimed as one of the frontline States in formulating, implementing and sustaining various social securityand social assistance programmes catering to the 'felt needs' of the vulnerable, deprived and marginalized sections of the community. Some of the measures taken in this regard in the District are;

- Noon meal scheme benefits around 82 percent of the children enrolled across the school in theblocks.
- The district has 1192 Public Distribution System outlets providing essential commodities free of cost and at subsidized rates. It provides a very strong safety net to the poor.
- The aged population of the district is 2.17 lakh. Around 61 percent of them are provided old age pension and other social security measures.
- The Government has provided marriage assistance to the poorer section of the community through various schemes. 1650 have been assisted under the scheme.
- The Government has also introduced maternity assistance to pregnant women mainly to eliminate MMR and IMR. 15917 women have been assisted under the programme.
- 494 cases of crime committed against women have been reported inthe year 2012-13.

The district has taken adequate measures to protect the interests of the disabled by organizing them into groups under 'PUDHU VAZHVU' project – a poverty reduction project implemented with the assistance of World Bank.

Suggestions and Way Forward:

Tamil Nadu is in the forefront in formulating and implementing various welfare schemes to promote the socio-economic interests of the vulnerable sections of the community. The schemes are yet to fullyreach the targeted groups. The measures suggested are as follows:

- A systematic awareness campaign has to be undertaken in order to enable various target groups under various schemes to make use of the schemes.
- There is a considerable number of aged without old-age pension. The government may extend old-age pension to all the aged.

Chapter 8: Infrastructure

Findings:

Infrastructure is the propeller of development. Augmentation of infrastructure of different kinds result in better access to various facilities created; facilitate the movement of people, goods and services, better income, better standard of living and removal of rural urban disparities. The district, as it has been stated, is strategically located. The infrastructures created in the district are presented here.

- The district is interlaced with a network of roads with a total length of 8916 kilometers linking almost all habitations in the district. Around 48 percent are mud roads; 41 percent are BTroads.
- The district has a record of providing electricity to all the habitations in the district. 1.21 lakh huts have been given electricity connection under single lamp scheme.
- The telecommunication system and the mobile network system are becoming stronger day - by-day.
- The District is blessed with a network of credit and non-credit cooperative institutions with a membership of 3.52 lakh. The district has also had 25 commercialized banks with their branches located in towns, cities and rural areas.

Suggestions and Way Forward:

- Since agriculture is the predominant occupation of the majority of the households in the district, agri-oriented infrastructuresuch as cold-storage plants, godowns, market yards and threshing floors across the district may be constructed.
- A vast stretches of roads in the district are mud roads. They may be converted into BT road to facilitate smooth flow of goods and services and people.
- Watershed development in the hilly region may betaken up to conserve the water.
- Facilities in the schools may be augmented with additional classrooms, toilets, drinking water, labs, playgrounds, etc.
- Feasibility of creating special economic zone for agriculture may be examined.
- The District has good tourist attractions such as Rock cut temples at Mandagapattu and Thalavanur villages, Kabilan Kundru, Gingee fort, the cultural township of Auroville. The district with a good network of roads and rails can be developed as a major tourism centre.

Conclusion

The human development status of the Villupuram district can be rated as moderate. The development in various spheres of life is not uniform across the blocks. There are blocks which have performed better in certain aspects of development; and have exhibited poor performance in certain other aspects. No block can claim to have registered better performance in all aspects of human development. The government has launched various schemes / programmes / projects to promote the well being of the people. The schemes have impacted the life of the people; but they are yet to bring the desired results. The administration has, therefore, to examine the loopholes in taking the schemes to the people and initiate measures to plug in the loopholes. Above all, the urge to lead a quality life should ultimately emerge from the people which require a very enabling and convivial environment.

ANNEXURES

Annexure I – Index Calculation Tables

Table 1.1

Human Development Index - Calculation Sheet

S.No	Block	Data										
		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
		Census	DRDA	DRDA	Census	DRDA	Health	Health	Health	Census 2011	SSA	SSA
		2011	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14
1	**Chinnasalem**	49	50.77	83.77	98	64	9.6	0.5	0.3	70.37	100.28	138.29
2	**Gingee**	20	37.42	95.33	76	87	24.0	1.2	0.1	73.35	100.43	58.03
3	**Kallakurichi**	38	32.42	85.92	90	90	18.9	0.3	1.2	69.72	100.09	103.09
4	**Kalrayanhills**	47	26.92	78.95	94	75	25.3	2.2	3.0	59.83	100.08	46.00
5	**Kanai**	47	35.68	88.07	90	71	19.6	0.1	3.9	72.35	100.22	88.59
6	**Kandamangalam**	39	46.95	95.10	99	58	19.3	0.5	0.1	76.88	100.10	46.89
7	**Koliyanur**	47	33.61	98.37	99	80	12.7	0.3	1.1	87.78	100.10	119.50
8	**Mailam**	34	38.10	96.60	98	76	16.6	1.1	1.7	72.19	100.19	76.90
9	**Marakkanam**	39	49.81	96.73	97	48	14.5	0.1	3.7	79.08	100.26	64.66
10	**Melmalayanur**	19	29.91	93.79	90	61	19.3	0.1	3.1	71.22	100.08	73.56
11	**Mugaiyur**	29	36.44	96.12	93	72	24.1	1.1	1.6	71.52	100.53	85.02
12	**Olakkur**	55	52.60	93.16	87	76	8.6	0.1	2.7	70.25	100.35	134.36
13	**Rishivandiyam**	18	29.80	95.03	75	54	19.0	0.4	1.1	62.57	100.14	86.25
14	**Sangarapuram**	22	36.87	86.98	92	70	12.9	1.7	2.0	69.22	100.18	92.00
15	**Thirukoilur**	34	56.48	97.56	93	85	22.9	0.7	1.3	67.22	100.12	106.91
16	**Thirunavalur**	20	38.56	94.09	97	78	7.0	0.1	1.2	64.60	100.27	76.89
17	**Thiruvennainallur**	24	37.78	98.90	91	71	25.3	1.8	2.2	67.55	100.35	101.79
18	**Thiyagadurgam**	53	39.68	92.95	96	63	22.3	0.1	1.7	66.26	100.13	142.46
19	**Ulundurpet**	22	31.90	94.65	92	44	14.7	0.6	0.9	65.05	100.26	142.41
20	**Vallam**	27	41.37	95.68	98	80	23.0	0.6	3.5	72.76	100.04	54.77
21	**Vanur**	33	41.37	95.95	96	73	11.3	0.1	0.8	77.70	100.07	67.15
22	**Vikkiravandi**	53	42.46	87.15	99	79	24.0	0.1	1.4	76.48	100.30	91.02
Maximum		55.33	56.48	98.90	99.19	90.00	27.83	2.42	4.29	87.78	100.53	142.46
Minimum		16.43	24.23	71.05	67.78	39.60	7.00	0.10	0.10	53.85	90.04	41.40

Table 1.2

Human Development Index - Calculation Sheet

S.No	Block	Indices										
		Standard of Living					Health			Education		
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
1	Chinnasalem	0.85	0.82	0.46	0.97	0.48	0.88	0.83	0.95	0.49	0.98	0.96
2	Gingee	0.10	0.41	0.87	0.27	0.94	0.18	0.53	1.00	0.57	0.99	0.16
3	Kallakurichi	0.56	0.25	0.53	0.71	1.00	0.43	0.91	0.74	0.47	0.96	0.61
4	Kalrayanhills	0.78	0.08	0.28	0.85	0.70	0.12	0.09	0.31	0.18	0.96	0.05
5	Kanai	0.78	0.36	0.61	0.69	0.62	0.40	1.00	0.09	0.55	0.97	0.47
6	Kandamangalam	0.59	0.70	0.86	1.00	0.37	0.41	0.83	1.00	0.68	0.96	0.05
7	Koliyanur	0.79	0.29	0.98	1.00	0.80	0.73	0.91	0.76	1.00	0.96	0.77
8	Mailam	0.46	0.43	0.92	0.96	0.72	0.54	0.57	0.62	0.54	0.97	0.35
9	Marakkanam	0.58	0.79	0.92	0.94	0.17	0.64	1.00	0.14	0.74	0.97	0.23
10	Melmalayanur	0.07	0.18	0.82	0.70	0.42	0.41	1.00	0.28	0.51	0.96	0.32
11	Mugaiyur	0.33	0.38	0.90	0.80	0.64	0.18	0.57	0.64	0.52	1.00	0.43
12	Olakkur	1.00	0.88	0.79	0.62	0.72	0.92	1.00	0.38	0.48	0.98	0.92
13	Rishivandiyam	0.05	0.17	0.86	0.24	0.29	0.42	0.87	0.76	0.26	0.96	0.44
14	Sangarapuram	0.15	0.39	0.57	0.78	0.60	0.72	0.31	0.55	0.45	0.97	0.50
15	Thirukoilur	0.45	1.00	0.95	0.79	0.90	0.24	0.74	0.71	0.39	0.96	0.65
16	Thirunavalur	0.09	0.44	0.83	0.92	0.76	1.00	1.00	0.74	0.32	0.98	0.35
17	Thiruvennainallur	0.20	0.42	1.00	0.73	0.62	0.12	0.27	0.50	0.40	0.98	0.60
18	Thiyagadurgam	0.95	0.48	0.79	0.90	0.46	0.27	1.00	0.62	0.37	0.96	1.00
19	Ulundurpet	0.14	0.24	0.85	0.77	0.09	0.63	0.78	0.81	0.33	0.97	1.00
20	Vallam	0.26	0.53	0.88	0.95	0.80	0.23	0.78	0.19	0.56	0.95	0.13
21	Vanur	0.43	0.53	0.89	0.89	0.66	0.79	1.00	0.83	0.70	0.96	0.25
22	Vikkiravandi	0.94	0.57	0.58	0.99	0.78	0.18	1.00	0.69	0.67	0.98	0.49

