District Human Development Report - 2017

Ramanathapuram District

State Planning Commission
Tamil Nadu

RAMANATHAPURAM

DISTRICT HUMAN DEVELOPMENT REPORT 2017

District Administration, Ramanathapuram and
State Planning Commission, Tamil Nadu
in association with
DHAN Foundation

Contents

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MESSAGE

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

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

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

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

ANIL MESHRAM
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Preface

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Tamil Nadu Vision 2023 aims at making the state "Numero UNO" State in India to achieve the levels of Human Development on par with the developed countries. The Human Development reports brought out by the state has brought the achievements and intra district disparities in human development attainments which demands to create basic infrastructure at the habitation level for addressing the specific issues. It calls for innovative programs which require inputs for addressing the backwardness and mainstreaming those backward areas. The preparation of DHDR would form a basis for the preparation of the Perspective plan with a human development perspective to have contextualized interventions.

Human Development is a continuous process of enlarging people's choices relating with, to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. The present report strives to measure, compare and document the extent of development in blocks relating to the above said choices to the local community. It has captured the status of Human Development of Ramanathapuram District through Human development index (HDI), Gender Inequality Index (GII), Child Development Index (CDI) and Multidimensional poverty index (MPI), which is a composite index highlighting the benchmarks and concerns in the district.

The range observed across the blocks in HDI value is 0.60 ((Ramanathapuram (0.92) to Bogalur (0.32)), the range lower in case of GII (0.10) and highlights the industrial backwardness. Gender equality in district is better than that of Human Development. The report calls for consideration of three more blocks, i.e. Nainarkoil, R. S. Mangalam and Tiruvadanai blocks as backward blocks besides the seven blocks, namely Bogalur, Kadaladi, Kamuthi, Mandapam, Mudhukulathur, Paramakudi and Tirupullani under State Balanced Growth Fund.

The process of preparation of the DHDR has enabled the district administration to have a core committee to review the progress and to moot proposals under State Balanced Growth Fund. I thank the State Planning Commission for this opportunity and place on record the appreciation for District Planning Cell and DHAN Foundation, in preparation of the report with the latest data (2013-14) through a systematic process of validation with the line departments and the State Planning Commission.

Having completed the District Human Development Report, the challenge is to build ownership among stakeholders through goal setting for each block and set systems and process at the district and block level for tracking. I look forward for all the departments and stakeholders to take advantage of the investment made by disseminating the findings and to build their capacities by mooting innovative proposals and build convergence with the existing schemes to improve the human development index resulting in a model district for the State.

(K. Nanthakumar)

Acknowledgement

We take great pleasure in acknowledging the contributions of the stakeholders which has enabled us to prepare Ramanathapuram District Human Development Report. We express our sincere gratitude to State Planning commission and District Administration 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.

Our thanks to **Thiru P.Selvarajan,** Head of Division, Rural Development and District Planning, State Planning Commission who added value during the review process which has enabled us to shape the report. Our special thanks to **Selvi S.Namagiri,** Senior District Planning Officer, State Planning Commission, who stood along with us from the initial stage to last with lot of challenges in building the capacities of resource institutions through regular feedback. We also thank **Dr. G.N.Krupa,** Planning Officer, for technical clarification on working the indices and also to **Tmt. P.Ruth Pramila,** Senior Planning officer who extended her support by correcting grammatical mistakes and language flow page by page.

We are very much thankful to the District Collector, **Thiru K.Nanthakumar, IAS** who made DHDR to be functional and shaped well by data validation, interpretation of data with ground reality, facilitating line department heads for consummate the task and for follow up. Our special thanks to **Tmt. S.Baby Ebenezer,** Former District Planning Officer, who facilitated the constitution of Core Committee and joined field visit to record case studies, which has enabled us to prepare the quality report and **Thiru S.Satheesh Kumar**, Former Technical Assistant for his timely and tireless assistance, particularly in facilitating data collection and validation from line departments and in organizing meetings at district level. We extend our thanks to **Thiru P.Shankar,** District Planning Officer who operationally supported to get factual informations. We thank **Thiru R.Thangaraj**, Technical Assistant, District Planning Cell for his timely data validation from line departments and **Tmt. M.Soundravalli,** Assistant for her timely data collection and all secretarial support.

Our sincere thanks to all the concerned heads of the departments, officials of the Statistics, Agriculture, Fisheries, Health, Education (SSA and RMSA), Animal Husbandry, Mahalir Thittam, Pudhu vazhalvu Thittam, DIC, DRDA, AD, Panchayat, Electricity board, PWD, District Employment Office, Transport, General Manager, Lead Bank, Social welfare department, ICDS, Insurance companies and all line departments of Ramanathapuram for their cooperation in providing the data and participating in various meetings for the preparation of the report.

Our sincere thanks to **Thiru M.P.Vasimalai,** Executive Director, DHAN Foundation, for his consistent followup of our work and provided strategic guidance in writing the report. We thank the team constituted by the DHAN Foundation under Centre for Research namely **Thiru A.Madhankumar**, Programme Leader, **Tmt. A.Umarani,** Programme Leader, **Tmt. R.Sasikala,** Team Leader, **Thiru. S.Sivanandhan,** Team Leader and **Thiru S.Arunjai Peter Pradheep**, Programme Associate who were instrumental in validating the data, drawing the quality inference, and for providing logistics support to complete the report.

We look forward for the continuous support and guidance from the district in preparing the perspective plan for the backward blocks banking on the investment made in preparing the DHDR. Once again we thank State Planning Commission for providing us this great opportunity and also guiding us in successful completion of DHDR for Ramanathapuram district.

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List of Boxes

List of Figures

List of Tables

CHAPTER 1
RAMANATHAPURAM DISTRICT - A PROFILE

1. District Profile

Introduction

Physical, historical, cultural, geographical and economical pattern of the district has close relation to human development. This information facilitates the human development measures by greater access to knowledge, better nutrition and health care services, secure livelihoods, security against crime and physical violence, satisfied leisure hours, political and cultural freedom and participation in community activities. Ramanathapuram is a developing district, in terms of human and economic development.

This chapter presents an overview of the Ramanathapuram district context in relation to human development. A detailed analysis of the issues is taken up in the forthcoming chapters.

Topography

Ramanathapuram District is an administrative district of Tamil Nadu State in southern India. The city of Ramanathapuram is the district headquarter. The geographical position of the district lies between Northern Latitude 9.05^0 and 9.50^0; Eastern Longitude between 78.10^0 and 79.27^0. The district has an area of 4123 km², occupies 3.16 percent of area in the State. It is bounded on the north by Sivagangai District, on the northeast by Pudukkottai District, on the east by the Palk Strait, on the south by the Gulf of Mannar, on the west by Thoothukkudi District, and on the northwest by Virudhunagar District. Pamban Bridge is a railway bridge which connects the town of Rameswaram on Pamban Island to mainland India. The Palk Strait is navigable only by shallow-draft vessels.

The district has a hot tropical climate, temperature ranging from 22.3^0 C as a minimum to 37.8^0 C as a maximum. The relative humidity is as high as 79 percent on an average, it ranges between 80 to 90 percent in coastal areas.

Soil type: Soil type is mostly Clay, red and Alluvium with high Zinc content which is Nature's gift to the district. It is one of the reasons for high chilly cultivation in the district than other districts in Tamil Nadu. Zinc is an essential micronutrient for the normal, healthy growth and reproduction of plants. Ramanathapuram chilly have uniqueness in colour and pungency. Basically, the district soil type is favorable for water storage. Coastal sandy plains are underlined by heavy clay soils at a depth of 2 to 3 m. Rain water percolating in surface can be potentially harvested by farm ponds or tanks for irrigation.

Nearly 50 percent of the surface area has deep red soil. Kamuthi and Paramakudi blocks have very deep red, black and moderately deep black soil. These blocks are suitable for pulses and horticultural crops. The characteristics of black soil are shrinking and swelling, they are very hard when dry and very sticky when wet. Black soils are especially suitable for rice. Alluvial soil is highly suitable for agriculture, especially crops such as paddy, sugarcane and plantain. Red soil has high iron content and is fit for pulses and groundnut. Black soil is rich source of calcium, potassium and magnesium, but has poor nitrogen content, Cotton, Tobacco, Chilly, Gingelly, Sorghum, Ragi and Maize grow well in it.

Rainfall: Volume of rainfall received in Ramanathapuram district is 827 mm. In 2011-12, the rainfall volume expected was 801 to 1000 mm, but actual rainfall received was below 800 mm[1]. The district is known to get 60.7 percent benefit from North East Monsoon; 16.4 percent from showers during the South West Monsoon and remaining 14.8 percent rainfall in summer periods. Based on the rainfall volume received by the district, the district is coming under area of low precipitation and it leads to drought. As drought is high in the district; it affects the economy, health, standard of living, industrial growth, social and cultural changes among the people.

History

In early 12th century Qutbul Hamid, Ghosul Hamid Hazrat Badhushah Sulthan Syed Ibrahim, Shaheedh came from Medinah Saudhi Arabia to India through Kannanur, Kerala and crossed through various parts of Madurai and Ramnad districts. Vikrama Pandiyan, ruler of Bouthiramanickapattinam (Now Erwadi) fought with Syed Ibrahim Badushah rigorously for 10 days, and finally Hazrath Syed Ibrahim Shaheedh won and captured. He ruled for 12 years the Erwadi province.

In the early 15th Century the present territories of Ramanathapuram district comprising of Taluks Tiruvadanai, Paramakudi, Kamuthi, Mudukulathur, Ramanathapuram and Rameswaram were included under Pandiyan Kingdom. Rajendra Chola brought it under his territory in 1063 AD. In 1520 AD., the Nayaks of Vijayanagar took over this area under their control from the Pandiyan dynasty for about two centuries, Marava chieftains-Sethupathis who were Lords under Pandiyan Kings and reigned over this part (17th century). At the beginning of the 18th century, family disputes over succession resulted in the division of Ramanathapuram.

[1]Statistical Handbook of Tamil Nadu, 2013, Department of Economics and Statistics, Government of Tamil Nadu

In 1730, Chanda Shahib of Arcot captured Ramanathapuram. In 1741 the area came under the control of the Marathas and then under the Nizam in 1744. Dissatisfied with the Nawab's rule, the chieftains revolted, led by the last ruling Nayak, against the Nawab in 1752. By that time, the throne of Arcot had two rivals, Chanda Shahib and Muhammed Ali, and this district was under the rule of Nawab of Arcot. The British supported Chand Sahib, whilst the French supported Muhammed Ali. This paved the way for a series of conflicts in the southern part of the continent also called Carnatic Wars. In 1795, the British deposed Muthuramalinga Sethupathy and took control of the administration of Ramanathapuram. In 1801 Mangaleswari Nachiyar was made the Zamindar of Sivagangai. After passing of Queen Velu Nachiyar, the Marudhu Brothers took the charge by paying regular revenue to the East India company. In 1803, the Marudhu Brothers of Sivagangai revolted against the British in collaboration with Kattabomman of Panchalamkurichi. Colonel Agnew captured Marudhu Brothers and hanged them and made Gowri Vallbah Periya Udaya Thevar as Zamindar of Sivaganga. After the fall of Tippu Sultan, the British took control and imprisoned the Nawab. In 1892 Zamindari system was abolished and a British Collector was appointed for the administration.

In 1910, Ramanathapuram was formed by clubbing portions from Madurai and Tirunelveli districts. Thiru. J. F. Bryant I.C.S was the first collector and this district was named as Ramanathapuram. During the British period this district was called as "Ramnad". The name continued after independence. Later the district was renamed as Ramanathapuram to be in conformity with the Tamil name for this region.

Administrative Setup: The district has been divided into two divisions for Administrative purposes, viz., Ramanathapuram and Paramakudi. The district has seven Taluks of Ramanathapuram, Tiruvadanai, Rameshwaram, Paramakudi, Mudukulathur, Kamuthi and Kadaladi and consists of eleven blocks, namely, Tiruvadanai, Rajasingha Mangalam (R. S. Mangalam), Paramakudi, Bogalur, Nainarkoil, Kamuthi, Mudukulathur, Kadaladi, Ramanathapuram, Tirupullani and Mandapam. The district has 400 revenue villages, 429 village panchayats, 2362 hamlets, 4 municipalities (Paramakudi, Ramanathapuram, Keelakarai and Rameshwaram) and 7 town panchayats (Abiramam, Kamuthi, Thondi, Mandapam, Mudukulathur, R. S. Mangalam and Sayalkudi).

Language

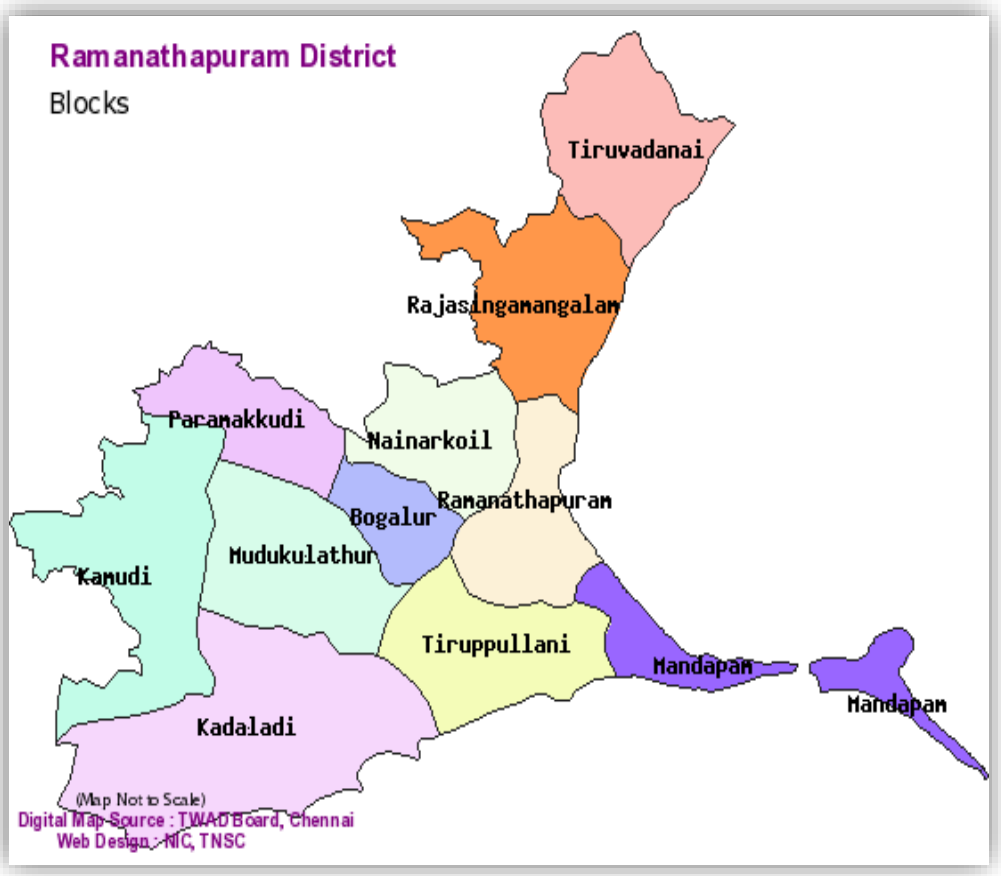
The official language in Ramanathapuram district is Tamil.

Art, Architecture and Culture

Art and Culture represent the refinement of a civilization and are transmitted through generations also potted by practice. Science and Art contribute mutually to enhance each other. Ramanathapuram symbolizes the communal harmony of the coastal southern district, where members of Muslim, Hindu and Christian communities live in harmony.

Rameswaram is a popular town in Ramanathapuram district of Tamil Nadu. The beautiful city is well known for its enchanting sea shores, tourist attractions, lofty Pamban Bridge and much more. Being the major pilgrimage center, the town is surrounded by Sri Ramanathan Swamy temple, Agnitheertham, Nambu Nayagiamman Temple and Satchi Hanuman Temple. The culture of Rameswaram involves a fine blend of legendary stories, architectural brilliance, religion and people. Rameswaram culture is depicted through art, music, drama, cuisine and festivals. The temples in the city hold rich architectural design and they were carved by experienced people.

The former President Dr. A.P.J. Abdul Kalam house has been converted into a museum in Rameswaram. Many rare photographs of his childhood life can be seen in the gallery. People in the city are friendly in nature and they maintain equality in terms of their religion and caste. Rameswaram is also a tourist destination which attracts the leisure lovers during the summer season. We can find a number of historical places and ancient religious temples in the town.



Map 1.1: Ramanathapuram District (Block)

Demography

Ramanathapuram district had a population of 1353445 as of Census 2011. The district was 30.34 percent urbanized and less urbanized than the State, urbanization of 48.40 percent. The district consists of 69.66 percent of the rural population. This district has the highest number of Muslims (as a percentage of total population) in the State followed by Vellore District. The religious composition of the district: Hindus - 80.41 percent; Muslims - 14.4 percent; Christians - 5.08 percent; and others - 0.11 percent.

The district has a population density of 331 inhabitants. The district population density is lower than that of State, 555 in 2011 census. Its population growth rate over the decade 2001-2011 is 13.96 percent and lower than the growth rate of State, 15.61 percent and nation 17.64 percent. The district has a sex ratio of 983 females for every 1000 males and child sex ratio of 961 girls for every 1000 boys in the age group 0 to 6 years as per Census 2011. Ramanathapuram district occupies a share of 1.88 percent of the total population of the State. Share of scheduled caste and scheduled tribe's population in the total population is 18.40 percent and 0.08 percent respectively.

Table 1.1: District Basic Demographic Indicators

Indicators	District	
	2011	**2001**
Total Population (in numbers)	1353445	1187604
Sex Ratio (in numbers)	983	1036
Child Sex Ratio (in numbers)	961	964
Density of population per Sq. km (in numbers)	331	290
Urban population (in %)	30.34	25.46
Percentage of 0-14 years old (in %)	24.55	-
Decennial growth (in %)	13.96	6.12

Source: Census 2001 and 2011

Economy

The district income is defined as the sum total of the economic value of all goods and services produced within a district. The production of goods and services crop up in one of three sectors. It is roughly like a series; each sector will pass its output to the subsequent sectors, these sectors are primary (produce goods using resources in the location), secondary (acquire the raw materials from the primary sector and turn them into refined goods) and tertiary (offer services for consumers or businesses).

Out of three sectors, the maximum propotion of the labour force, mainly depends on the primary sector, *viz.*, Agriculture and fishing:

Agriculture and allied activities has a significant role in the district mainly in rural areas. Paddy is the main food crop cultivated in more than 74 percent of the net area sown. The net sown area of paddy is 1.28 lakh ha with a contribution of 6.77 percent share to State total paddy cultivation[2] and the paddy production share was 5.88 percent in State total paddy production. Paddy is cultivated as irrigated and in rain-fed conditions. The district stands first in the State in chilly production and the area under cultivation, nearly 9.41 percent of the net sown area in the district is used for chilly cultivation. Major source of irrigation in the district is tanks. The irrigated area from the net cropped area is 31.45 percent, nearly one fold less than the State's 59.45 percent. The major crops cultivated in the district are Paddy, Millets, Groundnut, Gingelly,

[2] Statistical Handbook of Tamil Nadu, 2013, Department of Economics and Statistics, Government of Tamil Nadu

Cotton, Pulses, Vegetables, Chilly, and Coconut[3]. Normal area productivity and Production of Major crops are listed below.

Table 1.2: Normal area productivity and Production of Major crops, 2013

Sl. No.	Crop	Normal area in Ha.	Productivity per Ha. in Kgs.	Production in Metric Tones
1	Paddy	1,28,000	2552	3,27,859
2	Sorghum	2117	862	1825
3	Pearl millet	889	1123	998
4	Ragi	1448	1331	1927
5	Minor Millets	404	448	181
Total millets		**4858**	**941**	**4931**
6	Pulses	3362	491	1651
7	Cotton	2733	2.40 (Bales)	6559
8	Groundnut	6112	88.5	5409
9	Sunflower	145	351	51
10	Gingelly	1636	404	661
11	Chillies	16,292	808	13,164
12	Coriander	1748	254	443
13	Coconut	7942	14,000	1112 lakh nuts
14	Sugarcane	231	124	28,644

Source: http://www.ramnad.tn.nic.in/, Ramanathapuram

Sectoral contribution to Gross District Domestic Product (GDDP) is a vital indicator to appraise the economic growth of the district. Among the three sectors, the **primary sector** is the major sector in terms of employment. Though the proportion of agriculture and allied activities workers decreased from 49.3 percent in Census 2001 to 42.1 percent in Census 2011, it still has the biggest contribution to employment in rural areas. Even though the primary sector continues to account for the bulk of employment, the output is not proportionate. While analyzing the series of data from 2004-05 to 2011-12, the growth rate of primary sector, GDDP has varied from 16.29 percent in 2011-12 to -15.40 percent in 2007-08 at constant prices. The annual average growth rate of the primary sector in the district is 2.91 percent. Income from the primary sector was Rs.92578 lakh in 2011-12.

[3] Ramanathapuram District Hand book, 2011

Table 1.3: Gross District Domestic Product at constant price

Sl. No.	Year	District (Rs. in lakh)			
		Primary	Secondary	Tertiary	Total GDDP
1.	2009-10	77595	86786	281953	446334
2.	2010-11	79610	102166	313310	495086
3.	2011-12	92578	105609	332152	530339

Source: Department of Economic and Statistics, Ramanathapuram

The share of primary sector in GDDP was 17.46 percent, higher than the State primary sector contribution of 8.94 percent in 2011-12 but less than the secondary and tertiary sector's contribution of 19.91 percent and 62.63 percent, respectively. It proves the agriculture and fishery sector dependency of the district. The detailed analysis of the primary sector is furnished in Chapter 3.

Secondary sector: Income from the secondary sector was Rs.105609 lakh in 2011-12. While analyzing data from 2004-05 to 2011-12, the growth rate of secondary sector shows fluctuation from 65.87 percent in 2006-07 to – 19.38 percent in 2007-08 at constant prices. The share of secondary sector from total GDDP has decreased from 20.14 percent in 2004-05 to 19.91 percent in 2011-12 at constant prices. The share of district secondary sector, 19.91 percent was less than State secondary sector contribution of 30.10 percent in 2011-12. The district occupied 27th rank out of 32 districts in secondary sector income during 2011-12. The detailed analysis of the secondary sector is furnished in Chapter 3.

Tertiary sector: Income from the tertiary sector was Rs.332152 lakh in 2011-12. While appraising the data series from 2004-05 to 2011-12, the growth rate of tertiary sector shows fluctuation from 14.73 percent in 2006-07 to 5.24 percent in 2009-10 at constant prices. When compared with the primary and secondary sector, the tertiary sector share was higher from 2004-05 to 2011-12. Due to higher income in the tertiary sector, the primary and secondary sector labour move towards this sector. The share of district tertiary sector increased from 55.63 percent in 2004 - 05 to 62.63 percent in 2011 - 12. The detailed analysis of the secondary sector is furnished in Chapter 3.

Industry

Ramanathapuram district is an industrially backward district. Out of eleven blocks, except Ramanathapuram and Paramakudi, other blocks have been categorized as industrially backward blocks by MSME Department. In Census 2011, nearly 0.25 lakh people were involved as

household workers, it comes around 4.18 percent of the total workers. Among the eleven blocks, Paramakudi block shows a higher percentage of household workers, 13.06 percent. Well-established charcoal producer companies, which are managed by the community and weaving were the main reasons for a higher percentage of household workers in Paramakudi areas. List of Large and medium scale industries are furnished below. Throughout the district, the availability of large and medium scale industries is only six. Government and private sector investment in Ramanathapuram district is very low, main reasons for lower industrial development is as follows,

- Lack of mineral resources
- Lack of skilled labor availability
- No marketing facility
- Climatic conditions and Water scarcity
- Less connectivity to the ports and railway networks

Table 1.4: Details of Large and Medium scale industries in Ramanathapuram district, 2013

Sl. No	Name of the industry	Address
1	Pioneer Spinning, National Textile Corporation	Kamuthakudi
2	Co-operative Spinning Mills	Achankulam, Kamuthi
3	Sri Nithiyakalyani Textile	Tiruvadanai
4	Mannan Cotton Mills	VeerasozhanRaod, Abiramam
5	Ayisha Cotton Mills	Abiramam
6	TVL. Srinithi Industries Limited	Achunthanvayal, Ramanathapuram

Source: District Industries Centre, Ramanathapuram

Permanently registered, micro and small scale industries were 349. Of which, 253 units, nearly 72 percent were tailoring on job work. As an agrarian and coastal district, 3 percent of the small scale industries only depend on agriculture products. There is an immense potential of growth of agriculture as well as fish based industries in the district. After the East coast Road (ECR) entry coastal blocks have connectivity to the main cities. The district could utilize ECR for industrial development.

Fisheries: Being costal district, Ramanathapuram accounts for maximum fish catch in the State. The share of fisheries to primary sector is on par with agricultural production of the district. The district coast is well known for pearl fishing. The regional centre for the Central Marine Fisheries Research Institute has developed proven technology for the culture of Pearls, edible oyster calm mussel and seaweed. Commercial Pearl Farming has come up near Kurusadai Island and the

Tamil Nadu Fisheries Development Corporation Limited maintains it. The District has distinct Chank fishery, Jadhi Chanks are abundant in Palk Bay strait and Gulf of Mannar. More than 2000 fishermen are engaged in active Chank diving and sacred Chank collected by divers are marketed to West Bengal for making ornaments. About 160 Prawn farms are operating in the district, which follows an intensive type of prawn culture. Prawns harvested from these farms are exported to Japan, USA and European countries, which earns sizable foreign exchange for the country. Seven fish processing factories are functioning in Thondi and Mandapam. Prawn, squids, cuttlefish, crabs and fish are processed by angling and exported to foreign countries. Many small entrepreneurs are involved in fish drying. Dried fish is used in poultry and cattle feed manufacturing.