Table 1.3
Human Development Index - Calculation Sheet

S.No	Block	Standard of Living Index	Health Index	Education Index	Overall Index	Rank
1	**Chinnasalem**	0.68	0.88	0.77	0.775	2
2	**Gingee**	0.39	0.46	0.45	0.433	20
3	**Kallakurichi**	0.56	0.66	0.65	0.621	8
4	**Kalrayanhills**	0.41	0.15	0.20	0.230	22
5	**Kanai**	0.59	0.33	0.63	0.498	16
6	**Kandamangalam**	0.67	0.70	0.33	0.534	11
7	**Koliyanur**	0.71	0.80	0.90	0.800	1
8	**Mailam**	0.66	0.57	0.57	0.600	9
9	**Marakkanam**	0.58	0.45	0.55	0.524	13
10	**Melmalayanur**	0.32	0.49	0.54	0.436	18
11	**Mugaiyur**	0.57	0.40	0.61	0.518	14
12	**Olakkur**	0.79	0.70	0.76	0.751	3
13	**Rishivandiyam**	0.22	0.65	0.48	0.408	21
14	**Sangarapuram**	0.44	0.50	0.60	0.508	15
15	**Thirukoilur**	0.79	0.50	0.63	0.628	7
16	**Thirunavalur**	0.47	0.90	0.48	0.586	10
17	**Thiruvennainallur**	0.52	0.25	0.62	0.434	19
18	**Thiyagadurgam**	0.68	0.55	0.71	0.642	5
19	**Ulundurpet**	0.29	0.74	0.69	0.525	12
20	**Vallam**	0.62	0.32	0.41	0.437	17
21	**Vanur**	0.66	0.87	0.56	0.682	4
22	**Vikkiravandi**	0.75	0.50	0.68	0.636	6

Table 2.1

Gender Inequality Index - Calculation Sheet

S.No	Indicators	Data															
		Health			Empowerment						Labour						
		MMR	Share of Institutional Deliveries	Share of Ante Natal Coverage	Female Literacy	Male Literacy	Share of female Children (0-6) years	Share of male Children (0-6) years	Share of Female Elected Representatives in RLBs and ULBs	Share of Male Elected Representatives in RLBs and ULBs	Female Worker Participation Rate	Male Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector	Male Worker Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
		2013-14	2013-14	2013-14	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2013-14	2013-14
		Health Department			Census				RD&PRDepartment		Census				DOES	
		rate	%	nos	%	%	%	%	%		%	%	%	%	%	%
1	Chinnasalem	0.5	100.0	100.7	60.18	80.55	47.59	52.41	40	60	46.5	58.89	7.44	19.11	100.00	250.00
2	Gingee	1.2	100.0	102.8	65.11	81.59	48.21	51.79	38	62	44.94	59.96	9.07	20.24	85.00	300.00
3	Kallakurichi	0.3	100.0	97.6	60.36	79.07	47.67	52.33	33	67	39.66	58.5	8.15	24.22	90.00	300.00
4	Kalrayanhills	2.2	95.0	105.9	44.44	75.05	47.69	52.31	53	47	56.17	59.84	2.89	4.65	90.00	200.00
5	Kanai	0.1	100.0	106.1	63.31	81.38	48.56	51.44	39	61	43.04	57.86	6.51	16.19	90.00	200.00
6	Kandamangalam	0.5	100.0	106.6	69.16	84.59	48.70	51.30	38	62	38.51	59.6	7.3	22.3	100.00	200.00
7	Koliyanur	0.3	100.0	97.8	85.24	90.32	48.93	51.07	46	54	25.47	56.93	13.54	47.27	85.00	300.00
8	Mailam	1.1	100.0	101.0	63.11	81.27	49.97	50.03	40	60	32.47	57.5	9.59	33.57	90.00	300.00
9	Marakkanam	0.1	100.0	109.1	72.70	85.45	49.45	50.55	36	64	31.94	58.48	11.94	34	80.00	300.00
10	Melmalayanur	0.1	100.0	104.7	61.69	80.74	47.98	52.02	38	62	49.88	61.43	4.91	13.2	80.00	300.00
11	Mugaiyur	1.1	100.0	98.3	62.48	80.56	48.71	51.29	37	63	38.4	57.85	7.44	20.3	100.00	200.00
12	Olakkur	0.1	100.0	94.7	61.19	79.30	48.46	51.54	42	58	43.41	60.39	4.74	14.06	80.00	300.00
13	Rishivandiyam	0.4	100.0	100.8	52.93	72.20	48.66	51.34	38	62	45.67	58.72	5.12	10.37	90.00	300.00
14	Sangarapuram	1.7	100.0	100.2	61.04	77.39	48.44	51.56	33	67	38.03	58.14	7.36	18.11	90.00	300.00
15	Thirukoilur	0.7	100.0	103.3	58.39	76.04	47.63	52.37	35	65	37.84	57.38	8.44	23.35	80.00	200.00
16	Thirunavalur	0.1	100.0	99.4	52.17	77.03	47.84	52.16	39	61	44.66	57.7	4.19	12.38	100.00	250.00
17	Thiruvennainallur	1.8	100.0	96.8	57.17	77.93	48.36	51.64	35	65	41.56	58.44	5.05	13.8	100.00	200.00
18	Thiyagadurgam	0.1	100.0	102.3	55.54	76.98	48.12	51.88	35	65	43.48	57.94	5.35	17.97	90.00	300.00
19	Ulundurpet	0.6	100.0	99.7	55.25	74.85	48.72	51.28	42	58	38.69	55.01	7.22	19.04	90.00	200.00
20	Vallam	0.6	100.0	101.0	63.40	82.12	48.82	51.18	44	56	52.34	62.04	5.72	12.12	80.00	300.00
21	Vanur	0.1	100.0	104.0	70.31	85.08	49.10	50.90	46	54	39.73	59.07	11.43	26.72	110.00	350.00
22	Vikkiravandi	0.1	100.0	104.7	68.38	84.58	48.03	51.97	40	60	40.01	58.8	7.42	20.3	100.00	300.00
Maximum		2.42	100.00	109.10	85.24	90.32	49.97	52.41	53.00	67.00	56.17	62.04	47.27	13.54	110.00	350.00
Minimum		0.1	85.50	85.23	40.00	64.98	42.83	45.02	29.70	42.3	22.92	49.51	4.19	2.60	72	180