Tourism: Ramanathapuram district is known as an important site for pilgrims, marine biosphere, and bridge over the marine area. Every year minimum 7.5 lakh pilgrims and tourist visit Rameshwaram and other historic places of Ramanathapuram. Tourism in Ramanathapuram is an emerging livelihood opportunity for villagers. Promoting tourism literacy and capacity building on the traditional, artisanal skill is the need of the hour. Important sites and monuments attracting tourist towards the districts are Dhanushkodi, Kurusadai Island, Ramanathapuram palace cum museum, Rameswaram, Sea Water Aquarium, Mandapam and Pamban, Annai Indira Gandhi Bridge, Mela-Keela Selvanoor Bird Sanctuary and Chitrangudi Bird Sanctuary, etc.,.

Income

Per capita income: The Per capita income of Ramanathapuram district is Rs. 44707 at constant prices in 2011-12, is lower when compared to State's per capita income of Rs. 63996. The district occupies 24th place out of 32 districts in per capita income during 2011 - 12. Kanniyakumari district has the highest Per capita income of Rs. 96070 followed by Kancheepuram, Thiruppur, Virudhunagar and Thiruvallur which had income over Rs.83000. The reasons behind the district low per capita income are furnished in Chapter 3.

Table 1.2: Per Capita Income (constant prices)

Sl. No.	Year	District (Rs.)	State (Rs.)
1	2010 - 2011	41681	59967
2	2011-2012	44707	63996

Source: Deputy director, Economic and Statistics, Ramanathapuram

Social Sectors

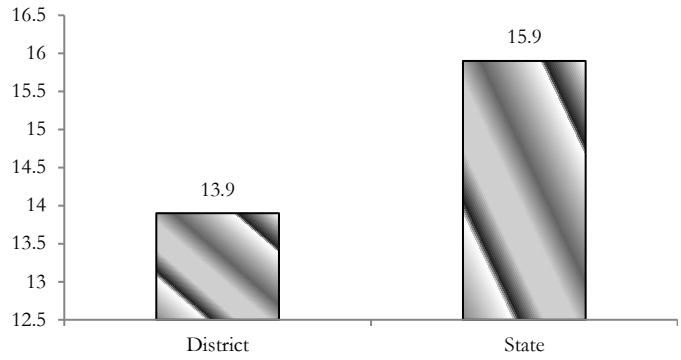
Health

Comparison of some major health indicators of Ramanathapuram with State data shows that the district has made notable strides. The overall population growth rate of the district was 13.96 percent, but in urban context the same illustrated about 35.82 percent, it was 5.5 fold higher than the rural population growth rate of 6.50 percent. Apart from birth and death, migration places an important role in population growth rate in urban areas.

Life expectancy at birth (LEB) indicates the health status of the people in the district. According to the State Human Development Report, 2003, LEB for Ramanathapuram was 63.19 years for male and 67.24 years for female which was lower than the State, 64.91 years and 68.85 years, respectively. Currently, the LEB of the district had increased to 71.2, 68.9 and 70.1 for female, male, overall respectively during 2013-14. It shows the improvement in health sector and health seeking behavior of the population.

The Crude Birth Rate (CBR) for the district has declined from 15.6 in 2012 - 13 to 13.9 in 2013 – 14 and lower than that of State CBR of 15.9. The Crude Death Rate (CDR) of the district has declined from 5.7 in 2012 - 13 to 5.6 in 2013 - 14.

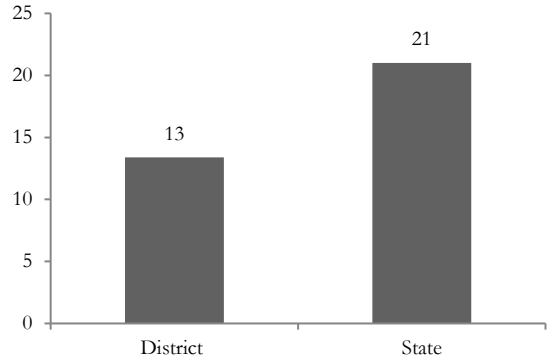
Chart 1.1: Crude Birth (2013 – 14)



Source: DDHS, Ramanathapuram

Infant Mortality Rate is a crucial factor in analyzing human development. Ramanathapuram district IMR is 13 in 2013-14, lower than the State IMR of 21, similarly, the district and State can proudly claim that the district achieved the millennium development goal of IMR less than 28.

Chart 1.2: Infant Mortality Rate (2013 – 14)



Source: DDHS, Ramanathapuram

Ramanathapuram achieved hundred percent institutional deliveries. The share of PHC and Government hospitals in terms of institutional delivery is higher than that of private hospitals.

Literacy

Literacy is a fundamental human right and the foundation for lifelong learning. It is fully essential to social and human development in its ability to transform lives. For individuals, families, and societies alike, it is an instrument of empowerment to improve one's health, one's income, and one's relationship with the world. The average literacy rate of Ramanathapuram increased to 80.72 percent in 2011 from 72.96 percent in 2001. If things are looked at gender wise, male and female literacy were 87.81 percent and 73.52 percent respectively in 2011, for 2001 census the same figures stood at 83.01 percent and 63.36 percent. Total literates in the district were 978946 of which male and female were 536487 and 442459 respectively.

The level of literacy rate in Ramanathapuram was well above the national average of 74.04 percent and above the State average of 80.09 percent. There was a gender gap in the literacy rate of the district: But compared with the national average (82.14 percent & 65.46 percent) and State's average (86.77 percent & 73.14 percent) gender gap in literacy was low in Ramanathapuram, which is a positive sign for district human development.

The **Gross Enrollment Rate** (**GER**) is a measure of total enrollment in schools. Ramanathapuram district achieved the GER in primary and upper primary as more than 100 percent in 2013-14 with the help of SSA scheme. The primary educational opportunity opened to all, irrespective of economic status of the family and gender. It ensures no child labour in the district. In terms of secondary enrollment, 95.54 percent of the children were enrolled during 2013-14.

Enrollment in higher education is lower than that of country and State. On an average, nearly 50 percent of the children have the opportunity of going for higher education, rest of the children remain unskilled workers or idle. Because of lack of skills, the opputunities are limited for labour force which in turn leads to the low per capita income of the district.

Conclusion

Ramanathapuram district is one of the developing districts in Tamil Nadu. The district contains the Pamban Bridge, an east-west chain of low islands and shallow reefs that extend between India with the island nation of Sri Lanka, and separate the Palk Strait from the Gulf of Mannar. The Palk Strait is navigable only by shallow-draft vessels. The district has a hot tropical climate. Soil type in the district is mostly Clay, red and Alluvium with high Zinc content which is Nature's gift to the district. This kind of soil type is favorable for the creation of water storage structures.

The district has three different types of context related to human development, *viz*., Rural, Urban and Coastal, each has its implication with human development in terms of knowledge, better health services, livelihood opportunities and cultural freedom. The geographical terrain of the district creates drought, lower agricultural productivity and lower urbanization than the State. It also has lower industrial growth which has consequences in lower per capita income compared to the State. The district occupies a share of 3.16 percent area with a 1.88 percent population of the State.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

2. Human Development in District

"The basic purpose of development is to enlarge people's choices. In principle, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figures: greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying leisure hours, political and cultural freedoms and sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives."

Mahbub ul Haq (1934-1998)
Founder of the Human Development Report

According to UNDP, human development is "about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests. People are the real wealth of nations. Development is thus about expanding the choices for people to lead lives that they value."

Human development means greater access to knowledge, better diet and health services, secured livelihoods, safety against the offence and physical voilence, satisfying leisure hours, political, intellectual freedoms and participation in collective affairs. Ramanathapuram district's human development status is assessed based on the computed human development index and gender inequality at block level. The current chapter deals with the Human Development Index (HDI), Gender Inequality Index (GII), Child Development Index (CDI) and Multidimensional Poverty Index (MPI) at block level, the indices computed based on proxy indicators proposed by State Planning Commission.

Human Development Index in Ramanathapuram – Inter-Block Variations

Human development is a multidimensional feature. HDI is a composite index measuring average achievement in 3 basic dimensions with 11 indicators. The dimensions are standard of living, health and education. These three dimensions crucially contribute to the human development of the block and district. Details of the indicators are given below.

Dimensions	Indicators
Standard of living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to electricity Access to Pucca houses
Health	Infant Mortality Rate

	Maternal Mortality Ratio Under 5 Mortality Rate
Education	Literacy rate Gross enrollment in Primary education Gross enrollment in secondary education

Index value falls between 0 to 1. Here closer to 1, is high index value which shows higher human development and the value shows closer to the 0, is lower index value which shows lower human development. In Ramanathapuram district, Ramanathapuram (0.92), Paramakudi (0.78) and Mandapam (0.76) blocks occupy first three ranks. Mudukulathur (0.45), Kadaladi (0.40) and Bogalur (0.32) fall in last three ranks. The range between the higher value and lower value is 0.60 ((Ramanathapuram (0.92) to Bogalur (0.32)), which indicates the inter block disparity among the blocks is high in terms of human development.

Understanding social and human behavior across the district is significant phenomena to understand about human development. The context of the particular region plays the key role in the family and community as they are the foundation of human as well as social development. The context has its own implications for social work practice. It also introduces the lifespan from childhood to age accounting for the person, social, cultural and structural dimensions. Ramanathapuram district can be classified based on three contexts.

I. Six **coastal** blocks, *viz*., Tiruvadanai, R. S. Mangalam, Ramanathapuram, Mandapam, Tirupullani and Kadaladi. Of which, Ramanathapuram, Mandapam and Tirupullani blocks are coastal with urban context and other three blocks are Coastal with rural context blocks.
II. Four **rural** blocks *viz*., Bogalur, Kamuthi, Nainarkoil, and Mudukulathur.
III. One **urban** block, Paramakudi.

A closer observation on the level of achievement in the three dimensions of human development index reveals their interrelationship with context. Generally, the standard of living indicators are relatively higher in an urban area. Similarly, focus on education and health dimensions are high in urban-based blocks, it leads to better human development. Urban context blocks such as Ramanathapuram, Paramakudi, Mandapam and Tirupullani occupied first four places in the human development index during 2013-14.

Table 2.1: Top and Bottom three blocks in Human Development Index, 2013-14

Top 3	Bottom 3
Ramanathapuram (0.92)	Mudukulathur (0.45)
Paramakudi (0.78)	Kadaladi (0.40)
Mandapam (0.76)	Bogalur (0.32)

Source: Ramanathapuram district indices computation

Bogalur has secured 11th rank, last rank in Ramanathapuram district in terms of HDI due to being backward in health and education dimensions. In this dimensions, totally six indicators were analyzed, of which, Bogalur block falls in the bottom three categories in five indicators, such as, IMR (22.20), MMR (341.30), U5MR (22.18), Literacy rate (75.56 percent) and GER in secondary education (65.25 percent).

Likewise, Kadaladi and Mudukulathur blocks have secured 10th and 9th rank in Ramanathapuram district in the human development index during 2013 - 14. Kadaladi block is backward in the following indicators, low range of Access to cooking fuel (14.55 percent), Access to toilet facilities (47.38 percent), Access to pucca houses (86.71 percent), GER in primary (99.79 percent) and GER in secondary education (56.92 percent), high IMR (16.40) and U5MR (18.85). Likewise, Mudukulathur block is backward in Access to drinking water (88 percent), MMR (326.37), Literacy rate (74.74 percent) and GER in primary education (99.67 percent).

Gender Inequality Index

The gender inequality is measured based on GII computation. The **Gender Inequality Index (GII)** is a new index developed by UNDP for assessment of gender differences in Human Development Report 2010. In developing countries, men and women do not enjoy equal opportunities and resources. Gender inequality is observed in access to education, health, participation in political, wage rate, preference for male kids, higher poverty rates for female-headed families, volience against women.

Gender inequality in Ramanathapuram – Inter-Block Variations

There are three important dimensions used to measure gender inequality among the blocks, the dimensions are Health, Empowerment and labour market. These three dimensions have fourteen indicators, which are given below

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

The gender inequality index value lies between 0 to 1. Here, the value is closer to 0 represents lower gender inequality and value closer to 1 represents higher gender inequality. The GII values reveal low range of inequality exist among blocks of Ramanathapuram district. GII Values are given in Annexure - 2.

The performance in Health, Empowerment and labour market is fine in best performing blocks *viz*., R. S. Mangalam (0.01), Paramakudi (0.02) and Ramanathapuram (0.03) blocks. Mandapam (0.09), Bogalur (0.09) and Mudukulathur (0.11) blocks fall last three ranks in GII. Range of disparity on Gender Inequality Index is 0.10. Here the range is very low when compared with Human development index of Ramanathapuram, 0.60.

Table 2.2: Top and Bottom three blocks in Gender inequality index, 2013 - 14

Top 3	Bottom 3
R. S. Mangalam (0.01) Paramakudi (0.02) Ramanathapuram (0.03)	Mudukulathur (0.11) Mandapam (0.09) Bogalur (0.09)

Source: Ramanathapuram district indices computation

In Mandapam block, low share of female elected representatives in RLBs and ULBs (33.15 percent), low female work participation rate (14.99 percent) and minimum female wage rate for agricultural works (Rs.130) causes higher gender inequality, so that the block is placed at 9th rank and GII value is 0.09. Correspondingly, high maternal mortality (341), low female literacy (65.5 percent), share of female children 0-6 years (48.6 percent), female work participation rate in non agricultural sector (13.81 percent) and minimum female wage rate for agricultural work (Rs.140) result in placing Bogalur block in 10th rank with 0.09 GII value.

Mudukulathur block ranks 11th in GII with an index value of 0.11 and occupies last rank among eleven blocks in Ramanthapuram district due to high MMR (326), low female (65.2 percent) and male literacy rates (84.3 percent), minimum share of female workers in the non agricultural sector (8.57 percent) and lowest female wage rate for agricultural works (Rs.140).

Child Development Index

The child development index (CDI) is an index merging performance measuring children's education and health. Index value was between 0 to 1. The higher the index value, i.e. closer to 1 would be the best in child development. The lower the index value, i.e. closer to zero, the worse the children faring. The child development index for Ramanathapuram district is computed based on eight indicators prescribed by SPC. Indicators and values used for CDI computation is enclosed as Annexure 3. Indicators used for CDI computation are furnished here.

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

Range of disparity noticed in CDI is 0.56 varying from Bogalur (0.26) to Ramanathapuram (0.82). Here the range is very high when compared with GII of Ramanathapuram 0.10 and less when compared with HDI, 0.60.

Health and education dimensions have been taken to analyze the child development, these dimensions are well performing in top three blocks, *viz*., Ramanathapuram, Mandapam and Tirupullani blocks.

The top and bottom three blocks of the district in the CDI is given below.

Top Three blocks with higher CDI value	Bottom Three blocks with lower CDI value
Ramanathapuram (0.82)	Kadaladi (0.39)
Mandapam (0.55)	Kamuthi (0.39)
Tirupullani (0.55)	Bogalur (0.26)

Kadaladi and Kamuthi blocks occupies 9th and 10 places correspondingly with 0.39 index value. The proportion of malnourished children is high, 39.90 percent across the Ramanathapuram district, which is the major contributing factor for backwardness of Kamuthi block. In Kadaladi block, the contributing factors for low child development are: high U5MR (18.8), malnourishment children (39.56 percent), low child sex ratio (949), GER in primary education (99.79 percent) and GER in secondary education (56.92 percent).

Among eleven blocks, Bogalur ranks 11th in CDI with 0.26 index value because of high U5MR (22.2), children never enrolled in school (1.82 percent), low child sex ratio (945), enrollment in secondary education (65.25 percent) and transition rate from upper primary to secondary (86.17 percent).

Multidimensional poverty Index

The Multidimensional Poverty Index (MPI) is a new measure designed to confine the exact shortages that the public look at the similar time. It can be used to build an image of people living in poverty and permits comparisons across blocks. Poverty can be classified as two types, *viz*., Income poverty and non-income poverty. Through MPI computation, the level of income

and Non-income poverty is assessed based on the below said proxy indicators. As per SPC guidelines, three dimensions are used to assess the poverty in Ramanathapuram district, v*iz*., Health, education and standard of living with ten indicators. Indicators used for MPI computation are furnished here.

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

The multidimensional poverty index is a composite index of diverse poverty variables. As an end result, a wide range of disparity, 0.57 has observed among the blocks. Range starts from Ramanathapuram block (0.13) to Kadaladi (0.71). Index value falls from 0 to 1, the index value closer to zero shows lower poverty with better human development and index value which falls closer to one shows a higher range of poverty with lower human development.

Like HDI, MPI is computed based on health, education and standard of living dimensions, these dimensions' performance is better in top three blocks, such as, Ramanathapuram, Paramakudi and Tirupullani blocks.

The top and bottom three blocks of the district in the Multidimensional poverty index are given below.

Top Three blocks with Lower MPI value	**Bottom Three blocks with Higher MPI value**
Ramanathapuram (0.13)	Mudukulathur (0.54)
Paramakudi (0.20)	Tiruvadanai (0.55)
Tirupullani (0.30)	Kadaladi (0.71)

Mudukulathur block is placed as 9th rank with a MPI value of 0.54, because of high range of Higher Order Birth rate (8.7 percent), drop out in secondary education (7.20 percent) as well as, low range of access to drinking water (88 percent). Likewise, Tiruvadanai block ranks 10th out of eleven blocks for the reason of high drop out in primary education (1.89 percent) and low access to drinking water (86.69 percent). Kadaladi block ranks 11th place with 0.71 MPI value. Out of ten indicators used for MPI computation, eight indicators are backward in Kadaladi block, such as, high IMR (16.40), HOB (9 percent), malnourished children (39.56 percent), drop out in

primary education (1.5 percent), drop out in secondary education (12.03 percent), minimum range of cooking fuel (14.55 percent) and access to toilet facilities (47.38 percent).

Conclusion

Disparities within a country, State, district or a block may be caused due to the unequal spread of natural capital and/or fabricated in the sense of neglect of some regions, preference for investment and infrastructural facilities. Within the district communal factors have added regional disparity. It is reflected in Human Development status of the district.

The range between the higher HDI value and lower HDI value is 0.60 (Ramanathapuram (0.92) to Bogalur (0.32)), the range lower in case of GII (0.10), gender equality in district is better than that of HDI. Similarly, the CDI range starts from Bogalur (0.26) to Ramanathapuram (0.82) and the MPI range starts from Ramanathapuram (0.13) to Kadaladi (0.71).

While assessing the four indices, Ramanathapuram block occupies the first rank in HDI, CDI and MPI, Paramakudi block occupies the second rank in HDI, GII and MPI, Tiruvadani block occupies the fifth rank in HDI, GII and MPI and Nainarkoil occupies the eighth rank in HDI, CDI and MPI. In terms of HDI and CDI, Bogalur block occupies the eleventh rank. Likewise, in HDI and MPI, Mudukulathur block ranks ninth. R. S. Mangalam occupies the seventh rank in CDI and MPI, and Tirupullani block occupies third rank in CDI and MPI.

The overall outcome of the four indices has furnished here.

Table 2.3: Consolidation of HDI, GII, CDI and MPI indices, 2013-14

S. No.	Block	HDI		GII		CDI		MPI	
		Index value	Rank	Index value	Rank	Index value	Rank	Index value	Rank
1	Bogalur*	**0.32**	**11**	**0.09**	**10**	**0.26**	**11**	0.46	6
2	Kadaladi*	**0.40**	**10**	0.04	4	**0.39**	**9**	**0.71**	**11**
3	Kamuthi*	0.54	7	0.07	8	**0.39**	**10**	0.45	5
4	Mandapam*	***0.76***	***3***	**0.09**	**9**	***0.55***	***2***	0.31	4
5	Mudukulathur*	**0.45**	**9**	**0.11**	**11**	0.51	6	**0.54**	**9**
6	Nainarkoil	0.46	8	0.06	7	0.40	8	0.51	8
7	Paramakudi*	***0.78***	***2***	***0.02***	***2***	0.54	4	***0.20***	***2***
8	R. S. Mangalam	0.61	6	***0.01***	***1***	0.49	7	0.48	7
9	Ramanathapuram	***0.92***	***1***	***0.03***	***3***	***0.82***	***1***	***0.13***	***1***
10	Tirupullani*	0.71	4	0.06	6	***0.55***	***3***	***0.30***	***3***
11	Tiruvadanai	0.66	5	0.05	5	0.52	5	**0.55**	**10**

Source: Ramanathapuram district indices computation

* SBGF Blocks

Human development is better in urban based blocks than that of rural context. The urban context blocks, *viz*., Ramanathapuram, Paramakudi, Tirupullani and Mandapam have better human development than rural based blocks, such as, Bogalur, Kadaladi, Kamuthi, Mudukulathur, Nainarkoil and R. S. Mangalam.

Way forward

Across the district, drought is a common concern. As per State Planning Commission (SPC) under State Balanced Growth Fund (SBGF) seven blocks have been declared as backward blocks (Bogalur, Kadaladi, Kamuthi, Mandapam, Mudukulathur, Paramakudi and Tirupullani).

Based on the indices computation and field reality, Human development in Nainarkoil, R. S. Mangalam and Tiruvadanai blocks needs improvement, hence, inclusion of these three blocks as backward blocks under SBGF will improve the overall Human Development of the district.

CHAPTER 3

EMPLOYMENT, INCOME AND POVERTY

3. Employment, Income and Poverty

Introduction

As per International Labor Organization (ILO), 40 percent of the workforce are poor despite having employment, which reveals that employment itself does not remove poverty. People who are paid low for a long period results in insecure lives, and also; it reveals the dismal situation of the employment prospects. According to the United Nations Research Institute for Social Development (UNRISD), growing work efficiency leads negative impact on work creation. Improving employment opportunities and enhancing labour efficiency will facilitate eradication of poverty. Service sector alone shows such prospects whereas, the manufacturing and agricultural sectors need to ensure the scope of enhancing employment opportunities and work efficiency.

Human Development in the district will be protected by secure livelihood with standard earning. The Government initiatives in ensuring minimum wages to poor through rural development work are providing secure livelihood. The current chapter deals the impact of work participation rate, distribution of workers in various sectors, employment opportunity by Government, growth in per capita income, growth in GDDP, the prevalence of poverty and contribution of public distribution system in human development.

Employment

Size of workforce and Work Participation Rate (WPR)

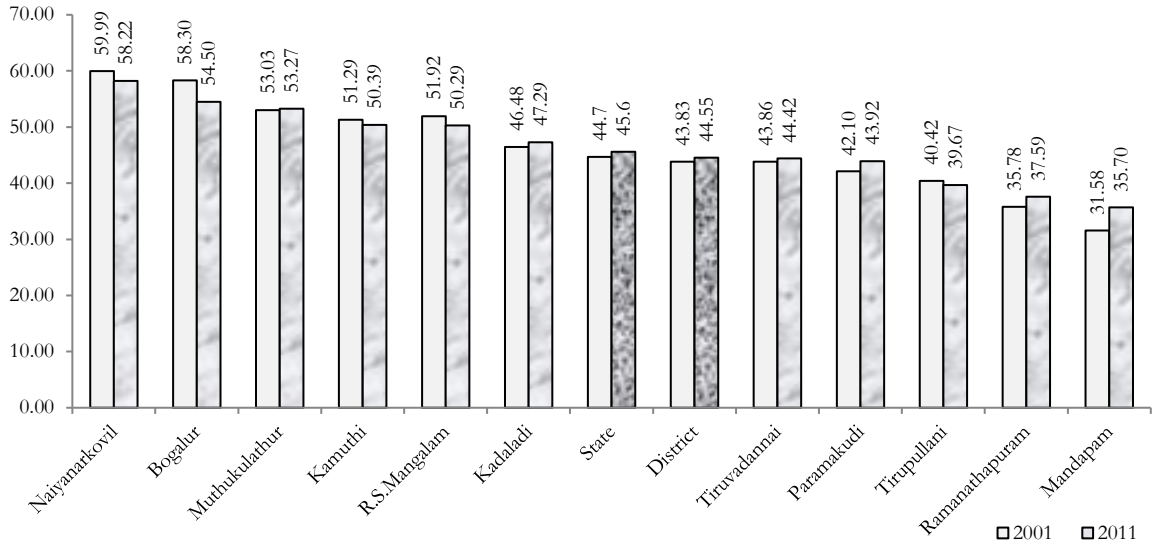
Ramanathapuram is an agrarian, drought prone and coastal district. Work participation rate of the district has increased from 43.83 percent in 2001 to 44.55 percent in 2011 census, at a growth rate of 15.83 percent (Figure 3.1) whereas the State's WPR has increased from 44.7 percent in 2001 to 45.6 percent in 2011. The working population in the district is 6.03 lakh in 2011, an increase of approximately 0.82 lakh over 5.20 lakh in 2001. Out of 6.03 lakh working population, 4.86 lakh workers are main workers and 1.17 lakh workers were marginal workers. Nonworkers of the district have decreased from 56.17 percent in 2001 to 55.45 percent in 2011, 7.5 lakh persons from the total population were nonworkers.

Table 3.1: Workers and Non-workers

Total workers		Main Workers		Marginal Workers		Non-workers		Total Population	
2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
520573	602977	433443	486150	87130	116827	667031	750468	1187604	1353445

Source: Census 2001 and 2011

Chart 3.1: Block wise work participation rate for Ramanathapuram district



Source: Census

Nainarkoil block stands first in WPR among 11 blocks in 2001 and 2011 census as 59.99 percent and 58.22 percent respectively. Mandapam block stands least in WPR as 31.58 percent and 35.70 percent in 2001 and 2011 census respectively. While assessing the top three blocks in WPR, nearly 80 to 85 percent of the workforce are involved in agricultural activities and are in rural blocks, whereas in the bottom three blocks, nearly 60 to 80 percent of the workers involved in non agricultural activities and are in urban areas. Here, the female WPR is very low. Female WPR in urban context is 14.20 percent lower than the rural context, 38.76 percent in 2011; similarly, the percentage of nonworkers' in these bottom three blocks is more than 60 percent. Urban areas have immense potential of employment opportunityboth for men and women. But more number of male are migrating than women leading to lower female work participation.

WPR growth rate: The WPR declined in Bogalur (-3.80 percent), Kamuthi (-0.91 percent), Nainarkoil (-1.77 percent) and R. S. Mangalam (-1.63 percent) blocks. Whereas, in Kadaladi (0.81 percent), Mandapam (1.79 percent), Mudukulathur (0.25 percent), Paramakudi (1.82 percent), Ramanathapuram (1.82 percent), Tirupullani (3.56 percent) and Tiruvadanai (0.56 percent) blocks increased. Urban areas shows increase in WPR whereas the complete agricultural belt

shows decline in WPR. It indicates agricultural activities in the district are in a decreasing trend. Agriculture plays a vital role in employment generation. In 2011, 85.37 percent of workers is under agricultural sector in Nainarkoil block, and hence stands first in WPR among 11 blocks, whereas in Mandapam, only 14.43 percent of the workers were under agricultural sector stand last in WPR.

Table 3.2: Percentage of Work Participation Rate

WPR	2001	2011
Total	**43.83**	**44.55**
Male	54.97	57.53
Female	33.08	31.34
Rural	**48.10**	**48.77**
Male	56.14	58.65
Female	40.39	38.76
Urban	**31.35**	**34.87**
Male	51.62	54.98
Female	11.38	14.20

Source: Census 2001 & 2011

The positive growth in WPR has witnessed both in rural and urban areas. The WPR is higher in rural areas (48.77 percent) compared to urban areas (34.87 percent), because of agriculture, fishing and salt activities creates employment opportunities to a huge number of workers in rural areas. But, the growth of WPR in rural areas is meager (0.67 percent) when compared with urban areas (3.52 percent) from 2001 to 2011. The main cultivators in the district, rural areas were 1.46 lakh in 2011, a decrease of approximately 0.17 lakh over 1.63 lakh in 2001. Here, the main cultivators have been transformed as marginal cultivators and agricultural laborers.

Male WPR has increased to 57.53 percent in 2011 from 54.97 percent in 2001, but, female WPR has decreased to 31.34 percent in 2011 from 33.08 percent in 2001. Increasing trend of male WPR shows no child labour in the district. Eradication of child labour from the district is the biggest achievement to enhance human development.

Box 3.1: Child Labour decline in Ramanathapuram

Government acknowledged guarding child labour from abuse and work in dangerous situation which would affects the child's physical and mental growth. According to the survey 2003, 937 child labours have been identified, of which 307 children were in hazardous occupations (Source: Commissioner of labour, 2003). The Continuous effort by labor welfare department eliminated the child labourers from Ramanathapuram district. Through Residential Special Training Centre (RSTC) and Non Residential Special Training Centre by Sarva Shiksha Abhiyan (The Education for All Movement) elementary education has been universalized. The success of child labor elimination is due to diverse collective programmes by the government, viz. Nutrition, noon meal schemes, free supply of uniforms, books, school bags, free bus passes, bicycle, free laptop and other incentive schemes for increasing school enrollment.

Main & Marginal workers:

In Ramanathapuram district, the total worker are classified into 4.86 lakh of main workers and 1.16 lakh of marginal workers, which is 80.62 percent of main workers and 19.38 percent of marginal worker in 2011, the status of main workers in district is less than the State average of 85 percent. Main workers are higher in urban areas than that of rural areas.

In terms of main workers, seven blocks were performing better than the district average. WPR is higher in Nainarkoil; but the percentage of main workers is lower than that of the district. Consequently, in Nainarkoil block 7.35 percent of the agricultural laborers have increased, simultaneously, the percentage of cultivators had reduced from 58.62 percent to 47.71 percent in 2001 to 2011 census. Paramakudi (89.07 percent) and Mudukulathur blocks (85.40 percent) had a higher percentage of main workers than that of State (85 percent) and other blocks. The percentage of main/marginal workers of Ramanathapuram district range from Paramakudi (89.07 percent / 10.93 percent) to Tiruvadanai (65.71 percent / 34.29 percent). This state of unsecure employment and income leads to poverty.

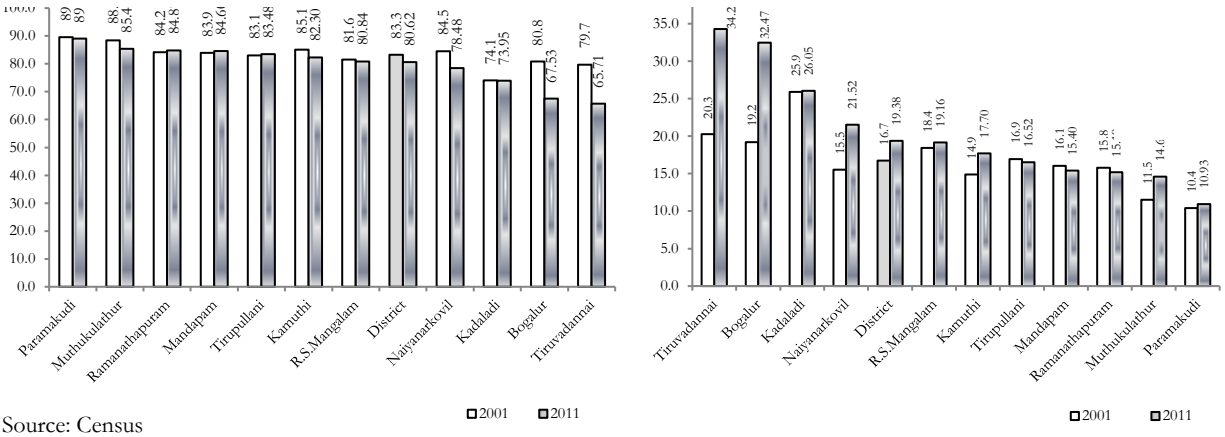
Trend in Main/Marginal workers: The main workers' status was 83.26 percent and marginal worker was 16.74 percent in 2001. The main worker were decreasing from 2001 to 2011 in rural and urban context. But, the decreasing trend is higher in urban areas than that of rural areas. 82 percent of the rural households have benefited through MGNREGA in the district. It might be the reason for the main workers reduction in rural areas.

Nainarkoil, Kadaladi, Bogalur and Tiruvadanai blocks showed a lower percentage of main workers than that of the district. Mandapam, Ramanathapuram and Tirupullani blocks showed an increasing trend of main workers from 2001 to 2011. Nainarkoil, Kadaladi, Bogalur, and Tiruvadanai blocks show a higher percentage of marginal workers than that of the district. The

growth of marginal workers is higher in Mudukulathur, Kamuthi, Nainarkoil, Bogalur and Tiruvadanai blocks than that of other blocks due to cultivators being converted as agricultural laborers.

Chart 3.2: Trend in v Main / Marginal workers

Main workers **Marginal workers**



Source: Census

Gender in Main/Marginal workers: Male main workers are more than the female main workers. Female marginal workers were nearly two times higher than the male marginal workers due to the unskilled nature of female jobs in 2011. Male main workers had decreased and female main workers were maintaining the same position in 2011 when compared to 2001.

Table 3.3 clearly indicates the female main workers' proportion has increased in rural areas, but has decreased in urban areas. While assessing the fact, nearly 82 percent of the rural poor got employment through MGNREGA, in which, female participation is higher than that of male participation, this is one of the reasons for increasing share of female workers in rural areas. Bogalur, Kadaladi, Kamuthi and Mudukulathur blocks were providing 100 percent MGNREGA work to the job card holders.

Table 3.3: Gender wise main and Marginal workers

2001	Male MW (%)	Female MW (%)	Male MLW (%)	Female MLW (%)
Total	90.22	72.10	9.78	27.90
Rural	88.92	71.56	11.08	28.44
Urban	94.28	77.84	5.72	22.16
2011	**Male MW (%)**	**Female MW (%)**	**Male MLW (%)**	**Female MLW (%)**
Total	84.87	72.69	15.13	27.31
Rural	83.04	72.06	16.96	27.94
Urban	89.33	76.62	10.67	23.38

Source: Census 2001 & 2011

Composition of workers in major sectors

In 1981 and 1991 census, workers were categorized into nine industrial categories, *viz.* i) Cultivators, ii) agricultural laborers iii) livestock, forestry, fishing, hunting, plantation, orchards and allied activities, iv) mining and quarrying, v) manufacturing and repairs- (a) household industries (b) other than household industries, vi) construction, vii) trade and commerce, vii) transport, storage and communication, ix) services.

But, in 2001 and 2011 census, workers were classified into four categories, i.e. cultivators, agricultural laborers, household industries workers and other workers. The first two categories were related to agricultural activities and last two categories were related to non-agricultural activities.

Agriculture and Non-agricultural sector workers

Nearly 3.27 lakh workers were involved in agriculture and allied activities among the 6.02 lakh of total workers in 2011 census. In the 2001 census, the total number of agriculture and allied activities workers were 3.04 lakh among 5.20 lakh of total workers, while, rest of the workers from total workers were non agricultural workers, 2.15 lakh and 2.75 lakh from total workers in 2001 and 2011 census respectively. Nearly 0.23 lakh of agricultural workers and 0.60 lakh of non agricultural workers were added to the total workforce in 2011 from 2001. The growth of non agricultural workers was higher than that of agricultural workers.

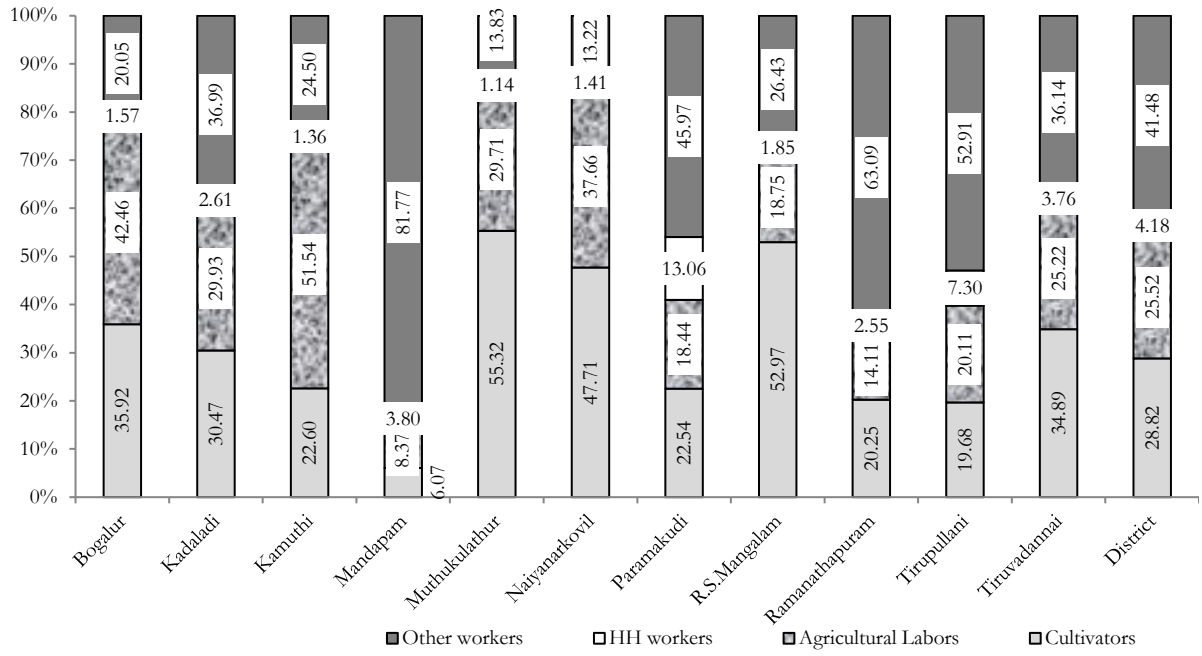
Agricultural and non agricultural workers were 54.34 percent and 45.66 percent respectively in 2011. Agricultural workers have decreased from total workers and vis-à-vis the percentage status is increased in non agricultural workers in 2011.

The proportion of cultivators has reduced to 28.82 percent in 2011 from 34.63 percent in 2001. The district received less than 800 mm of rainfall with uneven distribution[4] in 2011-12 against 800 to 1000 mm of expected volume, continuous shortfall leads the district to drought prone belt and low rainfall region. Drought, uneven rainfall pattern and rapid growth of *Prosophis* weed increases the cultivation cost and minimizes the productivity. It forces cultivators to become as agricultural labourer or explore non agricultural activities. Agricultural labourers and non agricultural workers have increased in 2011 census from 2001. Except Ramanathapuram and Mandapam blocks, other agricultural belt shows a considerable reduction of cultivators.

[4] Tamil Nadu Statistical Handbook, 2013, Department of Economics and Statistics, Government of Tamil Nadu

Reduction in cultivators ranges from minimum 0.25 percent (Mudukulathur) to a maximum of 12.45 percent in Kamuthi.

Chart 3.3: Composition of workers in Major sectors



Source: Census 2011

The vulnerability of the agricultural labourers has increased due to lack of oppurtunities in Agriculture sector. Kadaladi, Mandapam and R. S. Mangalam blocks show a decreasing trend of agricultural labourers. Kamuthi block has a higher percentage of agricultural laborers. Mandapam block has the lowest percentage of agricultural laborers due to coastal nature.

Weaving, handlooms, small scale charcoal industries, charcoal producer companies managed by community are well established in Paramakudi block leads higher percentage of household workers (13.06 percent) than other blocks. Around 4.18 percent (0.25 lakh) of workers are household workers in 2011.

2.50 lakh workers were involved as other workers in 2011, an increase of approximately 0.62 lakh over 1.90 lakh workers in 2001. Other workers have increased to 41.48 percent in 2011 from 36.48 percent in 2001.

Registration and placement provided by the employment office

Currently, educated are keen about finding a career based on their qualification and capacities which are not available in the market leading to frustration. The Government of Tamil Nadu has facilitated registration of unemployed people online which is beneficial to all.

As per the table 3.4., an average of 23000 candidates were registered in District employment office every year. But the placement is limited up to an average of 220 candidates per year. Placement against Registration is too low. While seeing the trend, particularly in 2011, the registration was at a peak of 29302 candidates, out of which one percent of the registered candidates got employment through employment exchange. 1,63,190 candidates had registered from 2007 to 2013, against 1557 candidates who got placement.

To address this gap, new ideas are being promoted by the Department of Employment cum Training. The fresh dream of the department is "to transform the Employment Offices into centers of brilliance for empowering the unemployed". The private sector is also addressing the gap through structured job fairs. The share of the private sector in placement has proliferated several fold. Vocational guidance services and study circles are established to increase the performance of candidates in the competitive exams conducted by public and private recruiting bodies. Apart from employment exchanges, immense scope exists, though banks and through competitive exams, conducted by Government and private sectors.

Table 3.4: Registration and Placement

Sl. No	Year	Registration	Placement
1	2007	21613	213
2	2008	20418	192
3	2009	22314	181
4	2010	21415	191
5	2011	29302	174
6	2012	20067	325
7	2013	28061	281
DISTRICT		**163190**	**1557**

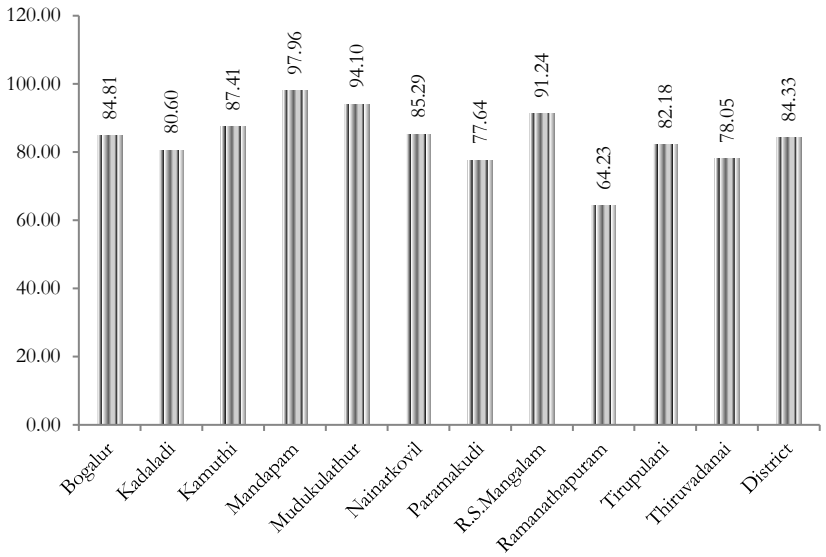
Source: District Employment Officer, Ramanathapuram

Box 3.2: MGNREGA – Employment and Income

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was conceptualized and endorsed as an act of the parliament in September 2005 to provide a statutory backing to the scheme. In Tamil Nadu, the scheme was first notified in 2006 in 6 districts, which was subsequently extended to other districts in a phased manner. In Ramanathapuram district, MGNREGS has been implemented in third phase during 2008. The major objectives of the scheme were to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a year as unskilled manual work, to generate productive assets, to protect the environment, to empower rural women, to cultivate gender equity in terms of the wage rate, to reduce rural-urban migration and to foster social equity.

As of 2012-13, there were 2,09,789 persons registered and received job cards (more than 84 percent of total rural households) under this scheme. A total sum of Rs 121.81 crore was allotted and 1.15 crore man-days generated with this scheme in 2012-13. The type of works taken up under this scheme include the formation of new roads, digging new ponds and renovation of water bodies like ponds, Ooranies, canal, irrigation tanks, etc. Mandapam, Mudukulathur and R. S. Mangalam blocks provided more than 90 percent job card to the rural population and employment. Since, Ramanathapuram block has urban based context, the MGNREGA registration is low i.e. 64.23 percent in 2013-14.

Chart 3.4: HH provided employment under MGNREGA, 2013–14



Source: BDO/PD, DRDA, RD & PR Department, Ramanathapuram.

Backward district like Ramanathapuram, the MGNREGS is one of the finest employment programme to the rural population, 81 percent of the job card holders are women. It clearly articulated in census 2011, the female main workers in rural areas has increased to 72.06 percent in 2011 from 71.56 percent in 2001.

Income

Growth in per capita income

Per capita income is derived by dividing the net domestic product by the midyear population. The per capita GDP is especially useful for comparing countries / States / districts because it shows the virtual performance. An increase in per capita GDP indicates growth in the economy.

Table 3.5: Per capita Income (GDDP at Constant Price)

Sl. No	Year	Ramnad District (Rs.)		State (Rs.)	
		Per capita Income	Growth rate	Per capita Income	Growth rate
1	2004 - 2005	27301	-	33998	
2	2005 - 2006	30251	10.81	38435	13.05
3	2006 - 2007	36537	20.78	43941	14.33
4	2007 - 2008	34888	- 4.51	46293	5.35
5	2008 - 2009	36555	4.78	48473	4.71
6	2009 - 2010	37536	2.68	53359	10.08
7	2010 - 2011	41681	11.04	59967	12.38
8	2011 - 2012	44707	7.26	63996	6.72
Average growth rate			**7.55**		**9.52**

Source: Department of Economics and Statistics, Ramanathapuram

The per capita income of Ramanathapuram district was Rs. 44707 at constant prices in 2011-12 was lower when compared to the State's per capita income of Rs. 63996. The district occupies a 24th place out of 32 districts in per capita income during 2011 - 12. Kanniyakumari district had the highest per capita income of Rs. 96070; followed by Kancheepuram, Thiruppur, Virudhunagar and Thiruvallur which had a higher per capita income of over Rs.83000.The per capita income of Ramanthapuram district is lower than PCI of above districts by around twenty thousand units.

7.55 percent of an annual average growth rate is observed from 2004 - 05 to 2011-12, lower than the State's 9.52 percent. Particularly in 2007 - 08, the per capita income of the district shows negative growth of 4.51 percent due to a reduction of income in the primary and secondary sector. In the primary sector, production from agriculture and allied activities had reduced to Rs. 22279 lakh in 2007 - 08 from Rs. 34053 lakh in 2006 - 07 at constant price. Likewise, in the secondary sector, production from manufacturing goods in registered sectors had declined to Rs. 35460 lakh in 2007-08 from Rs. 74508 lakh in 2006-07.

Drought is an existing phenomenon in the district; continuous droughts can have significant environmental, agricultural, health, economic and social consequences, the effect varies according to vulnerability. Drought can also reduce water quality, because lower water flows, reduce dilution of pollutants and increase contamination of remaining water sources. Excessive growth of *Prosophis juliflora* in water bodies and cultivable lands poses depletion of ground water table and it replaces native biodiversity. Charcoal making from the *Prosophis* plant is one of the livelihood in rural areas, but it is reducing land productivity.

Net cropped area of the district has increased as 200779 ha in 2013 – 14 from 183546 ha in 2001 – 02, clearly exhibits the agriculture intensification. The cropping area has increased, but the agricultural production is not showing that much improvement due to the following reasons, the irrigated area from the net cropped area is 31.72 percent, nearly one fold lower than that of State's 59.45 percent[5]. Most of the farming families in the districts solely depend on rain-fed agriculture and farmers could not harvest their yield every year, because of uneven distribution of rainfall and frequent crop failure. Farmers play a gamble with rains by raising rain-fed crops expecting good returns, but most of the time end up with losses. At times, availability of water during critical crop growth phases leads to low productivity and also crop failure landing farmers in debts. The district has innumerable tanks which are in a most dilapidated condition, rehabilitation of these tanks will increase the agricultural production.

As a coastal belt, rural areas have fishing, salt making and other sea related livelihood opportunities. Ramanathapuram district is the chief fish producing district in the State. Fish production share to GDDP primary sector is on par with agricultural production of the district, which increases "pressure on sea". During 2011-12, fish production of the district was Rs. 42495 lakh followed by Nagappattinam and Thoothukkudi, Rs. 34058 lakh and Rs. 23150 lakh respectively at constant price. The average annual population growth rate of the district is 1.3 percent and is lower than the workforce growth rate of 1.6 percent, but the workforce growth rate is not reflected with the average annual growth rate of per capita income, 0.94 percent. This means, "Production by the mass is there, but mass production is not there".

Sectoral output

The district income is defined as the sum total of the economic value of all goods and services produced within a district. The production of goods and services is based on three sectors, *viz*.,

[5] Tamil Nadu Statistical Handbook, 2013, Department of Economics and Statistics, Government of Tamil Nadu

primary, secondary and tertiary, it is roughly like a series; each sector will pass its output to the subsequent sector.

To assess the district income as well as rate of growth, constant price is used rather than the current price. Hence, Constant prices are a way of measuring the real change in output. Constant price calculated based on a year is chosen as the base year, for any subsequent years, the output is measured using the price level of the base year. This excludes any nominal change in output and enables a comparison of the actual goods and services produced. Current prices are influenced by the effect of price inflation, to avoid the inflation effect, constant price taken into account to construct the present chapter.

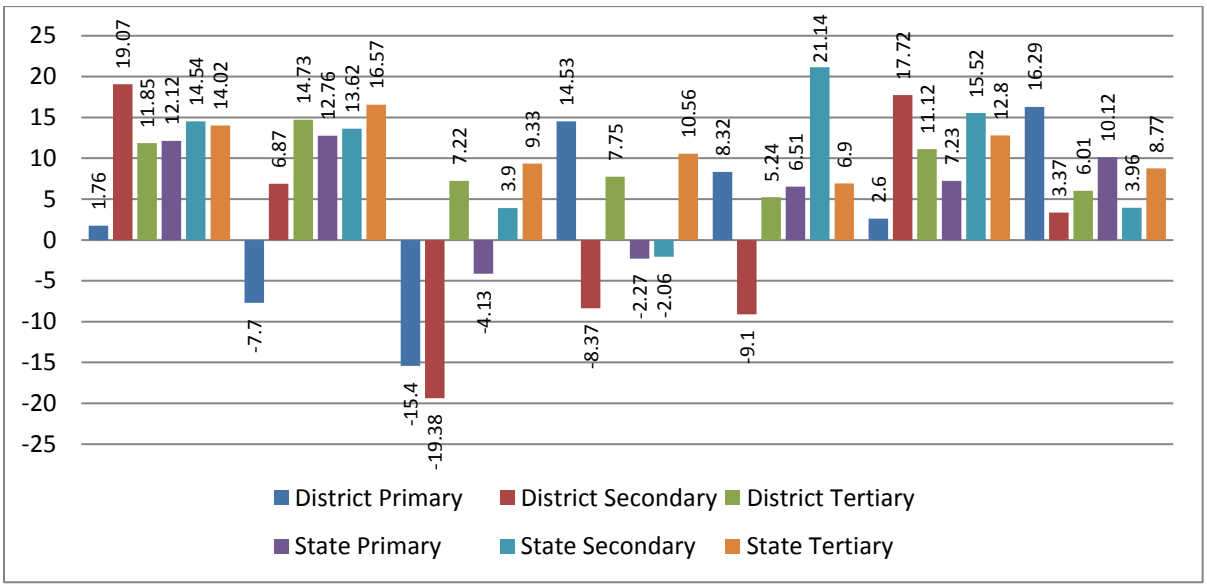
Table 3.6: Sectoral share of GDDP at constant price

Sl. No	Year	District (Rs. in lakh)				State (Rs. in lakh)			
		Primary	Secondary	Tertiary	Total GDDP	Primary	Secondary	Tertiary	Total GDDP
1	2004-05	78713	65443	180706	324862	2599508	6767931	12532883	21900322
2	2005-06	80102	77925	202123	360150	2914561	7751784	14290360	24956705
3	2006-07	73935	129251	231893	435079	3286591	8807824	16658553	28752968
4	2007-08	62549	104205	248630	415384	3150807	9151736	18213138	30515681
5	2008-09	71635	95478	267909	435022	3079411	2962975	20136950	26179336
6	2009-10	77595	86786	281953	446334	3279727	10857492	21525966	35663185
7	2010-11	79610	102166	313310	495086	3516987	12542302	24282284	40341573
8	2011-12	92578	105609	332152	530339	3872767	13039248	26411788	43323803

Source: Department of Economics and Statistics, Ramanathapuram

Sectoral contribution to Gross District Domestic Product (GDDP) is a vital indicator to appraise the economic growth of the district. Among the three sectors, the primary sector is the major sector in terms of employment. Though the proportion of agricultural and allied activity workers has decreased as 42.1 percent in 2011 from 49.3 percent in 2001, still agriculture is the biggest contributor to employment in rural areas. While analyzing the series of data from 2004 -05 to 2011 - 12, the growth rate of primary sector in GDDP has increased to 16.29 percent in 2011 - 12 from -15.40 percent in 2007 - 08 at constant prices. The annual average growth rate of the primary sector in the district is 2.91 percent.