Table 2.2

Gender Inequality Index - Calculation Sheet

S.No	Block	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 ofmale Children (0-6) years	Share of Female Elected Representatives in RLBs and ULBs	Share of Male Elected Representatives in RLBs and ULBs	Female Worker Participation Rate	Male Worker Participation Rate	Female Worker Participation Rate in Non-Agri Sector	Male Worker Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
1	Chinnasalem	0.01	1.00	1.01	0.60	0.81	0.48	0.52	0.40	0.60	0.47	0.59	0.19	0.07	0.74	0.41
2	Gingee	0.01	1.00	1.03	0.65	0.82	0.48	0.52	0.38	0.62	0.45	0.60	0.20	0.09	0.34	0.71
3	Kallakurichi	0.00	1.00	0.98	0.60	0.79	0.48	0.52	0.33	0.67	0.40	0.59	0.24	0.08	0.47	0.71
4	Kalrayanhills	0.02	0.95	1.06	0.44	0.75	0.48	0.52	0.53	0.47	0.56	0.60	0.05	0.03	0.47	0.12
5	Kanai	0.00	1.00	1.06	0.63	0.81	0.49	0.51	0.39	0.61	0.43	0.58	0.16	0.07	0.47	0.12
6	Kandamangalam	0.01	1.00	1.07	0.69	0.85	0.49	0.51	0.38	0.62	0.39	0.60	0.22	0.07	0.74	0.12
7	Koliyanur	0.00	1.00	0.98	0.85	0.90	0.49	0.51	0.46	0.54	0.25	0.57	0.47	0.14	0.34	0.71
8	Mailam	0.01	1.00	1.01	0.63	0.81	0.50	0.50	0.40	0.60	0.32	0.58	0.34	0.10	0.47	0.71
9	Marakkanam	0.00	1.00	1.09	0.73	0.85	0.49	0.51	0.36	0.64	0.32	0.58	0.34	0.12	0.21	0.71
10	Melmalayanur	0.00	1.00	1.05	0.62	0.81	0.48	0.52	0.38	0.62	0.50	0.61	0.13	0.05	0.21	0.71
11	Mugaiyur	0.01	1.00	0.98	0.62	0.81	0.49	0.51	0.37	0.63	0.38	0.58	0.20	0.07	0.74	0.12
12	Olakkur	0.00	1.00	0.95	0.61	0.79	0.48	0.52	0.42	0.58	0.43	0.60	0.14	0.05	0.21	0.71
13	Rishivandiyam	0.00	1.00	1.01	0.53	0.72	0.49	0.51	0.38	0.62	0.46	0.59	0.10	0.05	0.47	0.71
14	Sangarapuram	0.02	1.00	1.00	0.61	0.77	0.48	0.52	0.33	0.67	0.38	0.58	0.18	0.07	0.47	0.71
15	Thirukoilur	0.01	1.00	1.03	0.58	0.76	0.48	0.52	0.35	0.65	0.38	0.57	0.23	0.08	0.21	0.12
16	Thirunavalur	0.00	1.00	0.99	0.52	0.77	0.48	0.52	0.39	0.61	0.45	0.58	0.12	0.04	0.74	0.41
17	Thiruvennainallur	0.02	1.00	0.97	0.57	0.78	0.48	0.52	0.35	0.65	0.42	0.58	0.14	0.05	0.74	0.12
18	Thiyagadurgam	0.00	1.00	1.02	0.56	0.77	0.48	0.52	0.35	0.65	0.43	0.58	0.18	0.05	0.47	0.71
19	Ulundurpet	0.01	1.00	1.00	0.55	0.75	0.49	0.51	0.42	0.58	0.39	0.55	0.19	0.07	0.47	0.12
20	Vallam	0.01	1.00	1.01	0.63	0.82	0.49	0.51	0.44	0.56	0.52	0.62	0.12	0.06	0.21	0.71
21	Vanur	0.00	1.00	1.04	0.70	0.85	0.49	0.51	0.46	0.54	0.40	0.59	0.27	0.11	1.00	1.00
22	Vikkiravandi	0.00	1.00	1.05	0.68	0.85	0.48	0.52	0.40	0.60	0.40	0.59	0.20	0.07	0.74	0.71

Table2.3

Gender Inequality Index - Calculation Sheet

S.No	Block/ District	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
1	Chinnasalem	0.17	1	0.49	0.63	0.40	0.26	0.32	0.55	0.41	0.59	0.56	0.33	0.48	0.149	9
2	Gingee	0.23	1	0.49	0.64	0.31	0.34	0.33	0.60	0.43	0.62	0.57	0.33	0.48	0.122	5
3	Kallakurichi	0.14	1	0.46	0.65	0.36	0.32	0.29	0.59	0.39	0.57	0.55	0.34	0.48	0.189	14
4	Kalrayanhills	0.28	1	0.48	0.57	0.23	0.13	0.32	0.42	0.36	0.64	0.53	0.18	0.39	0.085	1
5	Kanai	0.10	1	0.49	0.63	0.32	0.16	0.25	0.47	0.33	0.55	0.56	0.24	0.42	0.221	15
6	Kandamangalam	0.17	1	0.50	0.65	0.40	0.17	0.33	0.48	0.39	0.59	0.57	0.29	0.46	0.150	10
7	Koliyanur	0.14	1	0.58	0.63	0.35	0.38	0.31	0.62	0.41	0.57	0.60	0.36	0.50	0.181	13
8	Mailam	0.22	1	0.50	0.62	0.37	0.34	0.35	0.60	0.44	0.61	0.56	0.36	0.50	0.117	4
9	Marakkanam	0.10	1	0.51	0.65	0.28	0.37	0.25	0.62	0.35	0.55	0.58	0.33	0.47	0.252	22
10	Melmalayanur	0.10	1	0.48	0.64	0.24	0.28	0.23	0.56	0.32	0.55	0.56	0.26	0.43	0.248	20
11	Mugaiyur	0.22	1	0.48	0.64	0.39	0.17	0.35	0.48	0.40	0.61	0.56	0.28	0.46	0.122	6
12	Olakkur	0.10	1	0.50	0.62	0.23	0.27	0.23	0.55	0.32	0.55	0.56	0.25	0.43	0.249	21
13	Rishivandiyam	0.16	1	0.46	0.61	0.28	0.28	0.27	0.55	0.37	0.58	0.54	0.28	0.44	0.171	12
14	Sangarapuram	0.26	1	0.46	0.64	0.32	0.31	0.34	0.59	0.43	0.63	0.55	0.32	0.48	0.108	3
15	Thirukoilur	0.19	1	0.46	0.64	0.26	0.18	0.29	0.48	0.36	0.60	0.55	0.22	0.42	0.136	7
16	Thirunavalur	0.10	1	0.46	0.63	0.34	0.22	0.25	0.51	0.34	0.55	0.54	0.28	0.44	0.229	18
17	Thiruvennainallur	0.26	1	0.46	0.64	0.35	0.15	0.35	0.46	0.39	0.63	0.55	0.25	0.44	0.107	2
18	Thiyagadurgam	0.10	1	0.45	0.64	0.33	0.28	0.25	0.56	0.34	0.55	0.55	0.31	0.45	0.238	19
19	Ulundurpet	0.18	1	0.48	0.61	0.33	0.17	0.31	0.47	0.37	0.59	0.54	0.25	0.43	0.140	8
20	Vallam	0.18	1	0.51	0.62	0.24	0.29	0.28	0.57	0.38	0.59	0.57	0.26	0.45	0.157	11
21	Vanur	0.10	1	0.54	0.62	0.47	0.41	0.30	0.63	0.40	0.55	0.58	0.44	0.52	0.224	16
22	Vikkiravandi	0.10	1	0.51	0.64	0.39	0.31	0.27	0.59	0.37	0.55	0.57	0.35	0.48	0.228	17

Table 3.1
Child Development Index - Calculation Sheet

S.No	Block name	Data							
		Health			Education				
		U5MR	Percentage of Malnourished Children	Juvenile sex ratio(0-6)	Enrollment in Primary	Enrollment in Secondary	Children never Enrolled in School	Transition rate from primary to Upper Primary	Transition rate from Upper Primary to Secondary
		2013-14/DDHealth)	2013-14 –ICDS	2011	2013-14	2013-14	2013-14	2013-14	2013-14
1	**Chinnasalem**	0.3	908	0.16	100.28	138.29	0.000	98.85	99.60
2	**Gingee**	0.1	931	0.04	100.43	58.03	0.000	99.04	98.44
3	**Kallakurichi**	1.2	911	0.19	100.09	103.09	0.000	99.08	99.00
4	**Kalrayanhills**	3.0	915	0.69	100.08	46.00	0.010	97.74	96.15
5	**Kanai**	3.9	944	0.09	100.22	88.59	0.000	98.59	98.84
6	**Kandamangalam**	0.1	947	0.06	100.10	46.89	0.000	99.31	99.71
7	**Koliyanur**	1.1	960	0.02	100.10	119.50	0.000	97.7	99.04
8	**Mailam**	1.7	982	0.05	100.19	76.90	0.000	98.33	99.79
9	**Marakkanam**	3.7	970	0.02	100.26	64.66	0.000	99.15	98.89
10	**Melmalayanur**	3.1	924	0.16	100.08	73.56	0.000	98.71	98.70
11	**Mugaiyur**	1.6	951	0.35	100.53	85.02	0.000	97.87	98.29
12	**Olakkur**	2.7	929	0.07	100.35	134.36	0.000	98.97	99.42
13	**Rishivandiyam**	1.1	950	0.1	100.14	86.25	0.000	97.11	99.74
14	**Sangarapuram**	2.0	944	0.52	100.18	92.00	0.000	97.93	99.96
15	**Thirukoilur**	1.3	909	0.02	100.12	106.91	0.000	99.09	99.61
16	**Thirunavalur**	1.2	919	0.03	100.27	76.89	0.000	98.59	98.02
17	**Thiruvennainallur**	2.2	937	0.08	100.35	101.79	0.000	98.02	98.17
18	**Thiyagadurgam**	1.7	928	0.07	100.13	142.46	0.000	98.03	96.65
19	**Ulundurpet**	0.9	949	0.05	100.26	142.41	0.000	96.98	97.82
20	**Vallam**	3.5	952	0.22	100.04	54.77	0.000	98.53	99.75
21	**Vanur**	0.8	964	0.11	100.07	67.15	0.000	98.76	99.61
22	**Vikkiravandi**	1.4	934	0.03	100.30	91.02	0.000	99.09	98.80
Maximum		3.90	982	0.69	100.53	142.46	0.010	99.31	99.96
Minimum		0.10	908	0.02	100.04	46.00	0.00	96.98	96.15