Chart 3.5: Sectoral growth rate for Gross District Domestic Product, District vs. State



Source: Department of Economics and Statistics, Ramanathapuram

Primary sector

Agriculture and allied activities, Forestry and logging, fishing, mining and quarrying services boost up the primary sector. Among these four services, agriculture and fishing contribute much to the primary sector growth of the district. The drought and pressure on sea influences the growth rate. Mounting fashion of drought moreover pressure on sea leads slighter growth.

The share of primary sector in GDDP of the district is 17.46 percent which is less than the share of secondary and tertiary sectors of 19.91 percent and 62.63 percent respectively in 2011 – 12 but higher than the State's primary sector contribution of 8.94 percent, which indicates the dependency on agriculture and fishery sector. The primary sector contribution is coming down from 2004-05 to 2011-12 in district and State. As of census 2011, 54.34 percent of the total workforce of the district mainly depends on agriculture and allied activities, but production is very less due to unskilled nature of labour plus inadequate technology adaptation. The same pattern is replicated with cultivators. Out of 32 districts in Tamil Nadu, Ramanathapuram district occupies the 22nd rank in the primary sector. Agriculturual labours are of 54.34 percent indicating high dependence on agriculture and low output of primary sector and lower per capita income underlis the status of the population depending on agriculture.

Box 3.3: Showcasing the farming activity is profitable in Ramanathapuram

The Kamuthi block in Ramanathapuram district is one of the rural based block, agriculture is the main occupation. It consists of 53 rural Panchayats and two-town Panchayats namely, Abiramam and Kamuthi. This block has been identified by SPC under SBGF as backward block. The identified backwardness are poverty, industrial backwardness, drought and health. The HDI value of Kamuthi block is 0.54 and places 7th among eleven blocks of Ramanathapuram in 2013 - 14. In terms of cultivators workforce, a maximum of 12.45 percent have been transformed as agricultural labourers as of 2001 and 2011 census. Kamuthi block shows a higher percentage of agricultural labourers of 51.54 percent. Agricultural labourers are socially most vulnerable workers, this is mainly because of rainfall failure. Continous drought and crop failure poses threat to farmers to explore alternatives as their land has become idle. In this circumstance, the entry of "The Kalgidhar Society" has proved the farming activity is profitable in drought prone area. Founder of this society is Baba Iqbal Singh from Himachal Pradesh.

In 2010, the society purchased 120 acres of fallow land in Abiramam, Kamuthi block in Ramanathapuram district. After the Prosopis weed clearance, with the help of Assistant Agricultural Officier, Kamuthi, Agricultural College and Research Station, Tamil Nadu Agricultural University, Madurai, the water and soil samples were tested for crop cultivation. Since the Kamuthi block has a red soil, it was found suitable for orchard. Through the guidance of agricultural experts from the block, the society decided to cultivate horticultural crops like Mango, Papaya, Amla and Drumstick. Varieties suggested by agricultural college, Madurai. 20 persons from the northern states voluntarily involved themselves in farming activities. Within three years, they were able to harvest the mango and other fruits with sizeable yield. The income from this farm has been utilized for the purpose of upliftment of downtrodden and underprivileged rural masses through schooling, hospital care, de-addiction centres, old-age and orphanage home through Akal Academy.

Though the farming activity struggled to make profit in Kamuthi areas, it has witnessed a turnaround through introduction of new technologies to develop wastelands. Currently, the wasteland is transforming into farmlands with fruit bearing trees. The farm has become the model for the villagers as well as for the whole district. Subsequent to this success, farmers who put their land as wasteland have initiated cultivation. The land value also increased because of this intervention. The appreciation of district administration has made the farm worthy of replication. Though the farm has not received enough rainfall, a commitment to implement the latest technologies with the limited resources has resulted in success. The dedicated workforce also contributed a lot to its success says Shri. Manmohan Singh, the coordinator of the Kalgidhar Society orchard.

Secondary sector: Manufacturing by registered and unregistered bodies, electricity, gas and water supply and construction boost up the secondary sector growth. Out of four variables, manufacturing along with the construction sector's contribution was high. While analyzing a series of data from 2004-05 to 2011-12, the growth rate of secondary sector shows fluctuation from 6.87 percent in 2006-07 to – 19.38 percent in 2007-08 at constant prices. The share of the secondary sector its reduced to 19.91 percent in 2011-12 from 20.14 percent in 2004-05 which is

lower than the State secondary sector contribution of 30.10 percent in 2011-12 at constant prices.

In the secondary sector, contribution of manufacturing and construction industries has increased by 1.3 and 1.9 fold respectively from 2004-05 to 2010–11 due to the arrival of East coast road in Ramanathapuram district. Particularly in manufacturing, the growth of unregistered units is higher, 1.7 fold than that of registered units, which shows the unpredictability of the secondary sector income. While comparing the secondary sector contributing variables with the industrially developed districts like Thiruvallur, Coimbatore and Kancheepuram, the growth of manufacturing and construction increased by nearly 3 fold and 1.9 fold respectively in the similar period. In which, the growth of registered manufacturing units is higher, 3 to 4 fold compared with the unregistered manufacturing bodies, 1 fold, leads these districts shows industrially sound with stable growth. A similar trend is observed in the adjacent district with related context, i.e. Thoothukkudi, the growth of registered and unregistered unit's contributing on par, almost 2 fold, hence, Thoothukkudi district ranks 9th place in terms of Per capita income. Usually the unregistered unit's labor forces are unorganized and workforce exploitation is also possible. Income from the industrial sector of the district is Rs.125862 lakh, the district ranks 27th place among 32 districts. Low range of mining, mineral availability, no marketing facility, unskilled labour force, the geographical position of the district, lower connectivity between the cities and insufficient availability of raw material poses the district as industrially backward.

Tertiary sector: Catering, Hotels, Communications (Telephone, broadband, etc.), medicine, legal services, education and distribution of goods boost up the tertiary sector of the district. The growth rate of tertiary sector is constantly increasing trend from 2004 - 05 to 2011 - 12 (Except, 2007-08, 2009-10 and 2011-12) in the district and State. While appraising the series of data from 2004-05 to 2011-12, the growth rate of tertiary sector shows fluctuation from 14.73 percent in 2006-07 to 5.24 percent in 2009-10 at constant prices. The tertiary sector is better when compared to the primary and secondary sector and it is expressed in the year 2011-12 when compared to 2004-05. This is also reflected in the workforce of the tertiary sector. The composition of other workers has increased as 41.48 percent in 2011 from 36.48 percent in 2001. Since, higher income from the tertiary sector forced the primary and secondary sector labour to move towards this sector. The share of tertiary sector has improved from 55.63 percent in 2004-05 to 62.63 percent in 2011-12.

Out of nine variables, trade, hotels and restaurants, transport by other means, communication, banking and insurance services, real estate, business services, public administration and other

services contributes much in the district tertiary sector growth. It is a natural phenomenon in the growth of trade, hotel and restaurants in the Ramanathapuram where the district has the richest potential for tourism and pilgrim centre. Four fold growth observed in communication services of the district because of cellular phone entry. Pudhu Vaazhvu project and growth of self help group movements have boosted up the banking and insurance services of the district.

Box 3.4: The weed *Prosophis* is affecting the social and economical growth of the human being

The recent years, drought aggravated because of perennial weed *Prosophis*. Throughout the district, the weed *Prosophis* is affecting the social and economical growth of the human being. This weed demolishes the underground water table, it occupies nearly 40,000 ha of land in the district, which replicates with district land utilization pattern and transformation of workforce.

Since the land utilization pattern of the district shows an increasing pattern of current fallow land, meaning land is put into non agricultural purposes and cultivable waste was nearly 12800 ha within a decade (2001 - 2011). Out of 12800 ha., the conversion of current fallow has 8375 ha (32339 ha in 2001 to 40714 ha in 2011) due to multiplication of *Prosophis*. Environmental and other impact of these weeds are enormous. *Prosopis juliflora* can be a very violent invader, substitute native vegetation and take over rangelands. Negative effects include whole loss of pasture as well as rangelands. Dense stands of *P. juliflora* can obstruct irrigation channels, roads, smaller paths, crop lands and water sources.

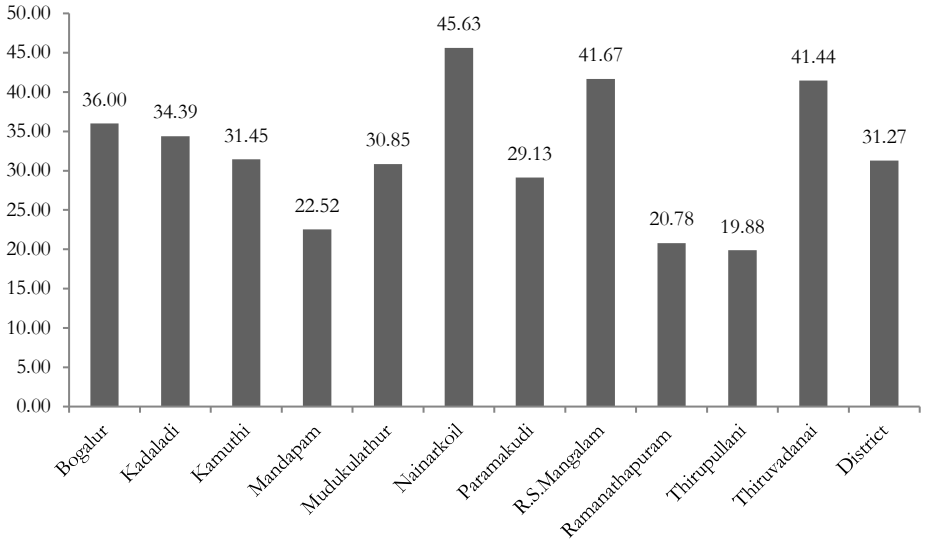
Currently the issue is minimizing trend, the current fallow converted as Agricultural land for cultivation. Current fallow reduced as 39165 ha and the net sown area augmented from 171577 ha in 2011 - 12 to 200779 in 2012-13. It shows the success of district administration and agricultural department, endless effort of these stakeholders are slowly changing the mindset of farmers towards cultivation. *Prosopis* species are salt along with drought tolerant, through deep roots, which tolerate dry and waterlogged soils. So that, the range of aggressiveness is higher. Loss of grass envelop under canopies can also advance soil erosion. Weed clearance in water resources in addition to farming land is a most desirable to boost up the production, productivity and Per capita income of the district. Right now, Agriculture Technology Management Agency (ATMA) is working on *Prosopis* weed clearance in Ramanathapuram district.

Poverty and Inequality

BPL percentage

Poverty as a multidimensional perception and refers to lack of access to the essential needs namely food, shelter, safety, teaching, healthiness, safe drinking water, and cleanliness for a polite, regular and efficient survival. Given the poverty line, various indicators are used to measure the incidence of poverty, such as head count or poverty ratio, poverty gap index, squared poverty gap, Sen Index, Kakwani index, Takayama index, Foster, Greer, and Thorbecke (FGT) index.

Chart 3.6: Poverty level, 2013-14



Source: Pudhu Vazhalvu Project & Mahalir Thittam, Ramanathapuram

In Ramanathapuram district has 31.27 percent of house holds are below poverty line in 2013-14. Bogalur (36 percent), Kadaladi (34.39 percent), Nainarkoil (45.63 percent), R. S. Mangalam (41.67 percent) and Tiruvadanai (41.44 percent) blocks had higher percentage of BPL families than that of district poverty status. Mandapam (22.52 percent), Ramanathapuram (20.78 percent) and Tirupullani (19.88 percent) blocks shows less than 25 percent of BPL families. Wide range of inter – block disparity exists in the presence of BPL families. Range starts from Tirupullani (19.88 percent) to Nainarkoil (45.63 percent), which is nearly 2 fold. Analysis of different factors which contribute to the poverty are given below:

a. Climatic factors: Climatic conditions constitute an important cause of poverty. The hot climate of the district reduces the working capacity of the people; especially the rural population production suffers severely. Frequent drought and cyclone cause heavy damage to agriculture. Moreover, absence of timely rain, excessive or deficient rain affects agricultural production. Particularly in 2006-07 and 2007-08, GDDP primary sector shows negative growth.

b. Demographic factors: Ramanathapuram district average per capita income growth rate was 7.55 percent in 2004-05 to 2011-12 financial year, was lower than that of State 9.52 percent. Population growth at a faster rate increases labour supply which tends to lower the wage rate. Wide range of inter – block disparity observed in population growth rate of the district, i.e. 4.10 percent to 19.60 percent.

c. Economic causes: Even today the farmers in the district are following the traditional method of cultivation, hence there is low agricultural productivity resulting in rural poverty. Per capita food

grain production of the district is 354 kg due to continuous drought, *Prosophis* growth and salinity, resulting in reduction of agricultural productivity. Nearly, 33 percent of agricultural land area is in the hand of 6.5 percent of medium and large farmers and 93.5 percent of the farmers are marginal and small farmers, which limits the adoption of new technology by the small and marginal farmers.

(iii) Decline of village industries: At present consequent upon industrialization, new factories and industries are being set up in rural areas. Village industries fail to compete with well-established industrial products in terms of quality and price. Out of eleven blocks, nine blocks have been announced as industrially backward blocks in Ramanathapuram district by SPC under SBGF. Ramanathapuram, Mandapam, Paramakudi and Tirupullani are urban based blocks with employment opportunities. Percentage of BPL families in these four blocks are low, which is less than that of district BPL status.

(iv) Lack of employment opportunities: Unemployment is the cause and effect of poverty. Due to lack of employment oppourtunities, people stay jobless or underemployed. Bottom three blocks with higher incidence of poverty in the district is closely correlated with the marginal workers. Percentage of marginal workers from the total workers in Nainarkoil and Tiruvadanai was 21.52 and 34.29 respectively, which was higher than that of the district (19.38 percent) and State (15 percent). Most of unemployed and underemployed workers are the small and marginal farmers and the landless agricultural laborers.

d. Social causes: Communal clashes[6] among the community/religion are the foremost reason for poverty in the district. In the rural/urban sector most of the population depends on borrowing from the money lenders and property owners to meet even their consumption expenses. Due to unemployment in the district males migrate to abroad for better income. Poor people approach moneylenders for their initial investment to get passport and Visa, etc., Usually agencies create a big image about income and accommodation. Unskilled persons do not fulfill the expectation of foreigners resulting in lower income. Unethical practice of some agency leads to crisis resulting in migrants returning to native without jobs.

Moneylenders exploit the poor by charging exorbitant rates of interest. Indebted poor cannot make themselves free from the clutches of moneylenders and poverty is further accentuated because of indebtedness. Such indebted families continue to remain under the poverty line for generations because of this debt-trap.

[6] Source: Incident at paramkudi, (http://www.thehindu.com/opinion/editorial/lessons-from-paramakudi/article2450479.ece)

Poverty makes an impact on hunger, malnourishment, deprived health and standard of living, school dropout, lower access to higher education. In Ramanathapuram district poverty reflects on different dimensions, i.e. the malnourished children of 32.08 percent, less per capita income of Rs. 44707 at constant prices in 2011-12, increasing trend of higher order birth rate, less access to higher education, low range of access to cooking fuel (43.85 percent) and inadequate distribution of safe drinking water around the year.

Contribution of PDS

The Public Distribution System (PDS) is the key factor of the Government's food security system in India. It is a tool for assuring fundamental commodities to the poor at easily affordable prices.

Table 3.7: PDS outlets and Family card holders

Sl. No.	*Name of the Block*	*No. of PDS Outlets*		Total PDS	Total Revenue Villages	No. family cards
		Regular	*Part-time*			
1	Bogalur	26	6	32	23	11960
2	Kadaladi	55	17	72	53	43277
3	Kamuthi	63	14	77	49	36766
4	Mandapam	49	11	60	19	55148
5	Mudukulathur	58	14	72	38	36466
6	Nainarkoil	36	4	40	36	14568
7	Paramakudi	37	11	48	34	47259
8	R.S.Mangalam	48	13	61	41	25408
9	Ramanathapuram	52	14	66	25	38130
10	Tirupullani	44	8	52	25	33064
11	Tiruvadanai	60	18	78	57	34794
District		**538**	**141**	**679**	**400**	**376840**

Source: DSO, Ramanathapuram

After the intervention of Floating Point System (FPS) food security among the poor was guaranteed. The PDS has a close association with the hunger free State/District and poverty mitigation. Both the central and State Governments shared the liability of regulating the PDS. A BPL card holder should be given 35 kg of food grain and the card holder above the poverty line should be given 15 kg of food grain as per the norms of PDS. The status of PDS outlets and family card holders is furnished in Table no. 3.7. Total PDS shops in the district were 679 in 400 revenue villages, households with family cards are 376840.

Conclusion

Employment, income and poverty have a close relationship with one another. Secure livelihood, standard earnings and poverty free life have a bearing on the human development of the district.

Kadaladi (0.81 percent), Mandapam (1.79 percent), Mudukulathur (0.25 percent), Paramakudi (1.82 percent), Ramanathapuram (1.82 percent), Tirupullani (3.56 percent) and Tiruvadanai (0.56 percent) blocks showed increasing trend in WPR growth. Urban blocks showed a higher range of growth in workforce and agricultural belt showed a decreasing trend in work force.

The Per capita income of Ramanathapuram district was Rs. 44707 at constant prices in 2011-12 was less when compared with State per capita income of Rs. 63996 and the district occupies a 24th place out of 32 districts in terms of per capita income. Ramanathapuram district has the highest fish production in the State. Fish production share to GDDP primary sector is on par with agricultural production of the district, which builds "pressure on sea".

The BPL families in Bogalur (36 percent), Kadaladi (34.39 percent), Nainarkoil (45.63 percent), R. S. Mangalam (41.67 percent) and Tiruvadanai (41.44 percent) blocks was higher than that of district poverty status.

CHAPTER 4

DEMOGRAPHY, HEALTH AND NUTRITION

4. Demography, Health and Nutrition

Introduction

Attaining sufficient health standards is important for the success of human development and the eradication of poverty. While constructing the human development index, the health indicators contribute much to decide the human development of the block/district. The role of social customs, culture, geographical position of the blocks, and occupation based hazards greatly influence the health effects.

The present chapter tries to look at the extent of disparity in demographic trends, health indicators, nutritional status of children as well as women and the influence of non nutritional factors on health in Ramanathapuram district. It also documents the prevalence of HIV-AIDS, TB, Leprosy and malarial incidence across the blocks. The study uses data obtained from the health departments of Ramanathapuram District through the District Planning Cell.

Demographic Trends and Health Indicators

Population and Demographic Transition

Population growth rate (PGR) reflects the number of births and deaths during the period and the number of people migrating to and from a block/district. Globally, due to the slowing of birth rate population growth rate has shown a decline. Tamil Nadu is one of the most important State in the country and occupies 11th place in the area and seventh place in population[7]. As per the census 2011, Tamil Nadu has a population of 7.21 crore and increased from the figure of 6.24 crores in 2001, the growth rate has increased as 15.61 percent in 2001-2011 decade than 11.19 percent in 1991-2001 decade.

The total population of the district has increased to 1353445 in 2011 from 1187604 in 2001, at a growth rate of 13.96 percent which is lower than that of the State's 15.61 percent. The crude birth rate of the district itself exhibits the declining trend of population growth. Across the blocks, the population ranges from 210334 in Mandapam block to 39525 in Bogalur block, it shows that among the blocks vast disparity exists in terms of population spread. The population among the blocks shows an increasing trend. The population share of the district over State population was 1.88 percent, but the area coverage is 3.16 percent.

[7] Census 2011

The population growth rate was low in Bogalur, 4.10 percent and Nainarkoil, 5.96 percent due to the rural area with agrarian nature and no town panchayats too. Cultivators are decreasing and agricultural laborers are in increasing trend from 2001 to 2011, as, the population moves towards urban for employment. Kadaladi and Kamuthi also rural based blocks, in addition, human development in these blocks illustrates the 10th and 7th rank among 11 blocks. The high order birth rate of Kadaladi block is higher than that of the district. Being the backward blocks, the high population growth rate stimulates the poverty level and a chance to reduce the human development, implementation of family planning methods is the need of the hour in these two blocks.

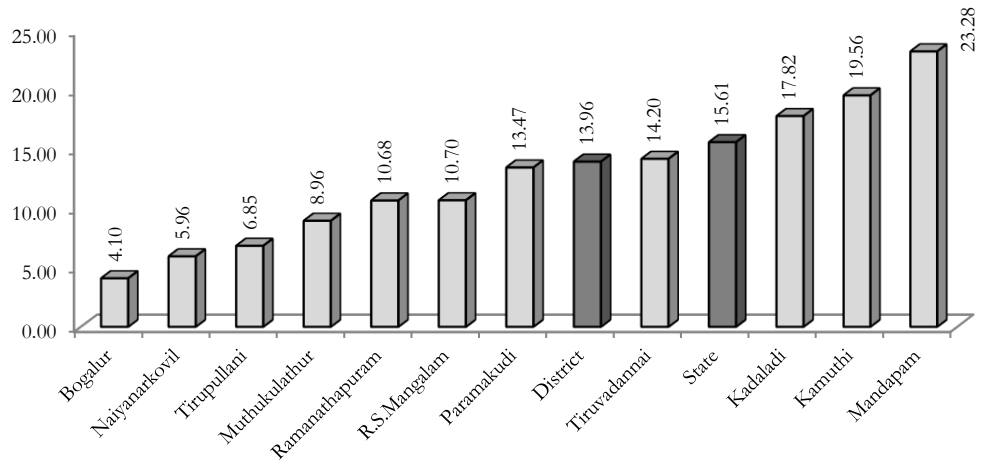
Table 4.1: Demographic Profile

Sl. No	Block	Population		Density		SC pop. %		ST pop. %	
		2001	2011	2001	2011	2001	2011	2001	2011
1	Bogalur	37967	39525	218	227	40.44	42.82	0.01	0
2	Kadaladi	137561	162071	197	233	15	14.49	0.01	0.01
3	Kamuthi	113460	135658	196	235	20.16	21.09	0.03	0
4	Mandapam	170608	210334	591	728	6.1	5.59	0.02	0.04
5	Mudukulathur	88688	96638	224	244	28.85	29.71	0	0.01
6	Nainarkoil	45638	48358	167	177	22.76	21.96	0.01	0
7	Paramakudi	156218	177259	538	610	21.93	23.2	0.03	0.08
8	R. S. Mangalam	76553	84742	204	226	21.1	22.88	0.01	0.03
9	Ramanathapuram	131415	145452	456	504	17.28	16.59	0.63	0.44
10	Tirupullani	118036	126121	409	437	16.79	17.8	0	0
11	Tiruvadanai	111460	127287	254	290	16.24	17.14	0.08	0.14
District		**1187604**	**1353445**	**290**	**331**	**18.21**	**18.4**	**0.09**	**0.08**

Source: Census 2001 & 2011

Mandapam is basically coastal and urban based block. Tourism is an emerging opportunity, it consists of Rameshwaram with historically famous pilgrimage centre, and it attracts many tourists from all over the India and the world. It catches the attention of the inter block and inter district migrants towards Mandapam block leading to a higher population growth rate.

Chart 4.1: Population growth rate (2001-2011)



Source: Census 2001 and 2011

The district Scheduled Caste population has increased to 249,008 in 2011 from 216,312 in 2001. The share of SC population was 18.40 percent in 2011. Among the eleven blocks, Bogalur block has a higher percentage of scheduled caste population in 2001 and 2011. Seven blocks show the increasing trend of SC population. The district Scheduled Tribe's population has increased to 1105 in 2011 from 1078 in 2001. The share of ST population in Ramanathapuram district is very low, 0.08 percent in 2011, 0.44 percent of the total scheduled tribe's population is living in Ramanathapuram block.

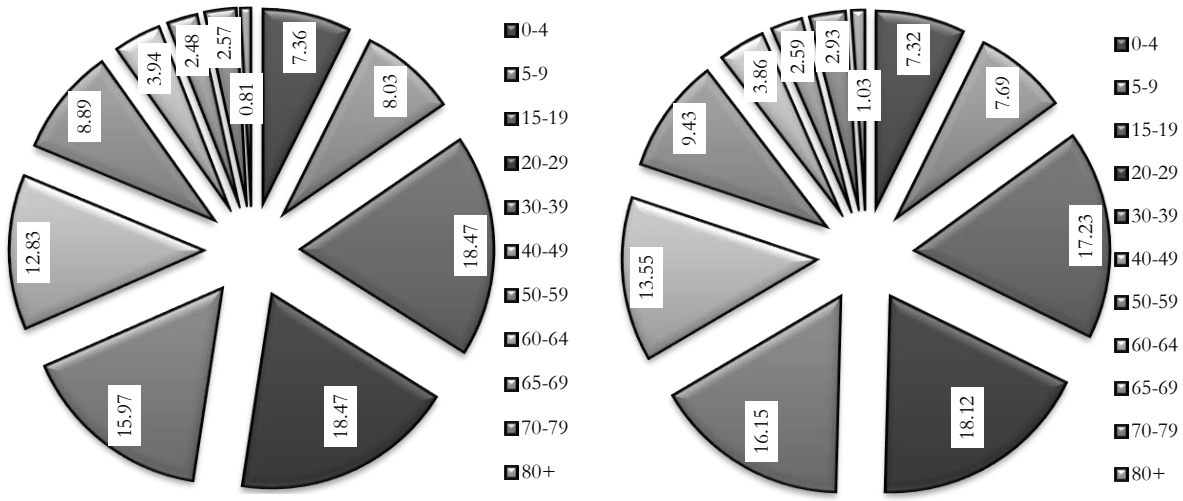
The population growth rate in Rural and Urban context*:* The population distribution in rural and urban areas was 69.66 percent and 30.34 percent, respectively, which shows district was less urbanized than that of the State population accommodation of 51.60 percent and 48.40 percent, respectively. However, the population growth rate in rural and urban area clearly exhibits the district current trend in urbanization. Overall population growth rate of the district was 13.96 percent, but in an urban context, it illustrates about 35.82 percent, which was 5.5 fold higher than the rural population growth rate of 6.50 percent.

Apart from birth and death, migration places an important role in population growth rate. Inter block, intra block, inter district and international migration are in practice. The district urban population growth rate explains about the rural-urban migration. Immigration was higher in urban areas than that of rural. Population from rural areas are migrating towards urban for want of livelihood opportunities, education and marriage. Migration practices has its own implications with the housing patterns, environmental problems associated with un-hygienic living conditions and others. The main purpose behind the female migration are marriage and education, and for

male migration are due to family demands, seeking better livelihood opportunities and for education. People also move to foreign countries for exploring and securing livelihood.

The demographic profile of the district shows the working group population, i.e. 20 to 60 years was 65.7 percent in 2011 higher than the State, 65.1 percent. The older dependent population of the district was 9.8 percent less than the State, 10.4 percent. 0 to 14 years population was 24.6 percent in the district higher than the State, 23.6 percent. The present situation illustrates that the district is dynamic with a younger generation in terms of social capital. Channelling the existing social capital in right way will induce the human development of the district. The district may face a higher range of the older population in future. As per the chapter 3, the unorganized workers and marginal workers of the district was higher than that of the State and that leads to risks with old age care and maintenance by the society and Government, which will be overcome by implementation of savings cum pension schemes to the unorganized workers with the help of insurance companies in the district.

Chart 4.2: Demographic profile in district and State



Ramanathapuram **Tamil Nadu**

Source: Census 2011

Density: The population density of the district/State is a mode of showing how crowded that place is, which is calculated by dividing the population by the area. The population density of Ramanathapuram district has increased to 331 in 2011 census from 290 in 2001 and lower than that of State, 555 and 478 in 2001 and 2011 respectively. The inter-block disparity is high with 177 in Nainarkoil to 728 in Mandapam. Mandapam and Paramakudi (610) blocks show the population density is higher than that of the State in Paramakudi and Mandapam blocks due to tourism and industrial growth. Urban based blocks, *viz.*, Mandapam, Paramakudi,

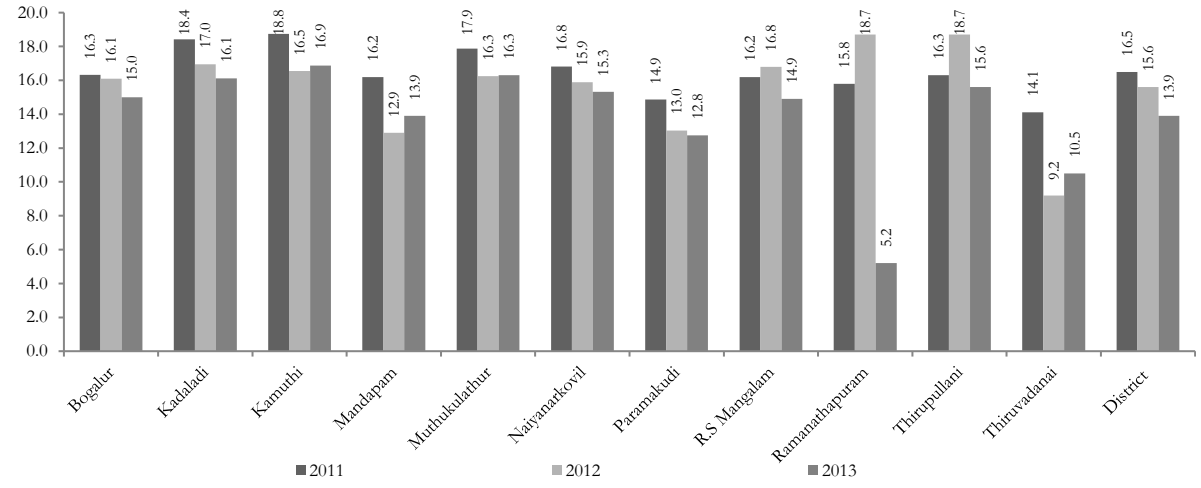
Ramanathapuram and Tirupullani have higher population density than that of rural blocks because of the growth rate of secondary and tertiary sectors.

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

The CBR and CDR are the two major factors affecting the demographic transition, important factors affecting these two variables are population policies from Government, the availability of family planning services, social and religious beliefs in relation to contraception, sterilization, urbanization, industrialization, economic status, infant mortality, morbidity, epidemic disease outbreaks and environmental circumstance.

The ***crude birth rate*** of all the blocks has shown a decline since 2009 and the inter–block disparity is high. Year by year CBR is fluctuating within a block. The crude birth rate of the district was 13.9 in 2013-14. The inter block disparity across the block shows huge, the range starts from Ramanathapuram block with CBR of 5.2 to Kamuthi block, 16.9. Except, Mandapam, Paramakudi, Ramanathapuram and Tiruvadanai, other blocks shows a higher range of CBR than the district.

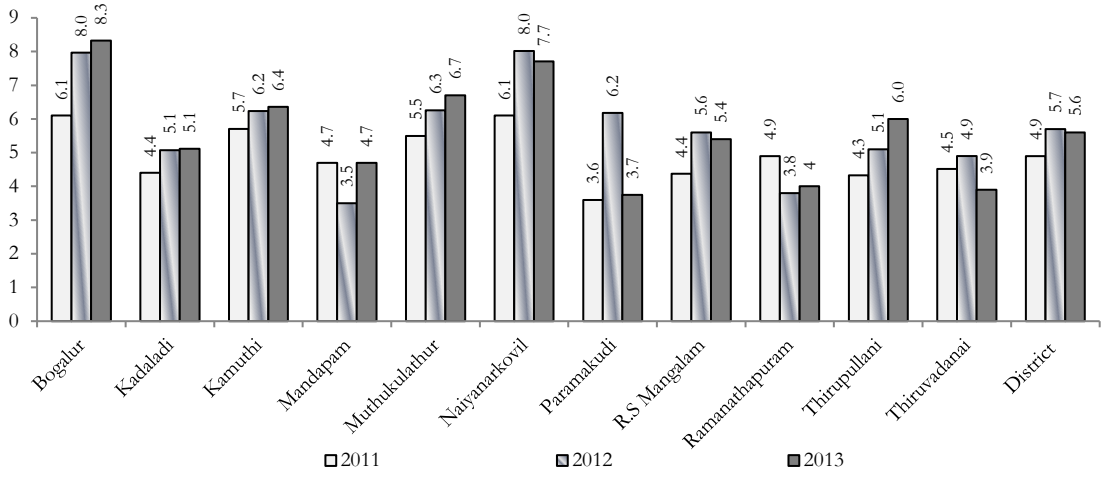
Chart 4.3: Trend in CBR, 2011 - 2012 to 2013 - 14



Source: DDHS, Ramanathapuram

The ***Crude Death Rate*** (CDR) of the district declined since 2009. The CDR has declined to 4.9 in 2011 from 5.6 in 2009 but, during 2013 – 14, it has increased again to 5.6. The inter block disparity across the block shows huge variation which starts from 3.7 in Paramakudi block to 8.3 in Bogalur block. Bogalur, Kamuthi, Mudukulathur, Nainarkoil and Tirupullani backward blocks show a higher range of CDR than the district in 2013-14.

Chart 4.4: Trend in CDR, 2011 - 2012 to 2013 - 14



Source: DDHS, Ramanathapuram

The CDR ranged from 3.6 to 6.1 in 2011. CDR of the all blocks except Ramanathapuram which showed a decline from 2009 to 2011. It shows that, the provision of a healthier environment and awareness about the endemic and epidemic diseases to the district populace has increased. Ramanathapuram block has shown a slight rise in the death rate from 4.5 in 2009 to 4.9 in 2011. The blocks such as Bogalur, Nainarkoil, Kamuthi and Mudukulathur show higher CDR when compared with district average in 2011 due to meager accessibility to the medical facilities because of remoteness.

Sex ratio and Child sex ratio

The sex ratio is the number of females per 1000 males in a given place. As per the latest Census in the year 2011, the sex ratio in Tamil Nadu has increased to 996 per 1000 males from 987 in 2001, which shows a better position of the State when compared with the nation.

Table 4.2: Sex ratio for Ramanathapuram, 2011

Sl. No	Block wise/District	General		Change	SC		Change
		2001	2011		2001	2011	
1	Bogalur	1027	972	-55	998	978	-20
2	Kadaladi	1025	983	-42	1003	987	-16
3	Kamuthi	1010	982	-28	1021	990	-31
4	Mandapam	995	982	-13	1007	1002	-5
5	Mudukulathur	1031	1003	-28	996	993	-3
6	Nainarkoil	1082	1012	-70	1033	988	-45
7	Paramakudi	1011	968	-43	995	977	-18
8	R.S.Mangalam	1074	1018	-56	1057	1025	-32

Sl. No	Block wise/District	General		Change	SC		Change
		2001	2011		2001	2011	
9	Ramanathapuram	1028	988	-40	1027	1006	-21
10	Tirupullani	1092	949	-143	1025	999	-26
11	Tiruvadanai	1089	986	-103	1020	975	-45
District		**1036**	**983**	**-53**	**1014**	**991**	**-23**

Source: Census 2001 & 2011

The sex ratio in Ramanathapuram district has declined to 983 in 2011 from 1036 in 2001, nearly 53 numbers decreased, when compared to the State sex ratio of the district is low. Male and female population of the district has 6.82 lakh and 6.71 lakh respectively in 2011. Tirupullani and Tiruvadanai blocks noticed a considerable reduction in sex ratio. Sex ratio ranges from 949 in Tirupullani to 1018 in R. S. Mangalam blocks, it showed a wide inter block disparity which is an indication to give focus on women status of the block and district in female infant mortality rate and early determination of the fetus. Social auditing and surprise visit to the scan centers will improve the present situation. Sex ratio in R. S. Mangalam shows a meager increase. Nainarkoil (1012) and Mudukulathur (1003) blocks shows declining trend, but the sex ratio is comparatively good. Bogalur, Kamuthi, Mandapam, Paramakudi and Tirupullani blocks have sex ratio less than that of district average.

The sex ratio of SC population has also declined to 991 in 2011 from 1014 in 2001, but which was better than that of general sex ratio of 983 in 2011. The sex ratio of ST population has increased to 977 in 2011 from 939 in 2001. The total ST population in Ramanathapuram district was 939 in 2001 and 977 in 2011, usually these population have the culture of migration. The sex ratio calculation for ST population was not being done at block level because of less number of population.

The Sex ratio in Rural/Urban Area: Urban sex ratio was lower than that of rural sex ratio. The sex ratio in rural area reduced to 987 from 1043 and in urban areas 973 from 1015 in 2001 and 2011 respectively. A data shows a decline of about 56 and 42 numbers in rural and urban areas, respectively, which illustrates the proportion of female population has declined faster in rural areas than in the urban areas.

Child sex ratio: The overall child sex ratio has improved in Tamil Nadu from 942 in 2001 to 946 in 2011. But the child sex ratio in Ramanathapuram district has decreased to 961 in 2011 from 964 in 2001. Though the CSR is better than the State and country, the decreasing trend needs corrective measures.

Table 4.3: Child Sex ratio

Sl. No	Block	Population in the age group of 0-6		Sex-ratio	Population in the age group of 0-6		Sex-ratio	Change
		Male	Female		Male	Female		
		2001			2011			
1	Bogalur	2241	2176	971	1934	1827	945	-26
2	Kadaladi	9465	8985	949	8934	8480	949	0
3	Kamuthi	7473	7214	965	7484	7130	953	-12
4	Mandapam	12733	12163	955	11725	11502	981	26
5	Mudukulathur	5319	5014	943	4836	4792	991	48
6	Nainarkoil	2595	2571	991	2317	2200	949	-42
7	Paramakudi	9551	9305	974	8908	8446	948	-26
8	R. S. Mangalam	4839	4625	956	4400	4219	959	3
9	Ramanathapuram	8226	7918	962	7804	7463	956	-6
10	Tirupullani	6578	6503	988	6666	6516	977	-11
11	Tiruvadanai	7149	6944	971	6697	6364	950	-21
District		**76169**	**73418**	**964**	**71705**	**68939**	**961**	**-3**

Source: Census 2001 & 2011

As per 2011 Census, male and female child population were 0.71 lakh and 0.69 lakh respectively. The percentage share of 0-6 year's population in the total population had decreased to 10.39 percent in 2011 from 12.60 percent in 2001 which was very low in Nainarkoil block, 9.34 percent. The child sex ratio of Mudukulathur (991), Mandapam (981) and R. S. Mangalam (959) blocks have improved in 2011 census, but in the other eight blocks, it showed a declining trend. The child sex ratio ranged from 991 in Mandapam to 945 in Bogalur blocks during 2011.

According to Census 2011, 119 revenue villages in the district have child sex ratio less than 900 which can be overcome by creating awareness among pregnant women's families about girl child benefit programs of Government, committees will be formed by involving local community to monitor scan centers, hospitals and deliveries, Promoting informers to convey messages on still birth, abortions, IMR, *etc.*

CSR in Rural and Urban Areas: General sex ratio is higher in rural areas than that of urban areas, but in case of child sex ratio, the position was reversed in 2001 and 2011 census. Here, the urban area has a higher child sex ratio than that of rural areas. The child sex ratio in rural context has not changed, it was maintained the same status, but for the same period, the urban context showed a decline from 971 to 963 in 2011. While comparing with the 2001 and 2011 census, sex ratio and the child sex ratio clearly indicated that importance of a female child was getting reduced.

Life Expectancy at Birth (LEB)

Life expectancy at birth indicates the quality of health care in the district. LEB for Ramanathapuram was 63.19 years for males and 67.24 years for females and for the State was 64.91 years and 68.85 years respectively, which reports LEB of the district, 65.18 years was lower than the State average of 66.74 years[8].

Table 4.4: Life Expectancy at birth

District/State	2003			2013 - 14		
	Male	Female	Combined	Male	Female	Combined
District	63.19	67.24	65.18	68.9	71.2	70.1
State	64.91	68.85	66.74	71.8	75.2	73.4

Source: Deputy Director, Economics and Statistics, Ramanathapuram

In a decade, the LEB of the district has improved as 68.9 years, 71.2 years and 70.1 years for male, female and combined respectively in 2013 - 14. However, the district performance is lower than the State average of 71.8 years, 75.2 years and 73.4 years for male, female and combined respectively in the same period. Both the cases, the female LEB is higher than the male LEB.

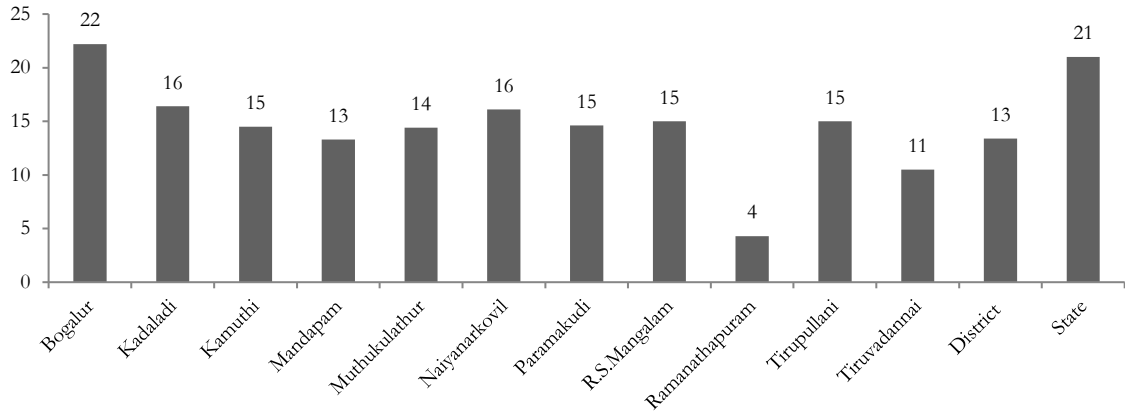
Infant mortality

Infant Mortality Rate (IMR) indicates the number of deaths of infants under one year of age in a given year per 1,000 live births in the same year; This rate is often used as an indicator of the level of health in a locality.. The millennium development goal is to reduce the infant mortality rate as 28 per 1000 live births in 2015.

IMR is a crucial factor to analyze human development. IMR of the district has reduced to 13 in 2013-14 from 21 in 2009 and lower than the State IMR of 21, except, Ramanathapuram and Tiruvadanai, other blocks have high range of IMR than the district. The district can proudly claim that the district had achieved the millennium development goal of IMR less than 28. Inter-block disparities are high and which shows fluctuating from time to time, the range from 4 in Ramanathapuram to 22 in Bogalur during 2013-14. IMR has 29 in Bogalur block during 2007 higher than that of district average, subsequent years, it was reduced. Nainarkoil, Paramakudi, Ramanathapuram, Tirupullani and Tiruvadanai blocks shows variation over a period of time and in 2011 it reached a good position.

[8] State Human Development Report, Tamil Nadu, 2003

Chart 4.5: Infant mortality rate in Ramanathapuram



Source: DDHS, Ramanathapuram, 2013 - 14

Doctors' inadequacy in PHCs, PHC distance as well as infrastructure facility, poor transport facilities, anemic mothers and low birth weight children are the causes for higher IMR. The blocks which have high IMR need continuous effort on Ante-Natal care, Anemia among adolescent girls, neonatal care, special care to low birth weight cum malnourished children, the infrastructure of PHC and transport facility. Maximum number of deliveries happen in Government hospitals, PHC and HSC, strengthening infrastructure facilities in Government hospitals and immunization in a prescribed period will reduce the infant mortality.

Maternal mortality

The maternal mortality ratio (MMR) is the annual number of pregnant women's deaths per 1,00,000 live births which includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy for a specified year. The Millennium Development Goal is to reduce the MMR as 109 per one lakh live births by 2015. The maternal mortality rate of the district is reduced to 49 in 2013-14 from 104 in 2009, lower than the State MMR of 68 and the district acheived the millennium development goal.

Table 4.5: Maternal Mortality ratio

Sl. No	Block /District	2009 - 10	2013 - 14
1	Bogalur	0	341
2	Kadaladi	140	80
3	Kamuthi	142	161
4	Mandapam	188	95.0
5	Mudukulathur	239	326
6	Nainarkoil	0	134
7	Paramakudi	88	47
8	R. S. Mangalam	0	0.0

9	Ramanathapuram	0	79.0
10	Tirupullani	73	148.0
11	Tiruvadanai	50	111.0
District		**104**	**49**
State		**85**	**68.0**

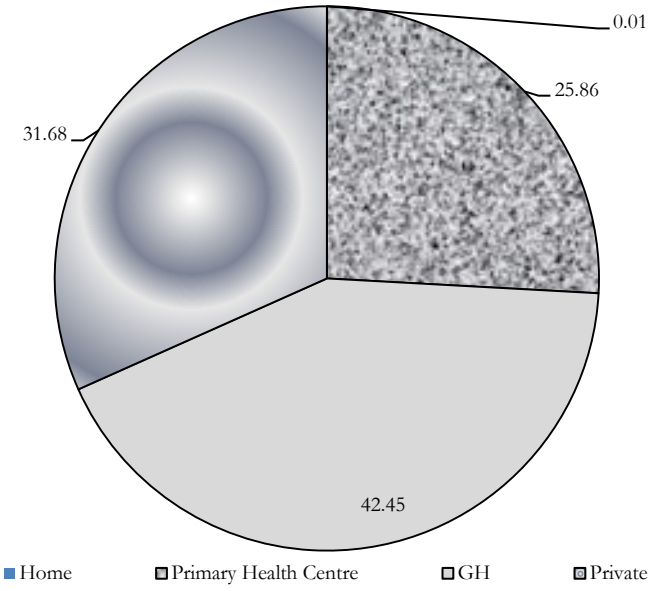
Source: DDHS, Ramanathapuram

Trend: The MMR at district shows variation from 2007 to 2013 - 14. The MMR status of Bogalur, Nainarkoil, R. S. Mangalam and Ramanathapuram block shows zero in 2009 and R. S. Mangalam block are maintaining the same status in 2013-14 too, the MMR range starts from 0 in R. S. Mangalam to 341 in Bogalur which shows the inter block disparity is huge. Except, Paramakudi and R. S. Mangalam, other blocks have high range of MMR when compared to the district in 2013 – 14. Even though, Ramanathapuram district achieved the MDG in MMR, Bogalur, Kamuthi, Mudukulathur, Nainarkoil, Tirupullani and Tiruvadanai blocks are in a delicate situation as they were showing an increasing trend of MMR due to inadequacy of Doctors' in PHCs, distance of PHCs and poor infrastructure and transport facilities and anemic mothers. These blocks need greater focus to reduce MMR by way of focusing on maternal nutritional health, anemic status, on time vaccination, improvement in infrastructural facilities of the Government hospitals and special transport facilities for pregnant women.

Institutional delivery

The percentage of children that were delivered in hospitals were termed as institutional deliveries. Ramanathapuram district shows better position in institutional delivery when compared with State and nation. Even with the lack of transport facility and economic backward condition, people are ensuring hundred percent institutional deliveries in the district, which shows a positive sign of the district towards human development. Total number of births in Paramakudi block were 2434 during 2011-12, of which 3 deliveries were at home. Now this situation has also improved and district stands unique in institutional delivery. The district maintained 100 percent institutional deliveries in 2012-13.

Chart 4.6: Place of delivery in Ramanathapuram, 2013-14



Source: DDHS, Ramanathapuram

The district institutional delivery status is slightly reduced to 99.99 percent in 2013-14 from 100 percent in 2012-13 and the district status is slightly higher than the State average of 99.90 percent. One home delivery is recorded in Ramanathapuram and R. S. Mangalam blocks in 2013-14. The influence of private hospitals is declining in institution delivery and the share of GH and PHC are in increasing.

Utilization of Government hospitals is higher in Ramanathapuram, which shows positive sign of development. Government hospitals and primary health centers play a major role in institutional delivery when compared to private hospitals, while seeing the share of a Government hospital in institutional delivery is remarkable and the share has increased from 58.40 percent in 2011-12 to 63.83 percent in 2012-13 due to the maternity assistance scheme by Government.

Stillbirth rate

The Stillbirth Rate is defined as "Number of stillbirths per thousand live births during the year". Pre-partum stillbirths are those which are occurring before labor reflecting genetic or gestation conditions, including maternal nutritional status and exposure to infection and toxins during pregnancy. Intra-partum deaths, those occurring during the birth process, can reflect the circumstances of the birth (Including position of the fetus, multiple births, premature delivery, placenta praevia, pelvic deformation and accidents due to interference).

Table 4.6: Stillbirth rate

Sl. No	Block	2007	2008	2009	2010	2011	2012	2013-14
1	Bogalur	23.0	18.7	14.3	9.9	18.9	10	8
2	Kadaladi	13.8	21.0	16.1	19.3	12.3	6	10
3	Kamuthi	16.1	18.4	14.9	14.9	11.5	14	9
4	Mandapam	13.1	16.1	11.2	15.5	14.9	11.5	13.3
5	Mudukulathur	24.4	28.4	18.8	20.2	20.4	14	13
6	Nainarkoil	3.5	5.8	13.3	10.7	9.8	9	11
7	Paramakudi	10.4	17.1	10.1	8.4	5.3	5	3
8	R. S. Mangalam	15.7	9.1	9.9	13.6	19.7	10.4	15.0
9	Ramanathapuram	10.5	7.1	4.4	4.1	8.8	7.2	4.3
10	Tirupullani	9.1	11.3	13.2	8.7	14.8	7.3	15.0
11	Tiruvadanai	15.2	10.8	13.8	12.3	8.0	17.0	10.5
District		**14.8**	**19.4**	**14.6**	**14.9**	**12.0**	**11.3**	**10.4**

Source: DDHS, Ramanathapuram

While analyzing the SBR from 2007 to 2013, except 2008 and 2010, the rest of the year, SBR has declining trend. In 2013-14, SBR of the district is 10.4, Mandapam, Mudukulathur, Nainarkoil, R. S. Mangalam and Tirupullani blocks recorded higher than the district SBR.

Immunization

Immunization figures are the key focal point of child survival programs throughout the world which influences neonatal death, IMR, U5MR and CDR, these factors influence human development index, child development index and multidimensional poverty index. There is an evidence of extreme decline in the occurrence of vaccine escapable diseases due to efficient execution of immunization services, no case of diphtheria, Pertusis, Neonatal Tetanus, Poliomyelitis recorded for the past 5 years.