Table 3.2
Child Development Index - Calculation Sheet

S.No	Block	Indices								Overall index	Rank
		Health			Education						
		U5MR	Percentage of Malnourished Children	Juvenile sex ratio(0-6)	Enrollment in Primary	Enrollment in Secondary	Children never Enrolled in School	Transition rate from primary to Upper Primary	Transition rate from Upper Primary to Secondary		
1	**Chinnasalem**	0.947	0.000	0.791	0.490	0.957	1.000	0.803	0.906	0.737	1
2	**Gingee**	1.000	0.311	0.970	0.796	0.125	1.000	0.884	0.601	0.711	4
3	**Kallakurichi**	0.711	0.041	0.746	0.102	0.592	1.000	0.901	0.748	0.605	14
4	**Kalrayanhills**	0.237	0.095	0.000	0.082	0.000	0.000	0.326	0.000	0.092	22
5	**Kanai**	0.000	0.486	0.896	0.367	0.442	1.000	0.691	0.706	0.573	17
6	**Kandamangalam**	1.000	0.527	0.940	0.122	0.009	1.000	1.000	0.934	0.692	6
7	**Koliyanur**	0.737	0.703	1.000	0.122	0.762	1.000	0.309	0.759	0.674	7
8	**Mailam**	0.579	1.000	0.955	0.306	0.320	1.000	0.579	0.955	0.712	3
9	**Marakkanam**	0.053	0.838	1.000	0.449	0.193	1.000	0.931	0.719	0.648	11
10	**Melmalayanur**	0.211	0.216	0.791	0.082	0.286	1.000	0.742	0.669	0.500	21
11	**Mugaiyur**	0.605	0.581	0.507	1.000	0.405	1.000	0.382	0.562	0.630	12
12	**Olakkur**	0.316	0.284	0.925	0.633	0.916	1.000	0.854	0.858	0.723	2
13	**Rishivandiyam**	0.737	0.568	0.881	0.204	0.417	1.000	0.056	0.942	0.601	16
14	**Sangarapuram**	0.500	0.486	0.254	0.286	0.477	1.000	0.408	1.000	0.551	19
15	**Thirukoilur**	0.684	0.014	1.000	0.163	0.631	1.000	0.906	0.908	0.663	9
16	**Thirunavalur**	0.711	0.149	0.985	0.469	0.320	1.000	0.691	0.491	0.602	15
17	**Thiruvennainallur**	0.447	0.392	0.910	0.633	0.578	1.000	0.446	0.530	0.617	13
18	**Thiyagadurgam**	0.579	0.270	0.925	0.184	1.000	1.000	0.451	0.131	0.568	18
19	**Ulundurpet**	0.789	0.554	0.955	0.449	0.999	1.000	0.000	0.438	0.648	10
20	**Vallam**	0.105	0.595	0.701	0.000	0.091	1.000	0.665	0.945	0.513	20
21	**Vanur**	0.816	0.757	0.866	0.061	0.219	1.000	0.764	0.908	0.674	8
22	**Vikkiravandi**	0.658	0.351	0.985	0.531	0.467	1.000	0.906	0.696	0.699	5

Table4.1

Multi Dimensional Poverty Index - Calculation Sheet

S.No	Block Name	Data									
		Health			Education		Living Standards				
		IMR	High Order Birth rate	Malnourished Children	Drop out in primary	Drop out secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Access to Electricity	Pucca house
		2013-14/SPC	2013-14	2013-14	2013-14	SSA & RMSA	2011	2013-14	2013-14	2011	2013-14
1	Chinnasalem	9.6	10.4	0.16	0.15	0.97	49	50.77	83.77	98	64
2	Gingee	24.0	15.3	0.04	0.42	0.83	20	37.42	95.33	76	87
3	Kallakurichi	18.9	13.2	0.19	0.89	0.86	38	32.42	85.92	90	90
4	Kalrayanhills	25.3	21.1	0.69	1.49	2.03	47	26.92	78.95	94	75
5	Kanai	19.6	16.3	0.09	0.53	1.18	47	35.68	88.07	90	71
6	Kandamangalam	19.3	10.3	0.06	0.35	0.88	39	46.95	95.10	99	58
7	Koliyanur	12.7	8.7	0.02	0.65	1.21	47	33.61	98.37	99	80
8	Mailam	16.6	12.9	0.05	0.40	0.91	34	38.10	96.60	98	76
9	Marakkanam	14.5	11.5	0.02	0.37	1.44	39	49.81	96.73	97	48
10	Melmalayanur	19.3	13.6	0.16	0.56	0.85	19	29.91	93.79	90	61
11	Mugaiyur	24.1	18.9	0.35	1.06	1.89	29	36.44	96.12	93	72
12	Olakkur	8.6	11.4	0.07	0.04	1.42	55	52.60	93.16	87	76
13	Rishivandiyam	19.0	19.4	0.1	1.17	2.80	18	29.80	95.03	75	54
14	Sangarapuram	12.9	15.8	0.52	0.27	1.16	22	36.87	86.98	92	70
15	Thirukoilur	22.9	17.9	0.02	1.51	2.07	34	56.48	97.56	93	85
16	Thirunavalur	7.0	19.3	0.03	1.23	1.73	20	38.56	94.09	97	78
17	Thiruvennainallur	25.3	19.2	0.08	1.37	2.21	24	37.78	98.90	91	71
18	Thiyagadurgam	22.3	15.6	0.07	1.16	2.80	53	39.68	92.95	96	63
19	Ulundurpet	14.7	14.8	0.05	1.35	2.34	22	31.90	94.65	92	44
20	Vallam	23.0	12.1	0.22	0.06	0.78	27	41.37	95.68	98	80
21	Vanur	11.3	11.3	0.11	0.29	1.91	33	41.37	95.95	96	73
22	Vikkiravandi	24.0	13.8	0.03	0.74	0.94	53	42.46	87.15	99	79
Maximum		25.30	21.10	0.69	1.51	2.80	55.33	56.48	98.90	99.19	90.00
Minimum		7.00	8.70	0.02	0.04	0.78	18.25	26.92	78.95	75.31	44.00