The State had achieved 95 to 100 percent coverage under different vaccination and sustains the same reporting over the years. Special efforts have also been taken to provide immunization services to all children of the slums and remote areas through Mobile Medical Units. Immunization services are provided throughout the State/district under the Supervision of Medical Officers from May 2008. Only Auto Disabled (AD) syringes are used for all vaccinations to ensure injection safety.

Table 4.7: Immunization status, 2013 - 14

Sl. No	Block	Total No. of children below 5 years	Total no. of children immunized	% of children immunized
1	Bogalur	3150	3089	98
2	Kadaladi	12900	12642	98
3	Kamuthi	9185	8987	98
4	Mandapam	3427	4902	143
5	Mudukulathur	7555	7312	97
6	Nainarkoil	3450	3412	99
7	Paramakudi	12940	12365	96
8	R. S. Mangalam	1438	1507	105
9	Ramanathapuram	2894	2942	102
10	Tirupullani	2025	2690	133
11	Tiruvadanai	2069	2677	129
District		**61033**	**62525**	**102**

Source: DDHS, Ramanathapuram

Child immunization status is good in Ramanathapuram district, on an average 96 percent of the children are getting immunization in time, which is one of the reasons for low IMR. The range in immunization status starts from 99 percent in Bogalur and Kamuthi blocks to 94 percent in Tiruvadanai block, which shows a low range of inter block disparity in 2012-13. The immunization status of the district increased to 102 percent in 2013-14. Paramakudi block shows the least immunization percentage of 96 and Mandapam, R. S. Mangalam, Ramanathapuram, Tirupullani and Tiruvadanai blocks registered more than hundred percent immunization.

Female infanticide

Female infanticide is the intentional killing of newborn female children or the termination of a female fetus through selective abortions. Infant mortality rate, neonatal mortality rate, stillbirth rate and the child sex ratio have the positive correlation with female infanticide. Mudukulathur (991), Mandapam (981) and Tirupullani (977) blocks has high child sex ratio than that of the district, other eight blocks showed a declining trend and lower than that of district status and the child sex ratio ranges from 991 in Mandapam to 945 in Bogalur block, the overall sex ratio of the district in 2001 was 1036, but the child sex ratio was 965. Usually, discrimination against girls is measured by using the child sex ratio. The Government is implementing women empowerment schemes over a decade to showcase the significance of women. Women empowerment schemes like,

- Support to Training & Employment Program for Women (STEP)
- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)
- Rashtriya Mahila Kosh - (National Credit Fund for Women)

Apart from this, people's mindset on girl child plays a vital role in sex ratio. While comparing with 2001 census of sex ratio and child sex ratio clearly indicates that the importance of a female child is getting reduced from the past two decades for which interventions by social audit and the surprise visit to scan center to detect cases of sex selective abortions were being undertaken. The district will ensure to prevent feticide and the sex determination during pregnancy. Focus needs to be given at Panchayat and revenue village level to improve the child sex ratio.

Box 4.1: Prevalence of aneamia among adolescent girls and Antenatal mothers

The healthy generations make the country wealthy and stronger. The per capita income decides the country's overall GDP plus positions, it better in all aspects. Likewise, health is the basic aspect of every individual to decide his/her well being in all aspects. Kadaladi block is considered as a backward block in the district with high prevalence of aneamia, which impacts the major health indicator. The attitudinal and behavioural changes also need to be looked out carefully for addressing aneamia, still, people in the rural areas are tying ropes called Thayathu, fire rod treatment, Mantharithal for treating aneamia.

As per the estimates, 20 percent of the maternal deaths in India are due to aneamia. A severely anemic woman faces nine times more risk of life during pregnancy than those with normal hemoglobin levels. Aneamia also results in an increased risk of premature delivery and low birth weight children. As per the source from the health department, Kadaladi (140), Kamuthi (142), Mandapam (188) and Mudukulathur (239) blocks have significant numbers of maternal mortality in 2009 where aneamia plays a major role. Early detection of aneamia helps to prevent complications related to pregnancy, delivery and child development. Adolescent girls (Teens) and pregnant women were the most vulnerable person for prevalence of Aneamia.

Recently (May 2013) DHAN Foundation had conducted the Knowledge, Attitude and Practice (KAP survey) sample survey and Hb test among 2,500 adolescent girls and 124 pregnant women in Kadaladi block. The survey mainly focuses on the knowledge part of aneamia, practices to avoid the causes and attitude against the implementation were tested. The Hb test shows that 82.3 percent of adolescent girls and 84.4 percent of pregnant women were aneamic. The KAP survey shows that 31.5 percent of adolescent girls and mothers had little knowledge on aneamia which was supported by National Centre for Biotechnology Information (NCBI) study, as per NCBI report the prevalence of aneamia among women is around 86.2 percent in Ramanathapuram district during 2012.

The health of women and adolescent girls of the family was more important which will be carried to the next generations. Since the proposed block Kadaladi in the district is remote and scattered, the population in rural areas could not avail enough knowledge on health behaviours. Local culture and belief are the hurdles in changing behaviour and practice so the strategy used for the intervention will be Behaviour Change Communication to bring the changes in the knowledge, attitude, behaviour and practices among the target groups to minimize aneamia.

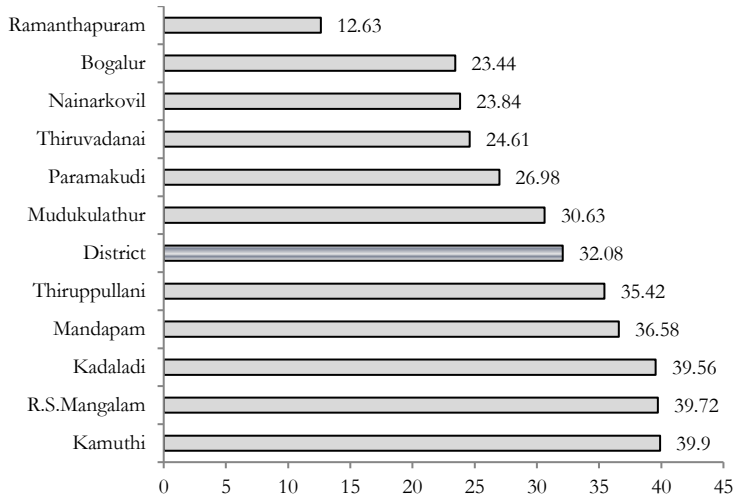
Nutritional status

Nutrition is a core pillar of human development. Malnourishment in State/district have their roots in poverty and inequality. Nutrition deficiency occurrs due to low birth weight children, lack of breastfeeding, common disease, hookworm / roundworm infection, eating too little, eating too much but taking an unbalanced diet which has a close relationship with poverty. There is a significant window of prospect to stop under nutrition by taking care of the nutrition of children in the first two years of life, girls during adolescence, mothers during pregnancy and lactation, which creates the environment to survive and reach optimal growth of development.

Nutritional level

Ramanathapuram district has 67.92 percent of the children in normal nutrition stage and 32.08 percent of malnourished children in 2013 -14. The malnourishment child's status in the district ranged between 12.63 percent in Ramanathapuram block to 39.9 percent in Kamuthi, which explains the existence of wide inter-block disparity. The district administration would continuously take effort to reduce malnourishment among below 5 years children, but, still the issue exists, Tirupullani, Mandapam, Kadaladi, R. S. Mangalam and Kamuthi blocks show a higher range of malnourishment compared to other blocks in the district. Out of these five blocks, except Kamuthi, other blocks has coastal area. Out of 11 blocks in Ramanathapuram, six blocks have coastal area, except Ramanathapuram and Tiruvadanai, other coastal areas have malnourishment issue.

Chart 4.7: Malnourishment among children in 0-5 years, 2013-14 (MUW+SUW)



Source: ICDS, Ramanathapuram

Under nutrition in backward blocks like Tirupullani, Mandapam, R. S. Mangalam, Kamuthi and Kadaladi are occurring due to many reasons like food habits, poverty, lack of education, ignorance, poor sanitation, carelessness, contaminated food, infections and other diseases. The higher order birth rate is also positively correlated with undernourishment issue. Due to all these factors the children take inadequate food which does not cater to their actual requirement or if they take enough food which is not absorbed properly due to infestations, leading to micronutrient deficiencies which causes increased rate of morbidity among children.

As per the Fifth Review Mission, Tamil Nadu – 2013 - 14 report, the food intake pattern of the children also places a vital role in underweight children. Breakfast was consumed by the majority (99 percent) of the children before coming to school, most common items for breakfast included rice with Sambar/Kulambu, left over rice Kanji with pickle. Nearly 10 percent of the children brought pickle to eat along with noon meal. Few children took a noon meal or egg to their home for sharing with the family members, frequent inadequate balanced diet contributes to the children being underweight.

A total of 279 children aged about 5 – 13 years were selected from 4 primary schools, 5 middle schools and 4 higher secondary schools for nutritional status assessment through Multi-staged stratified random sampling in Ramanathapuram district. Anthropometric profile of the children was taken into account. Out of 279 children, 34.7 percent were moderately underweight, 30.8 percent were mildly underweight and severely underweight children comprised 19.7 percent. The normal weight children were only 12.1 percent and children more than normal weight constituted 2.4 percent. As per the Report of 5th Joint Review Mission on Mid-Day Meal Scheme, Tamil Nadu, underweight was more prevalent among girls as 89 percent compared to boys, 81.3 percent.[9]

[9] Report of 5th Joint Review Mission on Mid-Day Meal Scheme, Tamil Nadu (29th July 2013 – 8th August 2013), Page 59.

Box 4.2: Prevalence of Malnourishment in Ramanathapuram district

Malnutrition in early childhood has serious, long-term consequences because it hampers motor, sensory, cognitive, social and emotional development. Malnourished children are less likely to perform well in school and more likely to grow into malnourished adults, at greater risk of disease and early death. Inadequate care of women and girls, especially during pregnancy results in low- birth weight babies. Nearly 30 percent of newborns have a problem of low birth weight which makes them vulnerable to further malnutrition and diseases. Ramanathapuram district has 67.92 percent of the children in normal nutrition stage and 32.08 percent of malnourished children in 2013 -14. The malnourishment child's status in the district ranged between 12.63 percent in Ramanathapuram block to 39.9 percent in Kamuthi, which explains the existence of wide inter-block disparity.

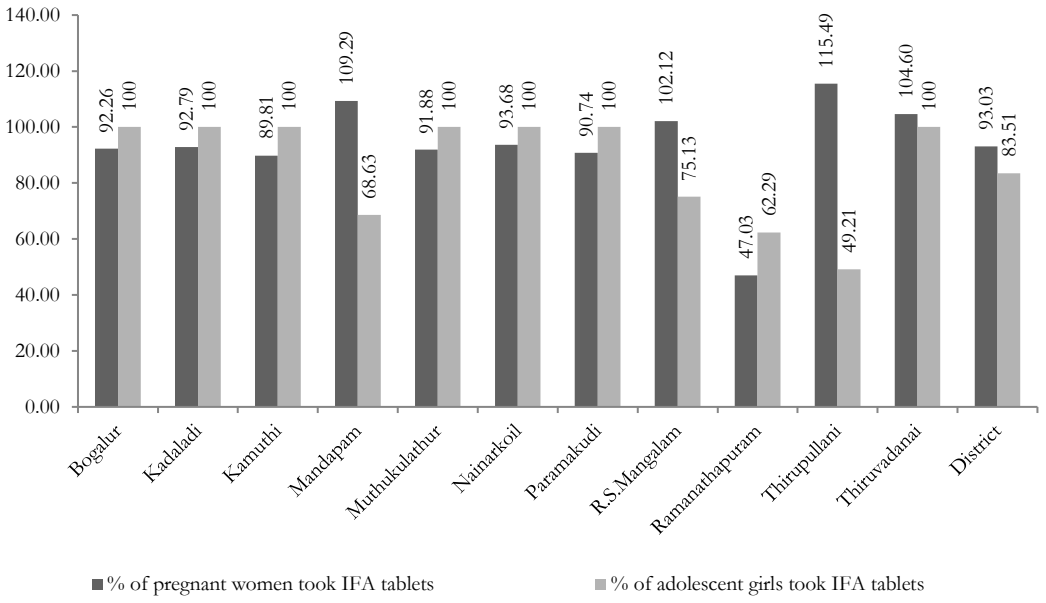
The nutritional status of children under six years (Preschooling) were measured with a parameter weight / age (Standardized by World health organization) through a combined weight campaign in three blocks ICDS centres in 2012-13. The weight/age has measured for 9516, 7724 and 6462 children in Kamuthi, Kadaladi and Mudukulathur blocks, respectively with the help of Public health and the ICDS department through this campaign. Similarly, 1845 children from primary schools in Paramakudi block were selected for measuring the height and weight during 2012. Based on the result, Body Mass Index (BMI) was calculated using the equation given by Garrow (1981).

A combined weighing campaign revealed 37.4 percent, 42 percent and 29.7 percent in Kamuthi, Kadaladi and Mudukulathur blocks, respectively were moderate and severely underweight children for their age. The seriousness of concern is higher in Kadaladi followed by Kamuthi. Malnourishment status is very severe in primary school going children, less than five percent of the children only fall under normal, others fall on severely and moderately underweight, the study found high prevalence of malnourishment in these blocks which can be overtaken by convergence of the noon meal scheme with a regular schedule of deworming, administering iron syrup as a prophylactic measure and providing clinical assistance in the form of appetizers to underweight children.

Provision of IFA tablets

Provision of Iron Folic Acid (IFA) tablets to the adolescent girls, pregnant women and below 5 years children results in mental development, increase the IQ levels, concentration and physical activity. Iron deficiency called as anaemia, on leaving it untreated affects the body immune system, heart and lungs, Iron is a main component in red blood cells, which carries the oxygen throughout the body. Hemoglobin content 12 g shows normal Hb and less than 7 g shows severe anemia. The following are the major causes for this higher prevalence: Lack of awareness on aneamia and its practices, Poor/ low consumption of Iron rich food, IFA tablets, Personal hygiene practices like usage of chappals/slippers, malnourishment among the women, children and adolescent girls, early marriage, early conception, no spacing between pregnancies and lack of awareness of the antenatal care etc.

Chart 4.8: Provision of IFA Tablet, 2013-14



Source: ICDS, Ramanathapuram

IFA tablet and iron rich food consumption, behavioral changes in usage of Chappals, self hygiene and sanitation helps to treat people who are suffering by anemia. 15 percent of the ANC mothers and adolescent girls are suffering with severe anemia. IFA tablet consumption in the district was 95.27 percent among pregnant women and 92.59 percent among adolescent girls in 2011-12, particularly in Kadaladi block, the IFA tablet consumption is less than that of the district and other blocks. The IFA tablet distribution among the pregnant women and adolescent girls are 93.03 percent and 83.51 percent respectively in 2013-14. Ramanathapuram block shows the least IFA tablet distribution of 47.09 percent among pregnant women and Mandapam, R. S. Mangalam, Ramanthapuram and Tirupullani blocks evidenced less than 100 percent IFA tablet distribution among adolescent girls.

Just IFA tablet disbursement only would not reveal expected outcome among pregnant women and adolescent girls, behavioral changes on health, sanitation, self hygiene, iron rich food intake plus orientation about IFA tablet and consumption can only lead to anemic free nutritious district.

Box 4.3: Nutrition programme of Government

Vision for the Twelfth Five Year Plan of Tamil Nadu on Nutrition would be to ensure

"NUTRITION SECURITY FOR ALL"

The following Government schemes are implemented by the State Government to attain the Twelfth five year plan, viz., Midday meal scheme in schools, Integrated child development scheme (ICDS) and National Rural Health Mission (NRHM) - "Improve the availability and access to quality health care by people, especially for those residing in rural areas, particularly for the poor, women and children."

In Ramanathapuram district, 1224 schools having the noon meal programme, through this, 103722 students enrolled and realizing the benefit out of 144279 total students in 2012-13, which shows nearly 71.89 percent. The percentage range of enrollment starts from 47.51 percent in Ramanathapuram block to 100 percent in Nainarkoil block which depends upon the context, the noon meal enrollment shows less than 60 percent in Ramanathapuram, Mandapam and Tirupullani, the urban based blocks. Upto the upper primary education Central Government is aiding for the noon meal programme, afterwards, for 9th and 10th, State Government is underneath. Quantity of food provided through noon meal and ICDS furnished here. Now, the TN government come forward to introduce the minor millet food items with the ICDS centre to address the undernourishment issue.

Mid day meal	Rice (100 g), Vegetables (50 g), Dal (15g), oil (3g) and egg for 5 days. For Tuesday and Friday, Bengal gram (20g) and Potato (20 g) respectively. This schedule prescribed for students who are undergoing primary education. Instead of 100 g rice, 150g rice and 60 g vegetables suggested for upper primary students.	
ICDS centres	Age	Food provided
	6 months to 1 year children	Weaning food
	1-2 years children	Weaning food, one boiled egg per week (Wednes day)
	2-3 years children	Weaning food, noon meal, Bengal gram/green gram (20g) on Tuesday, 3 boiled egg per week (Banana for non egg eating children), Potato 20 g on Friday
	3-5 years children	Noon meal, Bengal gram/green gram (20g) on Tuesday, 3 boiled egg per week (Banana for non egg eating children), Potato 20 g on Friday
	AN and PN	Weaning food
	Old age pensioners	Noon meal
	Adolecent girls	Weaning food

Non-nutritional factor and their impact on health

For any social and financial development, sufficient sanitation with good hygiene and safe drinking water is essential. Lack of proper sanitation and safe drinking water causes diseases which has direct relation with poverty. One of the most significant diseases that arise from poor sanitation and drinking water is diarrohea, young children below the ages of five are more susceptible. Other diseases that are caused by poor sanitation includes schistosomiasis, trachoma, and soil transmitted Helminthiases. The safe drinking water and individual household latrine are the vital indicators to decide human development and poverty existence in a district/block.

Water supply

The MDG target implies a commitment to raise the global drinking water coverage of 77 percent in 1990 to 88.5 percent in 2015. The water supply coverage of the district is 94.98 percent in 2013-14. As per the data sheet provided in www.mdws.gov.in, the district achieved the MDG target as of 2013. The safe drinking water coverage in rural context is lower than that of urban context. Bogalur, Kadaladi, Kamuthi and Paramakudi blocks noticed cent percent water supply coverage than other blocks in Ramanathapuram district. Least coverage of safe drinking water was recorded in Mudukulathur (88.00 percent), Tiruvadanai (86.69 percent) and Nainarkoil (90.52 percent) blocks in 2013-14.

Table 4.8: Access to safe drinking water, 2013 - 14

Sl. No	Block wise/District	Total Number of Habitations	Habitations provided with drinking water	% of safe Drinking water accessibility
1	Bogalur	93	93	100.00
2	Kadaladi	291	291	100.00
3	Kamuthi	275	275	100.00
4	Mandapam	308	303	98.38
5	Mudukulathur	200	176	88.00
6	Nainarkoil	116	105	90.52
7	Paramakudi	209	209	100.00
8	R. S. Mangalam	290	270	93.10
9	Ramanathapuram	206	190	92.23
10	Tirupullani	240	231	96.25
11	Tiruvadanai	323	280	86.69
District		**2551**	**2423**	**94.98**

Source: TWAD and RD&PR Department, www.mdws.gov.in

Though the district achieved the MDG target, around the year drinking water supply is still dream in Ramanathapuram district, being a drought prone district, provision of Cauvery water supply solves the drinking water problem to some extent, but which is not a permanent solution throughout the year. Still, the people spend nearly 2 – 3 hours to fetch the water during summer season, the productive time of women and children are used for water fetching process. Juvenile and weaker persons get affected by water borne diseases due to intake of unsafe water. To find the alternate source is the need of the hour, installation of desalination plant will reveal the eternal solution.

The water quality of the district is coming down because of continuous drought, sea water intrusion and various means. The following study proved the water quality of the district, physico-chemical parameters of ground water from ten sampling points in and around Ramnad city were determined. The results were compared with the standard values from ISI and WHO. Among the ten samples, five samples are not suitable for drinking purpose due to total dissolved solids, the amount of Mg2+, Ca2+, Na+, K+, Cl- and SO42- ions. The amount of Coliforms are also very high in the sample collected from Ramnad town.[10]

The people of Ramanathapuram have identified Kanmois and Ooranis as their **source of water** to make their history of habitation. Ooranis are called as ponds. These are the earthern reservoirs bound by earthern bunds along the sides and receive water from the monsoonal runoff and used for storing water for the whole year. These are the main sources of drinking water for more number of people in the district. These traditional resources are simple, apt, effective and manageable by the community. They provide better solution to the community to meet the diversified needs of water.

Villages have separate ponds for drinking, domestic and for livestock. The ponds are of different types. They are the simple ponds which are earthern bunded and don't have any masonry structures and fencing arrangements. The rainwater collected in the pond is directly taken for consumption. The second type is ponds with steps, sluice and fencing arrangements. Here steps are provided through which people get into the pond and take water. Sluice is provided through which rain water flows into the ponds. A shutter provision is also made to regulate the rainwater entry into the pond. Fencing is provided to arrest the livestock entry into the pond. The third type are sophisticated ponds with filter well mechanism. This is a pucca structured pond, bunds are stone pitched or masonry wall constructed on all the sides of the ponds to avoid siltation. A filter well is provided to get clean water.

Purification of pond water by local techniques: Monsoonal runoff stored in the pond may not be pure. People followed simple traditional water purifying methods to treat the water. Thethankottai is one of the local tree seed, which is mainly used for purifying water. The seed is rubbed with the inner side of the vessel, after that water is poured into the vessel. After settlement of the sediments at the bottom of the vessel, the water is used for drinking purposes. Scratching stones are found in a few places which are roasted by fire, then the roasted stones are taken and stored. If the roasted stones are added into the pond water that have been taken from

[10] Ahamed M.R, Azarudeen R, Karunakaran M, Burkanudeen A. A study on the quality of ground water in and around Ramanathapuram city. Current World Environment 2008;3(1):143-146.

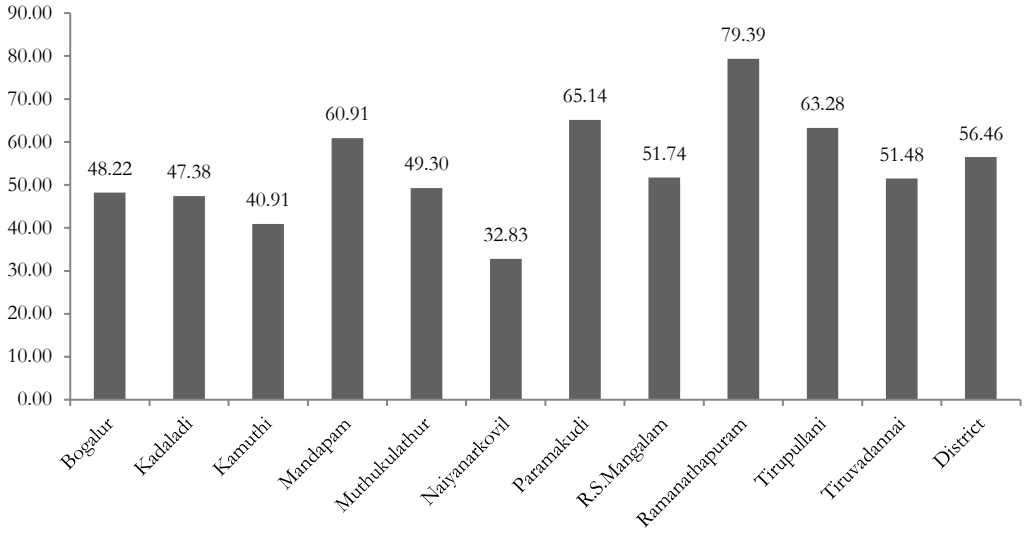
the pot, the water gets purified. When a glass of salt water is added into the pond water, the pond water gets purified. This practice is also being followed in some places.

Sanitation

Poor sanitation accounts for almost 50 percent of underweight children. Children suffering from diarrohea are more vulnerable and become underweight. 26 percent acute respiratory infections occur in children who are malnourished, which has a direct link to diarrohea. Sanitation is a serious issue in backward blocks. Reaching the MDG sanitation target to 75 percent by 2015, the district reached only 41 percent of individual household latrine (IHHL) as of 2012-13. It might be one of the reasons for the existence of greater percentage of malnourished children. Out of 3.36 lakh households, 1.38 lakh HH only have sanitation facilities. Open defecation is the common problem observed in rural areas. In the rural area, only 28.05 percent of the HH has toilet facility, whereas in urban areas, sanitation facility is better than that of rural areas at 79.79 percent. To reach the MDG target, the district requires to facilitate still 1.23 lakh IHHL constructions with proper technical awareness. Still, people in rural areas have some barriers in latrine usage like perceptions regarding odor, waste disposal as well as availability of scared water resources in the district. To break these barriers, technical services with proper orientation could facilitate the district to reach the MDG target. Sanitation facility within the household premises in Ramanathapuram district ranges from 69.92 percent in Paramakudi to 15.78 percent in Bogalur blocks, Kadaladi, Kamuthi, Tirupullani, Mandapam, R. S. Mangalam and Bogalur blocks show a lower percentage of household latrines than that of district status during 2012-13.

56.46 percent of the households accessed Individual Household Latrine in Ramanathapuram district in 2013 – 14. The range starts from 32.83 percent in Nainarkoil block to 79.39 percent in Ramanathapuram block, Urban context blocks, such as, Mandapam, Paramakudi, Ramanathapuram and Tirupullani blocks have a higher percentage of IHHL coverage than the district average and other rural context blocks. Several reasons combined with non-adoption of latrine. The most common are related to the poverty, socio-cultural issues and technical difficulties. Even the district has 56.46 percent of IHHL, the usage is meagre because of water scarcity. IHHL with proper technical awareness about construction of low cost plus low water usage latrines will provide 100 percent sanitation and hygiene.

Chart 4.9: Access to Sanitation, 2013-14



Source: www.mdws.gov.in, RD and PR Department, Ramanathapuram

Special programs

HIV/AIDS control

Human immunodeficiency virus infection / acquired immunodeficiency syndrome is a disease affecting human immune system caused by viruses. There is currently no curative measure or effective HIV vaccine. The treatment consists of highly active antiretroviral therapy (ART), which slows progression of the disease. So the best medicine for this disease is "Prevention is better than cure". The Government hospitals have a counselling Centre for HIV affected persons and providing free treatment. The HIV positive person's network provides economical support to the affected families.

All the prevalence states prove a clear declining trend in adult HIV prevalence. HIV is declined notably in Tamil Nadu to attain 0.33 percent in 2009 down from 0.58 percent in 2007. Most hopeful the decline is also evident in HIV occurrence among the young population (15 – 24 years) at national level, both men and women.

Ramanathapuram district shows an increasing trend in the case of HIV positive. It shows danger sign and awareness about the HIV-AIDS, which is the need of the hour. Female positive cases are sharply increasing and male female gap in terms of HIV infection is getting minimized. It is the alarming symptom to provide special attention to minimize the present situation. The range of spread is higher among 30-39 years age group followed by 40 - 49 years.

Table 4.9: HIV positive cases in Ramanathapuram, 2007-2014

Sl. No	Age-Group wise	Positive incidents in 2007-08		Positive incidents in 2008-09		Positive incidents in 2009-10		Positive incidents in 2010-11		Positive incidents in 2011-12		Positive incidents in 2012-13		Positive incidents in 2013-14	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	0-14	1	1	4	1	0	7	5	5	6	2	2	1	0	3
2	15-19	1	0	0	1	0	0	0	2	2	0	0	0	0	2
3	20-24	5	12	6	6	5	14	15	9	7	12	1	10	8	5
4	25-29	21	12	18	19	32	20	26	12	18	19	14	10	18	9
5	30-39	42	13	53	27	53	22	58	25	53	32	40	15	35	26
6	40-49	24	7	32	6	34	17	29	10	33	11	29	8	21	13
7	50 & Above	11	2	13	4	16	5	17	8	20	5	13	3	17	8
Total		105	47	126	64	140	85	150	71	139	81	99	47	99	66

Source: DDHS, Ramanathapuram

During 2013-14, the total HIV positive incidents were 99 males and 66 females, HIV infection was higher among the male than female. Specifically, 30-39 years old, male and female highly infected, followed by 40-49 years old than the other age groups. The HIV infection is varying from 2007 to till date.

Tuberculosis and Leprosy incidents

Tuberculosis: This is a public health problem and is also the world's largest epidemic disease. Tuberculosis in Ramanathapuram district are on an increasing trend. The TB control program in the district functions through block-level units. It is based on the revised national and State TB control program. It predicts detection of TB patients from those reporting with chest symptoms at the block TB center, including effective treatment for the prescribed period. Proper medicine and psychotherapy for the persons with TB infected families will reduce the spread. Except Kadaladi, other blocks show an increase trend of positive TB incidents.

In 2013 – 14, 1545 TB incidents recorded is very high spread when compared to previous years. The prevalence of TB is very high in Ramanathapuram block, 251, followed by Mandapam, 216. The entire block in Ramanathapuram district shows an increasing trend of TB occurrence.

Table 4.10: TB and Leprosy incidents

Sl. No	Block	Positive TB incidents			Leprosy		
		2008	2012	2014	2008	2012	2014
1	Bogalur	17	25	68	0	1	0
2	Kadaladi	114	108	193	3	12	5
3	Kamuthi	85	93	133	2	4	7

Sl. No	Block	Positive TB incidents			Leprosy		
		2008	2012	2014	2008	2012	2014
4	Mandapam	84	126	216	15	9	8
5	Mudukulathur	68	70	119	2	2	2
6	Nainarkoil	16	32	47	1	2	0
7	Paramakudi	66	95	167	5	7	8
8	R. S. Mangalam	20	36	75	3	3	6
9	Ramanathapuram	118	132	251	22	14	8
10	Tirupullani	56	77	166	4	4	11
11	Tiruvadanai	50	62	110	8	9	3
District		**694**	**856**	**1545**	**65**	**67**	**58**

Source: DDHS, Ramanathapuram

Incidents of Leprosy in India have decreased dramatically from 5,000,000 incidents in 1985 to 213,000 incidents in 2009. This significant decrease is largely due to the effectiveness of multi - drug therapy (MDT) that was developed in 1981. The prevalence of leprosy in India is now less than 1 case in 10,000 individuals. In Tamil Nadu, the prevalence rate has been brought down rapidly from 118 per 10,000 population in 1983 to a mere 2.2 in 2002. Leprosy curative services are now accessible in all PHCs, and Government dispensaries. In Ramanathapuram district, Leprosy infected persons are 67 incidents in 2012 and a notable reduction observed in Ramanathapuram block.

The leprosy status in Ramanathapuram district shows a declining trend in 2013-14. Kamuthi, Paramakudi, R. S. Mangalam and Tirupullani blocks show an increase in leprosy occurrence, these blocks need constant follow up to minimize the issue.

Incidence of Malaria in coastal belt

In Ramanathapuram district, Kadaladi, Mandapam, R. S. Mangalam, Ramanathapuram, Tirupullani and Tiruvadanai blocks coastal regions are reporting Malaria incidents, which are indigenous in transmission, as mosquito breeding potential were available in these areas. Fishermen community is also highly vulnerable for Malaria receptivity, since they are moving every season to other districts for fishing based on the seasons both East and West Coast. This type of movement paves the way for the increase of Malaria incidents in Ramanathapuram District. In 2012-13, 4291 malarial incidents registered in PHCs. Continuous control of Malaria disease is essential and inevitable in the coastal areas. The Malaria prevention measures is being undertaken by the health department and district administration.

Box 4.4: Utilization of public health services

The utilization of public health services is higher in Kadaladi block in terms of inpatient and outpatient flow compared to other blocks, Kadaladi has more numbers of Primary Health Centres. Throughout the district, 53 PHCs are spread across the blocks. The urban based PHCs serve a higher population than that of rural PHCs. The service provided by the PHC and HSC is remarkable. Because of remoteness, scattered settlement and lack of transport services, the populace could not reach the medical facility in time, which leads IMR, MMR, accidental death due to Snake bite and heart attack death etc., For every action in poverty alleviation, to acquire balanced growth in human development, the spread of human resources in basic amenities such as health, education, employment, etc plays vital role. Lack of human resources in backward region is a main cause for low human development.

To post a right person in a backward region like Ramanathapuram is an accurate solution to address the imbalanced growth in terms of health. Actual sanctioned post in all PHC and hospitals is 136; however, the doctors' availability is 104. The human resource shortage is highly observed in rural based blocks like Bogalur, Kadaladi, Kamuthi, Mudukulathur, Nainarkoil, R. S. Mangalam, Tiruvadanai and one post in Paramakudi. While verifying the share of institutional delivery, the government hospitals and PHCs contribute more than that of private hospitals which increased from 58.40 percent in 2011-12 to 63.83 percent in 2012-13. The increase shows positive sign on one side, but at the same time, insufficient human resources in hospitals leads IMR and MMR.

Table 4.11: Utilization of GOVT Health care services (2013 - 14)

Sl. No	Block wise/District	Total No. of OP	Total No. of In patients	No. of PHC	No. of Doctors availability	No. of AWCs
1	Bogalur	71557	2538	2	4	62
2	Kadaladi	312344	9749	9	15	178
3	Kamuthi	200237	5614	6	8	189
4	Mandapam	306482	802	7	18	195
5	Mudukulathur	139054	3178	4	5	139
6	Nainarkoil	106461	3514	3	6	83
7	Paramakudi	198538	5323	4	8	145
8	R.S.Mangalam	212495	387	4	9	133
9	Ramanathapuram	153898	277	3	10	127
10	Tirupullani	197714	356	5	9	108
11	Tiruvadanai	322829	801	6	12	136
District		2221609	32539	53	104	1495

Source: Health Department, ICDS, Ramanathapuram

In 2013–14, 2221609 and 32539 patients got benefit from government health care system as outpatients and inpatients.

Conclusion

Ramanathapuram district shows improvement in health indicators, *viz*., decline trend of infant mortality, maternal mortality, stillbirth rate and an ensured hundred percent institutional delivery. The district is moving towards population stability by reducing trend of crude birth and death rate. The population growth rate of the district is less than that of the State. However, a wide range of inter block disparity exists in the district because of isolated coastal and plain areas. Because of the remoteness, accessibility of health services is getting delayed. It is one of the reasons for the health backwardness of the district.

According to this chapter, a number of priority points have been identified in the district to attain high faring human development, i.e. to increase the child sex ratio by preventing sex-selective abortions through social auditing of scan centers along with hospitals, to reduce malnourishment among 0-5 years children by integrating minor millet based diet through ICDS program, efforts to reduce anaemia among adolescent girls and pregnant women, improve quality of primary health centers with adequate infrastructure facilities and human resource placement. Tirupullani, Mandapam, Kadaladi, R. S. Mangalam and Kamuthi blocks show a higher range of malnourishment than that of the district. Out of these five blocks, except Kamuthi, the rest of the block has costal context. Out of 11 blocks, six blocks have coastal context. Except Ramanathapuram and Tiruvadanai, other coastal blocks have malnourishment issue in a wider range.

IMR of the district has reduced to 13 in 2013-14 from 21 in 2009 and lower than the State IMR of 21. Except, Ramanathapuram and Tiruvadanai, other blocks have high range of IMR than the district. The district can proudly claim that the district has achieved the millennium development goal of IMR less than 28. Likewise, Except, Paramakudi and R. S. Mangalam, other blocks have a higher range of MMR than the district in 2013 – 14.

In 2013-14, the leprosy status in Ramanathapuram district was declining. Kamuthi, Paramakudi, R. S. Mangalam and Tirupullani blocks showed a increase in leprosy occurrence. These blocks need constant followup to minimize the issue.

Emphasis should be on supply of safe drinking water throughout the years. Sanitation and self hygiene is another core pillar for sustainable health care in Ramanathapuram. Prevalence of Malaria in coastal areas is a common health issue. The district administration is taking steps to break the malaria epidemic disease since continuous emphasis is required on malaria control.

CHAPTER 5

LITERACY AND EDUCATION

5. Literacy and Education

கேடில் விழுச்செல்வம் கல்வி யொருவற்கு

மாடல்ல மற்றை யவை

(திருக்குறள் – 400)

Learning is a wealth that none could destroy
Nothing else gives genuine joy

(Tirukkural: 400)

Introduction

Literacy is a basic human right furthermore the base for lifetime wisdom. It is entirely crucial to society and human development in its capability to convert lives. For individuals, families, as well as societies alike, it is a tool of empowerment to advance one's health, income, moreover relationship with the humanity. The uses of literacy are continually sprouting, along with proceeds in technology. From text messaging to Internet, the ever-wider accessibility of contact is made for better communal and political involvement. A literate community is a vibrant community, one that exchanges thoughts. Illiteracy, however, is a barrier to an improved quality of life.

The significant achievements in Ramanathapuram district according to Census 2011 as literacy rate (80.72 Percent), that is higher than the State (80.09 Percent). Gender wise also the literacy rate is above the State. The growth rate of female literacy is threefold higher than male literacy, i.e. 16.04 percent in the last decade. Girls fare well at enrollment in primary and upper primary, completion rate and transition rate from primary to upper primary and upper primary to secondary despite the poor child sex ratio, but the same does not get reflected in the drop out in primary education. Urban context plays an important role in improving the literacy rate.

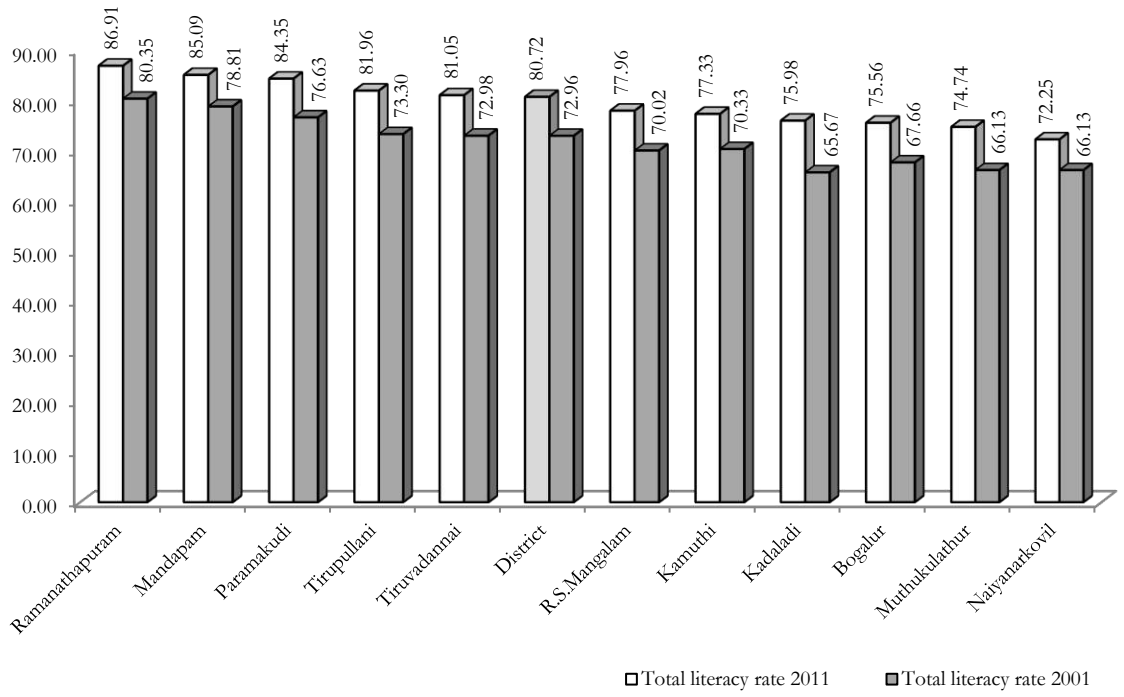
The present chapter tries to look at the extent of disparity in male, female literacy, analyze the status plus gaps in enrollment, completion, transition, dropout, access to education, school infrastructure, Pupil- Teacher ratio, and growth of higher education across the blocks. The study uses data from educational departments of Ramanathapuram District through the District Planning Cell.

Literacy performance of the district

According to the census, the working definition of literacy is a person in age limit of seven and above, who can both write and read with understanding any of the language measured as a literate. The literacy rate of the block is one of the vital indicators to decide the human development of the block; it is used to compute the Human Development Index.

The literacy rate of Ramanathapuram has increased to 80.72 percent in 2011 from 72.96 percent in 2001, slightly higher than that of the State, 80.09 percent in 2011. Total literates in Ramanathapuram District were 978,946.

Chart 5.1: Literacy rate for Ramanathapuram



Source: Census

The literacy rate in the district, range from 86.91 percent in Ramanathapuram to 72.25 percent in Nainarkoil. Mandapam, Paramakudi, Ramanathapuram, Tirupullani, and Tiruvadanai blocks show good results in literacy rate when compared to the district, except, Tiruvadanai and other four blocks has urban context.

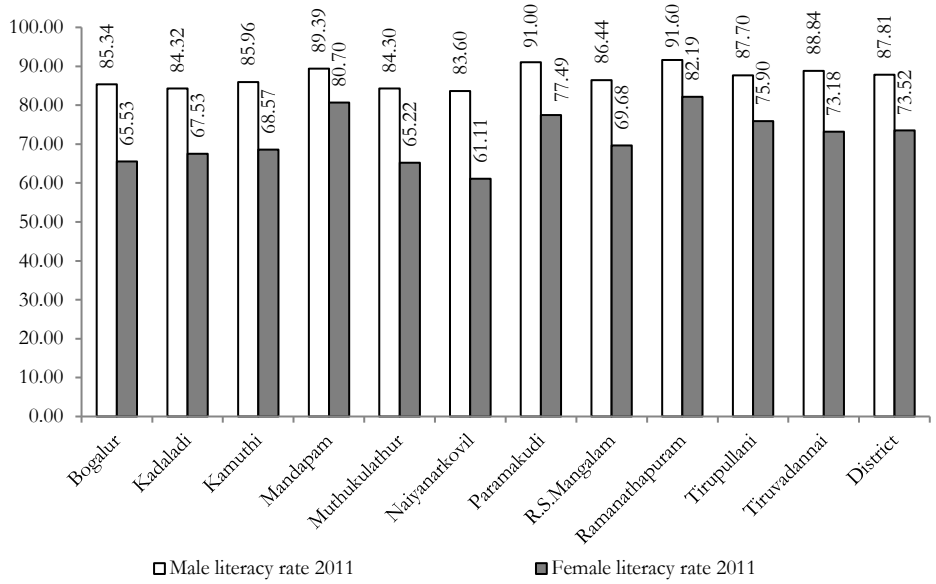
In the inter-census period (2001-2011), literacy growth rate is higher in Ramanathapuram, 10.63 percent than that of State's, 9.04 percent. According to the human development index, the least faring blocks of Kadaladi and Mudukulathur have a higher range of literacy growth rate than that of State, district and other blocks. It is one of the positive signs to fasten the human development in these two blocks. Apart from these blocks, the rural context based blocks *viz.*,

Bogalur, R. S. Mangalam, and Tiruvadanai along with urban based block Tirupullani has a higher literacy growth rate than that of the district. It is one of the conducive climate of the district towards enhancing human development.

The higher percentage of literacy rate is observed in urban areas than that of rural areas. The similar trend is noticed in terms of male and female literacy too. As per the 2011 census, the literacy rate in rural and urban areas of Ramanathapuram was 77.03 percent and 89.24 percent respectively. Alike, the male and female literacy rate for the same period was 85.29 percent and 68.68 percent in a rural context and 93.58 percent and 84.77 percent in the urban context, respectively, which shows a wide literacy gap, however, the hopeful trend has observed in the growth rate of rural literacy rate and female literacy rate from 2001 to 2011.

Gender: Male and female literacy rate have increased to 87.81 percent and 73.52 percent respectively in 2011 census from 83.01 percent and 63.36 percent respectively in 2001 and higher than the State, the State male and female literacy have also increased to 86.77 percent and 73.4 percent respectively in 2011 from 83.28 percent and 64.91 percent respectively in 2001. The number of male and female literates in the district was 536,487 and 442,459 respectively in 2011.

Chart 5.2: Gender literacy rate in Ramanathapuram



Source: Census 2011

The district has the gender inequality in literacy rate, but, the literacy gap has reduced to 14.29 percent in 2011 from 19.65 percent in 2001, slightly higher than the State. However, the growth rate of female literacy, 16.04 percent is nearly threefold higher than that of male literacy of 5.78 percent, which shows that the existence of literacy gap is sharply coming down. The Male literacy

rate ranges from 91.60 percent in Ramanathapuram to 83.60 percent in Nainarkoil, similarly, the female literacy rate ranges from 82.19 percent in Ramanathapuram to 61.11 percent in Nainarkoil.

The range of literacy gap was high in Nainarkoil, 22.50 percent and lowest in Mandapam, 8.69 percent, which shows a wide disparity among the blocks. The urban based blocks, *viz*., Ramanathapuram, Mandapam, Paramakudi and Tirupullani blocks have performed well in terms of total literacy rate, male and female literacy rate and lower literacy gap than district average and State. In case of rural context, Tiruvadanai block has performed better.

Elementary Education

Elementary education plays a significant role in human development. Primary education is the first phase of formal education in a range of necessary subjects. It usually involves no early formal education and is classically the beginning of methodological studies. Characteristic of a primary education are the prescribed tuition of reading, writing and mathematics.

Enrollment in Primary Education

The gross enrollment ratio in primary education for the district has increased to 102.93 percent in 2013-14 from 100.08 percent in 2012-13. Millennium development goals targeted 90 percent of enrollment in primary education by 2010, by considering this target; Ramanathapuram district executed the MDG in terms of gross enrollment, which is one of the vital education indicators to compute the human development index. GER ranges from 99.62 percent in Mudukulathur to 100.83 percent in Ramanathapuram during 2012-13, except, Bogalur, Nainarkoil, Paramakudi, Ramanathapuram and Tirupullani, other blocks have performed lower than that of district average due to inadequate transport facility and scarce school accessibility. But, during 2013-14, all the blocks are performing more than 100 percent GER in primary education. Tamil Nadu Government initiated numerous steps to improve the quality of education in Government schools. Hence, the recent trend shows that parents were fascinated with English medium schools than the Tamil medium which grounds declining trend of enrollment in Government schools and few schools have pupil school ratio of less than 10.

Table 5.1: Enrollment in Primary education

S. No.	Blocks	2012 - 13			2013 - 14		
		Boys	Girls	Total	Boys	Girls	Total
1	Bogalur	100.62	100.1	100.36	100.62	100.10	100.45
2	Kadaladi	99.62	99.78	99.70	99.79	99.78	100.92

S. No.	Blocks	2012 - 13			2013 - 14		
		Boys	Girls	Total	Boys	Girls	Total
3	Kamuthi	99.37	100.07	99.72	100.07	100.07	100.55
4	Mandapam	99.99	99.9	99.95	100.47	99.90	100.24
5	Mudukulathur	99.4	99.83	99.62	99.50	99.83	100.42
6	Nainarkoil	100.51	100.14	100.33	100.51	100.14	100.64
7	Paramakudi	100.49	100.3	100.40	100.19	100.30	100.28
8	R. S. Mangalam	99.99	100.04	100.02	99.99	100.04	100.62
9	Ramanathapuram	100.75	100.9	100.83	100.75	100.90	100.72
10	Tirupullani	100.05	100.13	100.09	100.05	100.13	100.52
11	Tiruvadanai	99.75	100.05	99.90	99.75	100.05	100.69

Source CEO, SSA, Ramanathapuram

The girls gross enrollment is higher than that of boys' enrollment, 100.11 and 100.05 respectively in 2012-13, likewise, The girls GER in primary education, 103.24 percent is higher than the boys GER, 102.62 percent during 2013-14. Even though, the sex ratio of the district is getting lower, the awareness regarding girl child education is remarkable. The boys' GER ranges from 99.50 percent in Mudukulathur to 100.75 percent in Ramanathapuram during 2013-14 and Kadaladi, Mudukulathur, R. S. Mangalam and Tiruvadanai blocks have enrolled less than hundred percent boys in primary education.

The girls' GER ranges from 99.78 percent in Kadaladi to 100.90 percent in Ramanathapuram during 2013-14 and Kadaladi, Mandapam and Mudukulathur blocks have enrolled less than hundred percent girls in primary education. The narrow range of disparity perceived within the blocks and among gender due to SSA intervention and the influence of Activity Based Learning (ABL) method.

Completion Rate and Dropout Rate in Primary Education

Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age. The indicator, which monitors education system coverage in addition to student succession, is projected, to determine the human capital pattern, quality of education and effectiveness.

Various factors may contribute to the poor performance of this indicator, including low quality of schooling, obstacle over poor performance, availability of teachers, classrooms and

educational materials. To avoid these obstacles, the Government took various steps to improve the education quality, on which the key intervention is an implementation of Activity based learning methods in elementary education. The primary completion rate is a significant indicator in MDG. In goal no. 2 to attain universal primary education, guarantee that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

The completion ratio in primary education was in increasing trend from 97. 2 percent in 2011-12 to 97.3 percent in 2012-13 respectively. The district constantly executing the MDG target in terms of primary completion rate and the district can reach the goal by 2015. The completion ratio in primary education ranged from 96.34 percent in Mandapam to 98.96 percent in Nainarkoil during 2012-13. Except Bogalur and Nainarkoil, other blocks show an increasing trend in primary completion from 2011-12 to 2012-13, this increasing trend was higher in Mandapam block, nearly 5 percent, which is one of the positive signs to narrow down the wide range. Kamuthi, Mandapam, R. S. Mangalam and Tiruvadanai blocks have the concern of an inferior completion rate than that of the district due to inadequate school accessibility.

Table 5.2: Completion rate and Dropout rate in primary education

Sl. No	Block	Completion Rate						Dropout Rate					
		Boys		Girls		Total		Boys		Girls		Total	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Bogalur	97.3	99.0	99.2	99.0	98.2	98.9	0.6	0.1	0.8	0.6	0.7	0.8
2	Kadaladi	96.9	95.8	97.8	96.9	97.3	96.7	0.6	1.9	2.0	1.2	1.3	1.5
3	Kamuthi	96.0	96.0	97.1	97.0	96.6	96.7	0.7	0.2	1.6	1.1	1.2	0.6
4	Mandapam	96.4	96.4	96.3	97.9	96.3	96.6	0.5	0.2	1.1	1.0	0.8	1.1
5	Mudukulathur	96.2	96.2	98.0	96.2	97.1	96.9	0.4	0.2	0.9	0.6	0.6	0.6
6	Nainarkoil	98.6	99.6	99.3	99.6	99.0	99.4	0.5	0.5	1.4	0.1	1.0	0.6
7	Paramakudi	97.2	95.8	97.1	97.1	97.2	96.7	0.4	0.3	1.0	1.2	0.7	0.6
8	R. S. Mangalam	95.8	96.0	97.4	97.6	96.6	96.7	0.8	0.6	1.4	1.0	1.1	0.8
9	Ramanathapuram	98.3	98.3	98.3	98.3	98.3	98.2	0.5	0.5	1.0	1.0	0.8	0.9
10	Tirupullani	97.6	97.3	97.1	97.3	97.4	97.0	0.3	0.3	0.8	0.8	0.6	0.6
11	Tiruvadanai	96.1	95.9	96.7	96.8	96.4	96.5	1.0	1.7	1.3	1.4	1.2	1.9
District		**96.9**	**96.9**	**97.7**	**97.6**	**97.3**	**97.3**	**0.6**	**0.9**	**1.2**	**0.9**	**0.9**	**0.9**

Source: CEO, SSA, Ramanathapuram

In terms of Gender, the primary completion rate of girls is higher than that of the boys, which shows that boy children need more concentration to complete the primary education, but in both the incidents, completion rate is in an increasing trend at district level. The Boys'

completion rate ranged from 98.61 percent in Nainarkoil to 95.75 percent in R. S. Mangalam, except, Bogalur, Nainarkoil and R. S. Mangalam, other blocks show an increasing trend in 2012-13. The girls' completion rate ranged from 99.32 percent in Nainarkoil to 96.28 percent in Mandapam, except Kamuthi, Mandapam, Paramakudi and Tiruvadanai, other blocks show an increasing trend of girls completion rate in 2012-13.