Table4.2

Multi Dimensional Poverty Index - Calculation Sheet

S.No	Block/ District	Indices										Overall Index	Rank
		Health			Education		Living Standards						
		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	Access to Electricity	Pucca house		
1	Chinnasalem	0.86	0.86	0.79	0.93	0.91	0.84	0.81	0.24	0.96	0.43	0.237	3
2	Gingee	0.07	0.47	0.97	0.74	0.98	0.05	0.36	0.82	0.04	0.93	0.457	14
3	Kallakurichi	0.35	0.64	0.75	0.42	0.96	0.54	0.19	0.35	0.61	1.00	0.419	10
4	Kalrayanhills	0.00	0.00	0.00	0.01	0.38	0.77	0.00	0.00	0.80	0.67	0.736	22
5	Kanai	0.31	0.39	0.90	0.67	0.80	0.76	0.30	0.46	0.60	0.59	0.424	11
6	Kandamangalam	0.33	0.87	0.94	0.79	0.95	0.57	0.68	0.81	1.00	0.30	0.276	4
7	Koliyanur	0.69	1.00	1.00	0.59	0.79	0.78	0.23	0.97	1.00	0.78	0.218	2
8	Mailam	0.48	0.66	0.96	0.76	0.94	0.43	0.38	0.89	0.95	0.70	0.288	5
9	Marakkanam	0.59	0.77	1.00	0.78	0.67	0.56	0.77	0.89	0.92	0.09	0.295	6
10	Melmalayanur	0.33	0.60	0.79	0.65	0.97	0.03	0.10	0.74	0.61	0.37	0.481	15
11	Mugaiyur	0.07	0.18	0.51	0.31	0.45	0.30	0.32	0.86	0.74	0.61	0.566	18
12	Olakkur	0.91	0.78	0.93	1.00	0.68	1.00	0.87	0.71	0.50	0.70	0.192	1
13	Rishivandiyam	0.34	0.14	0.88	0.23	0.00	0.00	0.10	0.81	0.00	0.22	0.729	21
14	Sangarapuram	0.68	0.43	0.25	0.84	0.81	0.11	0.34	0.40	0.71	0.57	0.486	16
15	Thirukoilur	0.13	0.26	1.00	0.00	0.36	0.43	1.00	0.93	0.72	0.89	0.428	12
16	Thirunavalur	1.00	0.15	0.99	0.19	0.53	0.04	0.39	0.76	0.89	0.74	0.432	13
17	Thiruvennainallur	0.00	0.15	0.91	0.10	0.29	0.16	0.37	1.00	0.65	0.59	0.578	19
18	Thiyagadurgam	0.16	0.44	0.93	0.24	0.00	0.95	0.43	0.70	0.87	0.41	0.487	17
19	Ulundurpet	0.58	0.51	0.96	0.11	0.23	0.10	0.17	0.79	0.69	0.00	0.587	20
20	Vallam	0.13	0.73	0.70	0.99	1.00	0.23	0.49	0.84	0.93	0.78	0.319	8
21	Vanur	0.77	0.79	0.87	0.83	0.44	0.40	0.49	0.85	0.86	0.63	0.308	7
22	Vikkiravandi	0.07	0.59	0.99	0.52	0.92	0.94	0.53	0.41	0.99	0.76	0.329	9

Annexure II

Data Tables Used in the Chapters

Table 1.1
Agriculture land holdings

Sl. No	Block/District	Percentage of farmers				percentage of area			
		Marginal	Small	Medium	Large	Marginal	Small	Medium	Large
1	Chinnasalem	71.90	18.70	9.31	0.11	33.92	30.19	33.77	2.12
2	Gingee	82.10	13.20	4.68	0.03	48.81	28.23	22.03	0.88
3	Kallakurichi	77.60	15.60	6.69	0.06	40.72	29.47	28.75	1.05
4	Kalrayan Hills	57.90	27.40	14.60	0.19	26.08	33.63	38.34	1.95
5	Kanai	85.60	10.50	3.81	0.04	53.13	25.25	20.66	0.84
6	Kandamangalam	82.60	11.80	5.51	0.07	45.65	25.13	27.86	1.36
7	Koliyanur	85.41	10.40	4.19	0.04	49.44	25.91	22.95	0.92
8	Mailam	80.13	13.70	6.03	0.07	41.45	27.71	28.84	2.00
9	Marakkanam	78.50	14.10	7.20	0.17	38.55	25.68	31.98	3.79
10	Melmalayanur	81.90	13.10	4.90	0.01	48.79	28.32	22.53	0.33
11	Mugaiyur	84.30	11.50	4.10	0.02	50.29	27.22	21.72	0.77
12	Olakkur	78.20	14.80	6.89	0.14	40.27	26.90	30.18	2.65
13	Rishivandiyam	78.50	14.70	6.67	0.08	40.06	28.75	29.89	1.29
14	Sankarapuram	76.40	16.60	6.90	0.03	40.40	31.25	27.87	0.47
15	Thirukovilur	84.70	11.00	4.15	0.02	48.53	26.79	23.62	1.06
16	Thirunavalur	86.80	9.20	4.01	0.04	54.21	22.89	21.99	0.73
17	Thiruvennainallur	84.40	10.10	5.42	0.14	43.61	21.58	30.15	3.22
18	Thiyagadurgam	80.60	14.20	5.04	0.03	45.45	29.83	23.79	0.93
19	Ulundurpet	87.60	9.10	3.24	0.03	62.08	20.61	16.49	0.82
20	Vallam	83.06	12.10	4.78	0.01	47.53	26.90	25.13	0.42
21	Vanur	75.54	15.16	9.05	0.22	33.47	24.05	35.26	7.21
22	Vikkiravandi	95.60	13.40	6.34	0.13	44.55	25.28	27.84	2.06

Source : Deputy Director of Statistics, Villupuram - 2013 - 14

Table 1.2
Land utilisation pattern

Sl. No	Category	Area in Ha		
		2001	**2011**	**2014**
21	Forest	71697	71697	71697
2	Barren and un-culturable Land	56655	56651	56651
3	Land put to non-agriculture purpose	120328	136056	136115
4	Cultivable waste	11602	9696	9591
5	Permanent pasture and grazing land	4195	4170	4170
6	Land unde misc. tree crops and groves not included in the Net Area Sown	7652	6308	6313
7	Current Fallow lands	89796	83962	85366
8	Other Fallow lands	17278	14899	14995
9	Net area sown	343000	338764	337305
10	Area sown more than once	37611	27182	163334
11	Gross Area Sown	380611	365945	500639
12	Total geographical area	722203	722203	722203

Source : Deputy Director of Statistics, Villupuram - 2001, 2011& 2014.

Table 1.3
CBR and CDR

S. No	Block/District	CBR				CDR			
		2009	2010	2011	2014	2009	2010	2011	2014
1	Chinnasalem	16.3	15.2	15.6	20.6	5.7	4.80	4.8	4.5
2	Gingee	16.3	15.8	16.2	14.7	6.0	6.26	7.1	6.0
3	Kallakurichi	15.4	15.5	15.1	16.5	4.8	4.39	3.7	3.5
4	Kalrayanhills	25.0	23.2	23.9	21.5	5.0	4.71	5.3	4.9
5	Kanai	18.5	18.5	18.4	16.1	5.1	6.33	6.2	5.4
6	Kandamangalam	16.6	15.7	14.9	13.4	6.3	6.43	6.4	5.2
7	Koliyanur	17.8	17.9	17.7	12.8	7.4	5.68	5.9	2.9
8	Mailam	16.1	15.4	17.1	14.8	7.1	6.73	7.1	6.1
9	Marakkanam	16.6	15.2	15.6	14.1	6.6	6.37	7.2	5.6
10	Melmalayanur	16.1	14.4	14.8	13.6	5.6	5.81	6.5	5.7
11	Mugaiyur	22.9	20.8	21.7	17.7	6.1	5.46	4.6	4.6
12	Olakkur	15.6	15.2	14.9	13.6	3.8	6.12	6.3	5.9
13	Rishivandiyam	18.9	17.8	18.6	18.2	5.3	4.71	4.1	3.7
14	Sankarapuram	17.2	16.9	17.5	17.6	6.3	6.52	5.8	5.3
15	Thirukoilur	21.3	18.5	19.6	5.0	6.4	5.13	5.4	1.3
16	Thirunavalur	18.2	19.4	20.5	5.5	4.9	4.54	5.3	1.2
17	Thiruvenainallur	19.4	19.3	20.8	5.8	6.2	5.25	6.1	2.2
18	Thiyagadurgam	14.5	18.6	19.4	4.6	4.7	4.95	4.7	1.7
19	Ulundurpet	19.4	19.1	19.2	4.7	3.8	6.00	4.7	0.9
20	Vallam	17.2	16.8	15.7	15.6	5.3	6.44	6.9	6.2
21	Vanur	16.0	15.9	16.2	13.4	5.2	5.58	5.7	4.3
22	Vikravandi	17.3	17.2	16.9	15.5	7.0	5.90	6.3	5.0
Villupuram District		**17.8**	**17.4**	**17.7**	**13.4**	**5.7**	**5.6**	**5.7**	**4.2**

Source :DD Health Villupuram(2009,10,11 &14)

Table 1.4
Infant Mortality rate

Sl.No	Block/District	2007	2008	2009	2010	2011	2012	2014
1	Chinnasalem	14.8	13.8	13.83	9.6	14.2	7.8	9.6
2	Gingee	24.3	25.5	26.38	31.5	25.9	26.7	24.0
3	Kallakurichi	45.8	22.1	17.83	18.0	19.8	18.4	18.9
4	Kalrayan hills	20.4	29.3	32.08	23.3	32.9	32.3	25.3
5	Kanai	21.3	19.6	23.71	20.5	21.0	14.8	19.6
6	Kandamangalam	20.8	30.2	17.61	23.9	23.7	19.1	19.3
7	Koliyanur	21.2	15.8	16.73	15.2	16.3	15.9	12.7
8	Mailam	23.9	27.4	17.37	23.0	18.9	20.0	16.6
9	Marakkanam	17.5	19.8	13.87	17.5	14.8	14.6	14.5
10	Melmalayanur	14.0	13.7	13.73	16.2	22.9	18.1	19.3
11	Mugaiyur	22.4	18.5	16.57	10.8	15.6	18.7	24.1
12	Olakkur	26.5	13.7	24.47	23.5	21.6	15.4	8.6
13	Rishivandiyam	22.5	19.9	20.64	17.3	17.2	17.1	19.0
14	Sankarapuram	22.6	28.6	15.29	24.0	16.3	24.4	12.9
15	Thirukoilur	19.5	18.1	16.15	19.5	18.4	21.5	22.9
16	Thirunavalur	12.8	14.3	8.16	7.9	11.1	8.2	7.0
17	Thiruvenainallur	34.8	26.6	25.18	19.4	19.4	20.9	25.3
18	Thiyagadurgam	22.9	19.9	17.51	19.2	19.7	13.1	22.3
19	Ulundurpet	10.6	4.5	8.99	9.2	11.6	13.2	14.7
20	Vallam	16.3	14.4	20.42	19.1	25.6	16.5	23.0
21	Vanur	17.2	11.2	16.09	15.1	13.5	14.8	11.3
22	Vikravandi	25.6	25.7	19.18	22.1	18.1	22.8	24.0
Villupuram District		**21.7**	**19.7**	**22.90**	**18.4**	**19.0**	**17.9**	**18.0**

Source :Vital Events Survey data - 2007 and 2014

Table 1.5
Percentage of Literacy

Sl. No	Block /District	2001			2011		
		Male	Female	Total	Male	Female	Total
1	Chinnasalem	75.05	49.66	62.36	80.55	60.18	70.37
2	Gingee	76.02	53.73	64.88	81.59	65.11	73.35
3	Kallakurichi	73.67	49.81	61.74	79.07	60.36	69.72
4	Kalrayanhills	30.05	18.21	24.23	75.05	44.44	59.75
5	Kanai	75.83	52.24	64.04	81.38	63.31	72.35
6	Kandamangalam	78.82	57.07	67.95	84.59	69.16	76.88
7	Koliyanur	85.85	68.58	77.22	92.14	83.11	87.63
8	Mailam	75.72	52.08	63.90	81.27	63.11	72.19
9	Marakkanam	79.62	59.99	69.81	85.45	72.70	79.08
10	Melmalayanur	75.23	50.91	63.07	80.74	61.69	71.22
11	Mugaiyur	75.06	51.56	63.31	80.56	62.48	71.52
12	Olakkur	73.89	50.49	62.19	79.30	61.19	70.25
13	Rishivandiyam	67.27	43.68	55.48	72.20	52.93	62.57
14	Sangarapuram	72.11	50.37	61.24	77.39	61.04	69.22
15	Thirukoilur	70.85	48.18	59.52	76.04	58.39	67.22
16	Thirunavalur	71.77	43.05	57.41	77.03	52.17	64.60
17	Thiruvennainallur	72.61	47.18	59.90	77.93	57.17	67.55
18	Thiyagadurgam	71.73	45.83	58.78	76.98	55.54	66.26
19	Ulundurpet	69.74	45.59	57.67	74.85	55.25	65.05
20	Vallam	76.52	52.32	64.42	82.12	63.40	72.76
21	Vanur	79.27	58.02	68.65	85.08	70.31	77.70
22	Vikkravandi	78.81	56.43	67.62	84.58	68.38	76.48
23	Villupuram	82.46	72.09	77.28	88.50	87.36	87.93
Villupuram District		**75.36**	**52.68**	**64.02**	**80.5**	**63.2**	**71.9**
State					**86.8**	**73.4**	**80.1**

Source : Census 2001 and 2011

Table 1.6

Secondary School – Enrollment

Sl. No	Block/ District	2012-13			2013 -14		
		Male	Female	Total	Male	Female	Total
1	Chinnasalem	94.80	84.10	89.45	149	128	138
2	Gingee	82.15	85.98	84.06	54	63	58
3	Kallakurichi	52.91	54.27	53.59	107	99	103
4	Kalrayanhills	40.22	24.60	32.41	53	38	46
5	Kanai	56.92	31.58	44.25	93	84	89
6	Kandamangalam	24.40	24.23	24.31	45	49	47
7	Koliyanur	81.19	80.67	80.72	118	119	119
8	Mailam	58.60	60.05	59.33	81	73	77
9	Marakkanam	47.22	31.45	39.33	62	67	65
10	Melmalayanur	57.13	60.56	58.85	72	75	74
11	Mugaiyur	66.54	47.35	56.95	90	80	85
12	Olakkur	124.36	116.98	120.67	136	133	134
13	Rishivanthiyam	48.74	22.57	35.66	87	85	86
14	Sankarapuram	105.19	78.71	91.95	89	96	92
15	Thirukoilur	74.69	82.45	78.57	96	118	107
16	Thirunavalur	48.98	37.64	43.31	82	72	77
17	Thiruvennainallur	77.53	51.05	64.29	105	98	102
18	Thiyagadurgam	113.93	96.73	105.33	151	134	142
19	Ulundurpet	109.15	79.48	94.32	145	140	142
20	Vallam	46.15	47.37	46.76	55	55	55
21	Vanur	46.62	49.15	47.88	69	65	67
22	Vikaravandi	67.05	45.69	56.37	88	94	91
23	Villupuram	82.36	111.71	97.04	165	171	168
Villupuram District		69.50	60.78	65.14			

Source: Chief Educational Officer, Villupuram District. 2012-13 & 2013 - 14

Table 1.7
Higher Educational Institution

Sl. No	Block /District	Art/science				Engg.				Polytechnics		Other institutions	
		No	Govt	Self Finance	students	No	Govt	Self Finance	students	No	Students	No	students
1	Villupuram District	11	2	9	6089	29	1	28	11322	7	2968	40	3336

Source: Regional Joint Director, Trichy. (2013 – 14)

Table 1.8
Sectoral Wise Growth Rate of District Gross Domestic Product

District/ State	Gross Domestic Product			Primary Sector			Secondary Sector			Tertiary Sector		
	2004-05	2011 -12	Growth %	2004-05	2011 -12	Growth %	2004-05	2011 -12	Growth %	2004-05	2011 -12	Growth %
Villupuram	600786	1087535	81	137989	177670	29	132166	263718	100	330631	646147	95
Tamil Nadu	21900322	43323803	98	2599508	3872767	49	6767931	13039248	93	12532883	26411788	111

Table 3.1
House Holds provided employment under MGNREGA

Sl. No	Block/District	2011		
		Total No. of HH	HH provided jobs under MGNREGA	Percentage of HH provided with jobs
1	Chinnasalem	33644	14916	44
2	Gingee	32307	24589	76
3	Kallakurichi	27082	19653	73
4	Kalrayan Hills	12333	4351	35
5	Kanai	32079	20254	63
6	Kandamangalam	31104	18014	58
7	Koliyanur	33725	20333	60
8	Mailam	27743	16997	61
9	Marakkanam	34853	22438	64
10	Melmalayanur	33990	17537	52
11	Mugaiyur	42986	19354	45
12	Olakkur	20864	14107	68
13	Rishivandiyam	40323	16229	40
14	Sankarapuram	33417	16828	50
15	Thirukoilur	27212	22826	84
16	Thirunavalur	29858	10600	36
17	Thiruvennainallur	30405	16614	55
18	Thiyagadurgam	24312	16292	67
19	Ulundurpet	32355	15978	49
20	Vallam	26374	12071	46
21	Vanur	38710	23469	61
22	Vikkiravandi	25922	21264	82
Villupuram District		671598	384714	57

Source: DRDA, Villupuram- 2011

Table 3.2
Percentage of Villages having PDS outlet within in the Village

Sl. No.	Block/District	Total Number of Villages	Total Number of PDS shop	Percentage of PDS outlet
1	Villupuram District	1104	1192	108

Source: District Supply Officer, Villupuram(2012 -13)

Table 4.1
Percentage of Institutional delivery

Sl. No	Block /District	Home	Sub health centre	Primary Health centre	GH	Private Hospitals	Percentage of Institutional delivery
1	Chinnasalem	0	0.45	33.6	40.9	25.5	100
2	Gingee	0.0	0.0	40.0	52.0	8.0	100
3	Kallakurichi	0	0.3	24	48	27.7	100
4	Kalrayanhills	0.7	0	59.9	24.1	15.3	99.3
5	Kanai	0.0	0.0	55.7	38.5	5.8	100
6	Kandamangalam	0.0	0.0	30.0	61.7	8.3	100
7	Koliyanur	0.0	0.1	22.8	55.7	21.5	100
8	Mailam	0.0	0.0	39.8	51.7	8.5	100
9	Marakkanam	0.0	0.1	32.4	54.7	12.9	100
10	Melmalayanur	0.0	0.0	51.0	43.5	5.5	100
11	Mugaiyur	0	0.2	41.5	49.2	9.1	100
12	Olakkur	0.0	0.1	20.8	60.0	19.0	100
13	Rishivandiyam	0	0	45.8	42.6	11.6	100
14	Sankarapuram	0	0	40.8	38	21.2	100
15	Thirukoilur	0	0	29.7	58.5	11.8	100
16	Thirunavalur	0	0	39	53.3	7.7	100
17	Thiruvenainallur	0	0	44.3	47.7	8	100
18	Thiyagadurgam	0.4	0	37.2	45.1	17.3	99.6
19	Ulundurpet	0.7	0	43.2	49.1	7	99.3
20	Vallam	0.0	0.0	41.5	53.1	5.4	100
21	Vanur	0.0	0.0	23.2	66.8	9.9	100
22	Vikravandi	0.0	0.0	34.4	55.6	10.0	100
Villupuram District		**0.4**	**0.1**	**37.8**	**49.5**	**12.6**	**99.8**

Source ; DD Health Villupuram - 2013 -14

Table 4.2
Immunization (below 5 years)

Sl. No	Block/District	Total Number of children below 5 years	Total number of children immunised	Percentage of children immunized 2012 -13	2014
1	Chinnasalem	3007	2566	85.3	97.3
2	Gingee	2722	2734	100	99.8
3	Kallakurichi	3680	3019	82.0	94.0
4	Kalrayanhills	1451	1323	91.2	112.5
5	Kanai	2471	2469	100	99.8
6	Kandamangalam	2067	2067	100	99.7
7	Koliyanur	2572	2632	102	99.8
8	Mailam	1905	1821	96	99.7
9	Marakkanam	2527	2529	100	99.9
10	Melmalayanur	1968	1950	99	99.8
11	Mugaiyur	3997	3662	91.6	93.5
12	Olakkur	1323	1288	97	99.9
13	Rishivandiyam	2818	2736	97.1	95.9
14	Sankarapuram	3096	2973	96.0	88.4
15	Thirukoilur	3054	2820	92.3	98.1
16	Thirunavalur	2623	2558	97.5	101.7
17	Thiruvenainallur	2878	2905	100.9	95.9
18	Thiyagadurgam	2324	2226	95.8	81.9
19	Ulundurpet	3425	3006	87.8	101.9
20	Vallam	1870	1872	100	99.8
21	Vanur	2812	2710	96	99.9
22	Vikravandi	2181	2152	99	99.8
Villupuram District		**56770.8**	**54018**	**95.8**	**98.1**

Source ; DD Health Villupuram:, Kallakurichi 2012 - 13, 2013-14

Table 4.3
Nutritional Status of Children below 5 years (Malnourishment)

Sl. No.	Block/District	2011 -12	2013 -14
1	Chinnasalem	38.49	16.00
2	Gingee	32.6	4.00
3	Kallakurichi	35.2	19.00
4	Kalrayan Hills	53.37	69.00
5	Kanai	31.59	9.00
6	Kandamangalam	10.4	6.00
7	Koliyanur	33.78	2.00
8	Mailam	26.48	5.00
9	Marakkanam	39.61	2.00
10	Melmalayanur	35.04	16.00
11	Mugaiyur	29.24	35.00
12	Olakkur	40.36	7.00
13	Rishivandiyam	35.64	10.00
14	Sankarapuram	29.9	52.00
15	Thirukovilur	27.24	2.00
16	Thirunavalur	24.75	3.00
17	Thiruvennai Nallur	33.69	8.00
18	Thiyagadurgam	29.89	7.00
19	Ulundurpet	39.37	5.00
20	Vallam	30.41	22.00
21	Vanur	23.6	11.00
22	Vikkiravandi	27.06	3.00
Villupuram District		**31.04**	**14.0**
State		**33**	

Source ; DD Health Villupuram, Kallakurichi-2011-12 & 2013-14

Table 4.4
Percentage of HH provided with Safe Drinking water

Sl. No	Block/District	Total Number of HHs	Percentage of HHs provided with safe
1	Chinnasalem	45222	83.77
2	Gingee	40066	95.33
3	Kallakurichi	48760	85.92
4	Kalrayanhills	12507	78.95
5	Kanai	32079	88.07
6	Kandamangalam	34478	95.10
7	Koliyanur	66108	98.37
8	Mailam	44831	96.60
9	Marakanam	47187	96.73
10	Melmalayanur	34241	93.79
11	Mugaiyur	44930	96.12
12	Olakkur	20864	93.16
13	Rishivandiyam	30948	95.03
14	Sankarapuram	37974	86.98
15	Thiyagadurgam	35388	97.56
16	Thirukoilur	29565	94.09
17	Thirunavalur	32526	98.90
18	Thiruvennai Nallur	28536	92.95
19	Ulundurpet	37932	94.65
20	Vallam	26123	95.68
21	Vanur	38710	95.95
22	Vikravandi	31393	87.15
Villupuram District		800368	92.77

Source: www.mdws.gov.in -2013-14

Table 5.1
Higher Educational Institution

Sl. No	Block /District	Art/science				Engg.				Polytechnics		Other institutions	
		No	Govt	Self Finance	students	No	Govt	Self Finance	students	No	Students	No	students
1	Villupuram District	11	2	9	6089	29	1	28	11322	7	2968	40	3336

Source: Regional Joint Director, Trichy. (2013 – 14)

Table 6.1
Percentage of population in the age group 0-6

Sl. No	Block /District	2001		Percentage of 0-6 population	2011		Percentage of 0-6 population
		Total Population 2001	Population in the age group of 0-6		Total Population 2011	Population in the age group of 0-6	
1	Chinnasalem	154770	21250	13.73	182032	19800	10.88
2	Gingee	150820	19560	12.97	173517	18317	10.56
3	Kallakuruchi	163027	19708	12.09	202086	23203	11.48
4	Kalrayan Hills	49081	6914	14.09	56327	8087	14.36
5	Kanai	124998	15614	12.49	139738	16491	11.80
6	Kandamangalam	129398	12758	9.86	145181	16207	11.16
7	Koliyanur	239671	31197	13.02	280592	30883	11.01
8	Mailam	177820	20157	11.34	190235	20487	10.77
9	Marakkanam	152042	19894	13.08	201473	22996	11.41
10	Melmalaiyanur	122448	12851	10.50	141155	14889	10.55
11	Mugaiyur	178413	23695	13.28	204937	25706	12.54
12	Olakkur	83279	9088	10.91	86700	9266	10.69
13	Rishivandiyam	118665	15052	12.68	143242	17864	12.47
14	Sankarapuram	139910	19100	13.65	167038	20322	12.17
15	Thirukoilur	132350	17474	13.20	163671	21112	12.90
16	Thirunavalur	103005	15136	14.69	132567	17193	12.97
17	Thiruvennainallur	118080	17518	14.84	144927	18008	12.43
18	Thiyagadurugam	100472	15139	15.07	121217	14841	12.24
19	Ulundurpet	136266	18830	13.82	173788	22695	13.06
20	Vallam	100970	11529	11.42	109270	11155	10.21
21	Vanur	166567	16695	10.02	164696	18938	11.50
22	Vikkravandi	118321	14016	11.85	134484	15646	11.63
Villupuram District		**2960373**	**373175**	**12.61**	**3458873**	**404106**	**11.68**

Source : Census 2001 and 2011

Table 6.2
Child sex ratio

Sl. No	Block/District	Populationin the age group of 0-6						Sex-ratio	
		2001			2011			2001	2011
		Male	Female	Total	Male	Female	Total		
1	Chinnasalem	10764	10486	21250	10377	9423	19800	974	908
2	Gingee	9910	9650	19560	9486	8831	18317	974	931
3	Kallakuruchi	9895	9813	19708	12144	11059	23203	992	911
4	Kalrayan Hills	3697	3217	6914	4224	3863	8087	870	915
5	Kanai	7936	7678	15614	8483	8008	16491	967	944
6	Kandamangalam	6521	6237	12758	8326	7881	16207	956	947
7	Koliyanur	15910	15287	31197	15760	15123	30883	961	960
8	Mailam	10246	9911	20157	10337	10150	20487	967	982
9	Marakkanam	10115	9779	19894	11671	11325	22996	967	970
10	Melmalaiyanur	6640	6211	12851	7738	7151	14889	935	924
11	Mugaiyur	11956	11739	23695	13174	12532	25706	982	951
12	Olakkur	4657	4431	9088	4804	4462	9266	951	929
13	Rishivandiyam	7602	7450	15052	9160	8704	17864	980	950
14	Sankarapuram	9712	9388	19100	10453	9869	20322	967	944
15	Thirukoilur	8869	8605	17474	11060	10052	21112	970	909
16	Thirunavalur	7699	7437	15136	8961	8232	17193	966	919
17	Thiruvennainallur	8895	8623	17518	9299	8709	18008	969	937
18	Thiyagadurugam	7808	7331	15139	7699	7142	14841	939	928
19	Ulundurpet	9608	9222	18830	11643	11052	22695	960	949
20	Vallam	6052	5477	11529	5715	5440	11155	905	952
21	Vanur	8640	8055	16695	9642	9296	18938	932	964
22	Vikkravandi	7125	6891	14016	8090	7556	15646	967	934
Villupuram District		**190257**	**182918**	**373175**	**208246**	**195860**	**404106**	**961**	**941**

Source : Census 2001 and 2011

Table 6.3
Life Expectancy

Sl. No	Block /District	2001		2011	
		Male	Female	Male	Female
1	Villupuram District	65.2	67.6	70.4	75.7

Source : Census 2001 and 2011

Table 6.4
Women access over resource and credit

Sl. No	Block/District	Number of Self Help	Number of members	Credit availed
1	Chinnasalem	462	7392	838
2	Gingee	883	14128	810
3	Kallakurichi	464	7424	1059
4	Kalrayan Hills	152	2432	489.50
5	Kanai	884	14144	1091
6	Kandamangalam	612	9792	1573.50
7	Koliyanur	886	14176	1929.25
8	Maarkanam	948	15168	1014.50
9	Mailam	793	12688	865.59
10	Melmalayanur	705	11280	739.50
11	Mugiayur	1378	22048	1671.75
12	Olakkur	520	8320	584.75
13	Rishivandiyam	911	14576	751.50
14	Sankarapuram	717	11472	657
15	Thirukoilur	709	11344	642.75
16	Thirunavalur	740	11840	952.50
17	ThiruvennaiNallur	527	8432	646.25
18	Thiyagadurgam	132	2112	339.50
19	Ulundurpet	748	19968	1002.25
20	Vallam	771	12336	729
21	Vanur	923	14768	976
22	Vikravandi	719	11504	81725
VillupuramDistrict		**15584**	**249344**	**19260.75**

Source: Mahalir Thittam, Villupuram (2013– 14)

Table 6.5
Worker Participation Rate

Sl. No.	Block/District	Female	Male
1	Chinnasalem	46.50	58.89
2	Gingee	44.94	59.96
3	Kallakurichi	39.66	58.50
4	Kalrayan Hills	56.17	59.84
5	Kanai	43.04	57.86
6	Kandamangalam	38.51	59.60
7	Koliyanur	25.47	56.93
8	Mailam	32.47	57.50
9	Marakkanam	31.94	58.48
10	Melmalayanur	49.88	61.43
11	Mugaiyur	38.40	57.85
12	Olakkur	43.41	60.39
13	Rishivandiyam	45.67	58.72
14	Sankarapuram	38.03	58.14
15	Thirukoilur	37.84	57.38
16	Thirunavalur	44.66	57.70
17	Thiruvennainallur	41.56	58.44
18	Thiyagadurgam	43.48	57.94
19	Ulundurpet	38.69	55.01
20	Vallam	52.34	62.04
21	Vanur	39.73	59.07
22	Vikravandi	40.01	58.80
Villupuram District		**39.92**	**58.44**
State		**45.2**	

Source: Census 2011

Table 6.6
Agricultural Wage Rate

Sl.No.	Block/District	Female Agricultural Wage Rage	Male Agricultural Wage Rage
1	Chinnasalem	100.00	250.00
2	Gingee	85.00	300.00
3	Kallakurichi	90.00	300.00
4	Kalrayanhills	90.00	200.00
5	Kanai	90.00	200.00
6	Kandamangalam	100.00	200.00
7	Koliyanur	85.00	300.00
8	Mailam	90.00	300.00
9	Marakkanam	80.00	300.00
10	Melmalayanur	80.00	300.00
11	Mugaiyur	100.00	200.00
12	Olakkur	80.00	300.00
13	Rishivandiyam	90.00	300.00
14	Sangarapuram	90.00	300.00
15	Thirukoilur	80.00	200.00
16	Thirunavalur	100.00	250.00
17	Thiruvennainallur	100.00	200.00
18	Thiyagadurgam	90.00	300.00
19	Ulundurpet	90.00	200.00
20	Vallam	80.00	300.00
21	Vanur	110.00	350.00
22	Vikkiravandi	100.00	300.00
Villupuram District		**91**	**266**

Source:Deputy Director of Statistics, Villupuram (2013-14)

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:

7.2.1 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 HHs having access to 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, two 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 **blocks** with reference to the 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)

   However, for per capita income, first convert the actual per capita income, the minimum per capita income and maximum per capita income into natural log values before converting into the index.

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

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

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

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

Construction of Gender Inequality Index (GII)

Introduction

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

Indicators considered for measuring GII in at Taluk Level

Dimensions	Indicators
Reproductive 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 with in each gender group using geometric mean.

For females

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

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. Aggregatingacrossgendergroupusinga Harmonicmean.

$$HARM(G_F, G_M) = \left\lfloor \frac{\left\lceil (G_F)^{-1} + (G_M)^{-1} \right\rceil^{-1}}{2} \right\rfloor$$

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

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

Where

$$\overline{health} = \left\lfloor \frac{\left\lceil \left(\frac{1}{MMR} \times ID \times ANE \right\rceil^{1/3} + 1 \right\rceil}{2} \right\rfloor$$

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

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

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

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

Construction of Child Development Index (CDI)

9.1 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), Universityof 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 enrollment in schools
	Transition rate from primary to upper primary and upper primary to secondary

Computation of Child Development Index

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

Multidimentional 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 Multidimentional 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 by using the formula –

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

Eg: Calculations will be based on highest values being assigned highest ranking

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

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

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

Abbreviations

AIDS	- Accrued Immune Deficiency Syndrome
AL	- Agricultural Laborors
ANC	- Ante Natal Care
BPL	- Below Poverty Line
CBR	- Crude Birth Rate
CC	- Cement Concrete
CCE	- Continuous and comprehensive evaluation
CD	- CompactDisk
CDI	- Child Development Index
CDR	- Crude Death Rate
CL	- Cultivations
DD	- District Director
DEO	- District Employment Officer
DHDR	- District Human Development Report
DPC	- District Planning Commission
DRDA	- Department of Rural Development
EDP	- Entrepreneurship Development Programme
GDP	- Gross Domestic Product
GER	- Group Enrollment Rate
GII	- Gender Inequality Index
HDI	- Human Development Index
HDR	- Human Development Report
HH	- House Hold

HHI	- House hold Industries
HIV	- Human Immune Deficiency Virus
IAY	- Indira Awards Yojana
ICDS	- Integrated Child Development Services
ICT	- International and Communication Technologies
ID	- Institutional Delivers
IFA	- Iron Folic Acid
IGP	- Income Generation Programme
IMR	- Infant Mortality Rate
INGO	- International Non Governmental Organisation
ITI	- Industrial Training Institute
LEB	- Life Expectancy Birth
M	- Municipalities
MDWS	- Ministry of Drinking water and sanitation
MGNREGS	- Mahatma Gandhi National Rural Employment Guarantee Scheme
MMR	-Maternal Mortality Rate
MPI	- Multi- Dimensional Poverty Index
MSME	- Micro Small and Medium Enterprises
NBA	- Nirmal Bharath Abhiyan
NDP	- Net Domestic Product
NGO	- Non Governmental Organisation
NH	- National Highways
OBC	- Other Backward Classes
OW	- Other Workers
PDS	- Public Distribution System

PHC	- Public Health Centre
PNC	- Post Natal Care
PRI	- Panchayat Raj Institution
RLB	- Rural Local Bodies
RMSA	- Rashtriya Madhya Milk Siksha Abhijan
Rom	- Read Only Memory
SABL	- Simplified ActivityBased Learning
SBR	- Still Birth Rate
SC	- Scheduled Caste
SHG	- Self HelpGroup
SPC	- State Planning Commission
SRI	- System of Rice Intensification
SSA	- Sarva Shiksha Abhiyan
ST	- Scheduled Tribes
TANSACS	- Tamil Nadu State Aids Control Society
TB	- Tuberculosis
TFR	- Total Fertility Rate
TNPWHA	- Tamil Nadu P
TP	- Town Panchayats
U5MR	- Under 5 Mortality Rate
ULB	- Urban Local Bodies
UN	- United Nation
UNDP	- United Nations Development Programme
UPS	- Uninterrupted Power Supply
WBM	- Water Bound macadam
WPR	- Worker Participation Rate

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