Total completion rate of the district was 97.3 percent. The completion rate among the boys is 96.9 percent and among girls, 97.6 percent in 2013-14, like 2012-13, girls are performing well than boys, except Bogalur, Nainarkoil, Ramanathapuram and Tirupullani, other blocks shows less boys completion rate than the district and except Bogalur, Mandapam, Nainarkoil, R. S. Mangalam and Ramanathapuram, other blocks performance are lower than the district in girls completion rate.

Dropout Rate in Primary education: The Dropout rate in primary education is in increasing trend which shows from 0.51 percent in 2011-12 to 0.9 percent in 2012-13 in primary education due to the girls dropout from 0.44 percent to 1.21 percent for the same period and during 2013 – 14, the district is maintaining the same figure, like 2012-13. In the case of Dropout rate, the dropout rate among boys, girls and the total is 0.95 percent, 0.93 percent and 0.94 percent respectively in 2013-14. In 2011-12, the girls' dropout was lower than that of boys' dropout, but, this situation reversed in 2012-13, the boys' dropout rate neither increased nor decreased. Tiruvadanai block shows considerable decline in dropout rates, which decreased from 4.04 percent to 1.17 percent during 2011-12 to 2012-13 in primary education.

All the blocks show an increasing trend in the primary education dropout rate except Kadaladi, Mandapam and Tiruvadanai blocks. Kadaladi, Kamuthi, R. S. Mangalam and Tiruvadanai blocks show more than one percent of dropout rate in 2012-13 due to scarce school accessibility and inadequate transport facility, which leads higher range of girls dropout.

Upper primary/ Middle school education

Universalization of Elementary Education (UEE) is a legitimate term and an assurance of State and district, which implies educating all children up to the age of 14 which is equivalent to completion of the upper primary education. The enrollment in upper primary schools is more a meaning of primary education completion rates than a function of the relevant age group. All children in the relevant age group of 11 to 14 cannot enroll in upper primary classes if they enroll and complete primary education.

Enrollment in upper primary education

The gross enrollment ratio in upper primary education has increased to 100.55 percent in 2013-14 from 100.54 percent in 2012-13 and entire blocks are maintaining more than hundred percent GER in upper primary education. The Enrollment ratio in upper primary education ranges from 100.24 percent in Mandapam to 100.92 percent in Kadaladi during 2013-14. The boys enrollment ratio was 100.92 percent and was higher than the girls, 100.18 percent in 2013-14, which ranges from 100.32 percent in Paramakudi to 101.58 percent in Kadaladi in boys enrollment and the girls enrollment ranges from 100.01 percent in Mudukulathur to 100.36 percent in Tiruvadanai.

Table 5.3: Enrollment in upper primary education

Sl. No.	Blocks	2012 - 13			2013 - 14		
		Boys	Girls	Total	Boys	Girls	Total
1	Bogalur	100.79	100.106	100.45	100.79	100.11	100.45
2	Kadaladi	101.58	100.263	100.92	101.58	100.26	100.92
3	Kamuthi	100.92	100.186	100.55	100.92	100.19	100.55
4	Mandapam	100.38	100.106	100.25	100.38	100.11	100.24
5	Mudukulathur	100.73	100.006	100.37	100.83	100.01	100.42
6	Nainarkoil	101.07	100.216	100.64	101.07	100.22	100.64
7	Paramakudi	100.12	100.246	100.18	100.32	100.25	100.28
8	R. S. Mangalam	101.12	100.116	100.62	101.12	100.12	100.62
9	Ramanathapuram	101.15	100.283	100.72	101.15	100.28	100.72
10	Tirupullani	100.92	100.121	100.52	100.92	100.12	100.52
11	Tiruvadanai	101.01	100.364	100.69	101.01	100.36	100.69
District		**100.89**	**100.18**	**100.54**	**100.92**	**100.18**	**100.55**

Source: EER 2013 - 14, Ramanathapuram

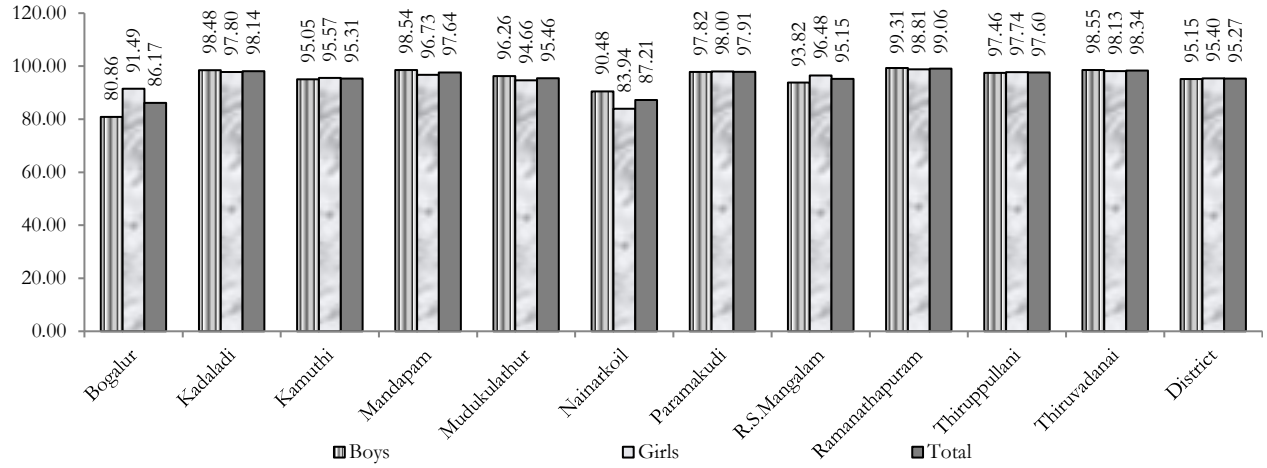
Multi-grade teaching is almost absent in most of upper primary schools. It restricts the education quality. Nearly 109 upper primary schools in the district are not having maths' and science teachers as of 2011-12[11]. The majority of the schools have at least three rooms and three teachers, this condition is common in educationally backward districts and blocks. Easy access of schools to enroll all the eligible children, provision of physical, infrastructural facilities and teaching learning materials in the classrooms will help a meaningful curriculum transaction.

[11] DISE, Tamilnadu report, 2011-12

Transition rate in upper primary to secondary

Transition rate is generally defined as the percentage of students progressing from one level of schooling to the next level. The transition rate in upper primary education to secondary education is reduced to 95.27 percent in 2013-14 from 96.98 percent in 2012-13 and 96.53 percent in 2011-12, which ranges from 86.17 percent in Bogalur to 99.06 percent in Ramanathapuram.

Chart 5.3: Transition rate in upper primary to secondary, 2013-14



Source: CEO, RMSA, Ramanathapuram

The girls transition rate is higher at 95.40 percent when compared to the boys transition rate of 95.15 percent in 2013-14, which has decreased from 2012-13. The girls transition rate of 97.67 percent was higher than the boys transition rate of 96.29 percent in 2012-13. The boys transition rate ranges from 80.86 percent in Bogalur to 99.31 percent in Ramanathapuram and for girls, range starts from 83.94 percent in Nainarkoil to 98.81 percent in Ramanathapuram during 2013-14.

Completion rate and Dropout rate in upper primary education

The completion rate in upper primary education is in increasing trend. The growth shows from 96.5 percent in 2011-12 to 97 percent in 2013-14, but, upper primary completion rate is slightly less than that of the primary education completion rate. The completion rate in upper primary education ranges from 93.6 percent in Mandapam to 99.7 percent in Nainarkoil during 2013-14. Bogalur, Mudukulathur, Nainarkoil, R. S. Mangalam, Ramanathapuram and Tirupullani blocks were performing better than the district average.

The boys and girls completion rate is more or less similar as 2012-13 data, but the girls completion rate is reduced from 97.7 percent in 2012-13 to 96.6 percent in 2013-14, the completion rate of girls, 96.6 percent is higher than the boys completion rate of 96.3 percent. It shows boy children need more concentration to complete their upper primary education. The Boys completion rate ranges from 93.9 percent in Kadaladi to 99.5 percent in Nainarkoil and for girls range starts from 95.8 percent in Tiruvadanai to 98 percent in Mudukulathur during 2013-14.

Table 5.4: Completion rate in upper primary education

Sl. No	Block	Completion rate								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Bogalur	98.93	96.46	99.1	98.74	98.64	96.2	98.84	97.55	99.3
2	Kadaladi	93.69	94.67	93.9	97.46	97.54	95.9	96.08	96.11	96.0
3	Kamuthi	94.2	95.62	94.4	97.02	98.18	96.3	95.24	96.90	96.1
4	Mandapam	94.03	95.41	94.2	92.35	94.16	96.9	91.34	94.79	93.6
5	Mudukulathur	96.09	96.09	96.3	97.58	98.23	98.0	96.84	97.16	97.3
6	Nainarkoil	99.28	97.81	99.5	99.13	99.21	97.6	99.31	98.51	99.7
7	Paramakudi	94.8	95.08	95.0	97.53	98.71	97.1	96.17	96.90	96.6
8	R. S. Mangalam	95.94	96.17	96.1	97.21	97.64	96.3	96.58	96.91	97.0
9	Ramanathapuram	98.15	98.67	98.4	98.12	98.23	96.4	98.14	98.45	98.6
10	Tirupullani	97.18	97.62	97.4	96.11	97.31	96.3	96.65	97.47	97.1
11	Tiruvadanai	94.75	95.62	95.0	95.45	96.47	95.8	95.1	96.05	95.6
District		**96.1**	**96.3**	**96.3**	**97.0**	**97.7**	**96.6**	**96.5**	**96.98**	**97.0**

Source: CEO, School Education, Ramanathapuram

The dropout rate in upper primary education has slightly increased to 0.83 percent in 2013-14 from 0.82 percent in 2012-13 and 2011-12, ranges from 0.5 percent in Nainarkoil to 1.1 percent in Mandapam. Kadaladi, Mandapam and Tiruvadanai blocks are having a high range of dropout than the district. The dropout rate in upper primary education is 0.75 percent for girls less than Boys dropout of 0.9 percent during 2013-14, girls dropout shows an increasing trend from 0.7 percent in 2012-13.

Table 5.5: Dropout rate in upper primary education

Sl. No	Block	Dropout rate								
		Boys			Girls			Total		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	Bogalur	0.77	0.89	0.8	0.49	0.42	1.8	0.63	0.66	0.6
2	Kadaladi	1.3	1.21	1.3	0.7	0.54	1.9	1.00	0.88	1.0
3	Kamuthi	0.96	0.87	1.0	0.69	0.75	1.8	0.83	0.81	0.8
4	Mandapam	1.13	1.18	1.1	1.06	1.25	1.7	1.10	1.22	1.1
5	Mudukulathur	0.96	1.12	1.0	0.35	0.43	1.0	0.66	0.78	0.7
6	Nainarkoil	0.54	0.62	0.5	0.45	0.51	0.9	0.50	0.57	0.5
7	Paramakudi	0.89	1.01	0.9	0.87	0.87	1.7	0.88	0.94	0.9
8	R. S. Mangalam	0.77	0.65	0.8	0.72	0.91	1.6	0.75	0.78	0.8
9	Ramanathapuram	0.79	0.81	0.8	0.94	0.89	1.5	0.87	0.85	0.9
10	Tirupullani	0.79	0.47	0.8	0.82	0.46	0.9	0.81	0.47	0.8
11	Tiruvadanai	1.15	1.21	1.2	0.93	0.95	2.0	1.04	1.08	1.0
District		**0.91**	**0.91**	**0.9**	**0.73**	**0.7**	**0.75**	**0.82**	**0.82**	**0.83**

Source: CEO, School Education, Ramanathapuram

Access to school

MDG insisted universalisation of primary education to children. According to the SSA norms, primary school need to be established within one kilometer of every habitations or for setting up Education Guarantee Scheme (EGS) or mobile schools in uncovered habitations.

Table 5.6: Availability of school

Sl. No	Block / District	Number of habitations	Number of primary schools (2011-12)	Number of upper primary schools (2011-12)	Number of high school (2011-12)	Number of higher secondary schools (2011-12)	Number of primary schools (2013 - 14)	Number of upper primary schools (2013 -14)
1	Bogalur	87	54	16	3	3	54	16
2	Kadaladi	272	175	58	12	10	176	58
3	Kamuthi	250	152	48	13	10	154	48
4	Mandapam	251	150	62	17	22	149	62
5	Mudukulathur	196	115	35	8	7	115	35
6	Nainarkoil	105	73	21	5	3	72	21
7	Paramakudi	181	137	46	15	10	135	46
8	R. S. Mangalam	276	111	28	7	6	109	28
9	Ramanathapuram	187	124	56	16	18	123	57

Sl. No	Block / District	Number of habitations	Number of primary schools (2011-12)	Number of upper primary schools (2011-12)	Number of high school (2011-12)	Number of higher secondary schools (2011-12)	Number of primary schools (2013 - 14)	Number of upper primary schools (2013 -14)
10	Tirupullani	249	107	38	10	13	107	38
11	Tiruvadanai	322	132	45	9	12	131	45
District		**2376**	**1330**	**453**	**115**	**114**	**1325**	**454**

Source: CEO, SSA, RMSA, Ramanathapuram

The District level, nearly 1325 primary and 456 upper primary schools are in 2376 habitations during 2013-14. In 2011-12, 115 high and 114 higher secondary schools were existing. While comparing the 2011-12 data with 2013-14, 3 primary schools promoted in Kadaladi (1 school) and Kamuthi (2 schools) and one primary school upgraded to upper primary school in Ramanathapuram block and 7 schools reduced from 2011-12 to 2013-14 in Mandapam (1 School), Nainarkoil (1 School), Paramakudi (2 Schools), R. S. Mangalam (2 Schools) and Tiruvadanai (1 School) blocks due to the parents' choice for private schools, predominantly, English medium teaching attracting the pupil towards private school.

Pupil teacher ratio in primary and upper primary

The pupil teacher ratio is calculated based on the enrollment of students and the sanctioned strength of teacher in each district/block. As per the SSA norm, the sanctioned strength is 1:40. In Ramanathapuram, the pupil-teacher ratio is below the standard, 1:25 and 1:26 in primary and upper primary education respectively. The PTR of the district ranges from R. S. Mangalam (1:19) to Kamuthi (1:28) in primary education and in upper primary education it ranges from R. S. Mangalam (1:21) to Tiruvadanai (1:31). Upper primary pupil teacher ratio is higher than the primary education.

Table 5.7: Pupil teacher ratio in primary and upper primary education

Sl. No	Block / District	2011 - 12				2013 - 14			
		Primary School		Upper Primary School		Primary School		Upper Primary School	
		Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio
1	Bogalur	26	158	22	229	18	108	23	107
2	Kadaladi	26	123	22	185	28	161	29	175
3	Kamuthi	28	151	27	173	27	137	23	268
4	Mandapam	19	70	24	116	25	249	29	297

Sl. No	Block / District	2011 - 12				2013 - 14			
		Primary School		Upper Primary School		Primary School		Upper Primary School	
		Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio	Pupil Teacher Raito	Pupil School Ratio
5	Mudukulathur	23	100	25	145	23	106	23	163
6	Nainarkoil	27	156	29	242	15	69	19	59
7	Paramakudi	23	64	22	87	28	247	25	408
8	R. S. Mangalam	19	47	21	65	23	119	22	146
9	Ramanathapuram	23	87	30	132	28	311	19	553
10	Tirupullani	27	97	26	160	23	203	21	364
11	Tiruvadanai	28	103	31	130	24	139	21	195
District		**25**	**111**	**26**	**164**	**24**	**168**	**23**	**249**

Source: CEO, SSA, Ramanathapuram

In 2013–14, the pupil teacher ratio has reduced from 2011-12 and the pupil school ratio was increased simultaneously in the same year. Bogalur and Nainarkoil blocks show less than 20 pupil teacher ratio in primary school. Nainarkoil and Ramanathapuram blocks show less than 20 pupil teacher ratio in upper primary school. The Pupil school ratio in Nainarkoil block is 69 and 59 in primary and upper primary school, respectively during 2013–14, which is lower than the district ratio.

Secondary education

Secondary education is the entry for prosperity, altering the wealth and launching social justice in the district. Secondary Education is a critical stage in the educational ladder as it trains the students for higher education and also the working world. The quick changes observed in the scientific, technological side, in general contribute to improve quality of life and to lower poverty. It is necessary that secondary school leaving students obtain a higher level of knowledge and skills than those with eight years of elementary education. Particularly the average earning of a secondary school certificate holder is appreciably higher than that of a person who has studied only up to middle school.

The GER in secondary education has increased from 85.66 percent in 2012-13 to 95.54 percent in 2013-14, ranges from 56.92 percent in Kadaladi to 105.22 percent in Ramanathapuram. Bogalur, Kadaladi, Kamuthi, Mudukulathur and Nainarkoil blocks recorded less than 90 percent GER in secondary education in 2013-14.

Table 5.8: GER in Secondary Education

Sl. No	Block wise/District	2012-13			2013-2014		
		No of children passed 10th std.	No. of children enrolled in higher secondary	% of enrollment	No. of children passed 10th std.	No. of children enrolled in higher secondary	% of enrollment
1	Bogalur	445	381	85.62	354	231	65.25
2	Kadaladi	1768	1247	70.53	2045	1164	56.92
3	Kamuthi	1934	1563	80.82	1782	1476	82.83
4	Mandapam	2641	2173	82.28	2072	2001	96.57
5	Mudukulathur	1284	912	71.03	1159	872	75.24
6	Nainarkoil	346	240	69.36	287	206	71.78
7	Paramakudi	2758	2497	90.54	2488	2489	100.04
8	R. S. Mangalam	750	587	78.27	570	554	97.19
9	Ramanathapuram	3001	3133	104.40	2680	2820	105.22
10	Tirupullani	1673	1576	94.20	1510	1482	98.15
11	Tiruvadanai	1938	1570	81.01	1064	1034	97.18
DISTRICT		**18538**	**15879**	**85.66**	**16011**	**14329**	**95.54**

Source: CEO, RMSA, Ramanathapuram

The district level primary and upper primary enrollment are better than that of secondary enrollment. Bogalur and Kadaladi blocks show decreasing trend of GER in Secondary education during 2012-13 to 2013-14. The boys secondary enrollment, 82.20 is lower than that of girls enrollment, 89.21 percent in 2012-13. The boys enrollment showed a decreasing trend from 84.10 in 2011-12 and the girls enrollment showed an increasing trend from 87.51 percent for the same period. The boys and girls enrollment range from Nainarkoil (67.86 and 70.79 percent) to Ramanathapuram (92.92 and 116.95 percent) respectively. Being an urban based block and the district headquarters, there is easy accessibility to schools. Ramanathapuram block performed better than other blocks in secondary enrollment.

In Kamuthi, Mandapam, Paramakudi, R. S. Mangalam and Tiruvadanai block there is an increased trend in the Boys enrollment. In case of Girls enrollment, Kadaladi, Kamuthi, Mandapam, Nainarkoil, Ramanathapuram and Tirupullani blocks show an increasing trend from 2011-12 to 2012-13. Except, Mandapam, other urban based blocks were performing better in terms of secondary education. Scarce accessibility of school and inadequate transport facility is the main reason for lower secondary education in rural based blocks than that of urban based blocks and a lower district average.

Dropout in secondary education

The Dropout rate in secondary education had increased from 5.81 percent in 2012-13 and 2011-12 to 8.14 percent in 2013-14. Out of eleven blocks, six blocks had the severity of secondary dropout rate.

Table 5.9: Dropout rate in secondary education in Ramanathapuram district

S. No.	Blocks	Dropout rate		
		2011-12	2012-13	2013-14
1	Bogalur	7.13	8.21	8.63
2	Kadaladi	7.20	9.16	11.99
3	Kamuthi	1.90	1.95	1.80
4	Mandapam	1.50	1.62	0.29
5	Mudukulathur	6.89	6.91	6.55
6	Nainarkoil	5.71	6.68	5.28
7	Paramakudi	0.99	1.11	0.00
8	R. S. Mangalam	3.21	3.74	3.35
9	Ramanathapuram	0.27	0.23	0.41
10	Tirupullani	0.99	0.97	0.83
11	Tiruvadanai	4.35	5.47	6.21

Source: CEO, RMSA, Ramanathapuram

The secondary dropout was very high in Kadaladi and Bogalur blocks than district in 2013-14 due to higher rates of BPL families, getting poor grades, inadequate transport facilities and insufficient school accessibility. The dropout rate in the secondary education range starts from 0 percent in Paramakudi to 11.99 percent in Kadaladi.

Basic infrastructure

SSA norms insisted for school infrastructure is a room for every teacher for every grade/class with the provision of two classrooms and verandah for every primary school with at least two teachers.

Table 5.10: Basic school infrastructure, 2013 - 14

Sl. No	Block / District	Total no. of schools	With 3 classrooms	With more than 3 classrooms	Without toilet	Without girls toilet	Without electricity	Without compound wall	Without drinking water
1	Bogalur	47	31	15	0	9	0	15	0
2	Kadaladi	144	94	47	0	1	5	65	0
3	Kamuthi	129	87	40	0	8	0	53	0

Sl. No	Block / District	Total no. of schools	With 3 classrooms	With more than 3 classrooms	Without toilet	Without girls toilet	Without electricity	Without compound wall	Without drinking water
4	Mandapam	116	58	53	0	3	5	18	0
5	Mudukulathur	104	76	24	0	0	2	37	0
6	Nainarkoil	68	43	25	0	0	1	29	0
7	Paramakudi	93	57	33	0	37	3	42	0
8	R. S. Mangalam	89	60	30	0	5	1	18	0
9	Ramanathapuram	77	49	25	0	0	3	17	0
10	Tirupullani	78	59	16	0	7	1	22	0
11	Tiruvadanai	115	79	35	0	3	4	44	0
District		**1060**	**693**	**343**	**0**	**73**	**25**	**360**	**0**

Source: CEO, School Education, Ramanathapuram

A room for Headmaster in upper primary school is a necessity. Table 5.9 illustrates about the infrastructure facilities in all schools have common toilet facilities, but toilet for girls alone were lacking in 73 schools. All schools in the Ramanathapuram district have drinking water connection, but, 25 schools did not have electricity connection. According to data given by the education department, in 2013-14, compound wall facility was not available in 360 schools.

Box 5.1: Initiatives for quality improvement in education

Achievement Studies and Progress Reports – ABL - Achievement tests have been conducted for Std II and Std IV on the subjects viz., Tamil, English and Maths. The pass percentage, average marks of the students, low achievers and low performing schools have been classified in comparison with the group of schools at cluster level. The above study is used to improve the quality of education at school level.

Simplified Activity Based Learning (SABL) - SABL method is a unique and effective approach to attract the children especially the out of school children. It helps the children to develop readiness, interest, self learning, group learning and many other qualities. It also helps the children to learn 753 skills at primary level. (Source: Elementary Education Register, 2013-14)

The following efforts are taken by the Sarva Siksha Abhiyan, to improve the quality of education. Based on RTE- PTR, the process of appointing additional teachers at primary level and at upper primary level are in progress. Every year need based in-service training programme is given to all existing teachers for 20 days and induction training to all newly appointed teachers.

ABL is implemented in all Government and Aided schools at primary level for Classes I-IV, SALM for Class V and ALM for Classes VI-VIII. TV and DVD players have been supplied to all Government primary and upper primary schools. Learning corners have been set up in all schools and supplementary readers have been supplied for them. The State Government provides free textbooks for all subjects to all children studying in Classes I to X standard. Similarly free uniforms are being provided to all children studying in Classes I-VIII by the State Government. For effective classroom processes TLM grant and School grant are provided to all Government and Aided schools. 290 Computer Aided Learning centre have been established in 290 schools till 2011-12.

Hostel facilities

Most of the rural blocks have scattered hamlets with less pupil density. Thus, hostel facilities at school level are the most important way to tackle the accessibility of education system in remote areas of Ramanathapuram district. Overall at the district level there are 100 hostels providing services to 7700 students. Out of 1.44 lakh students, 5.34 percent of the students in the district getting benefit of hostel services. It is one of the main reasons for urban based blocks having a higher percentage of GER than that of rural blocks. In 2013-14, out of 145,904 students, 7722 students are utilizing the 101 hostels in Ramanthapuram district, which is around 5.29 percent of the students in hostels.

Table 5.11: Hostel facilities in Ramanathapuram

Sl. No	Block / District	Total Number of students		No. of hostels		No. of students in hostels		Percentage	
		2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
1	District	144279	145904	100	101	7700	7722	5.34	5.29

Source: CEO, School Education, Ramanathapuram

Box 5.2: Improvement in Quality of Education

For every action in poverty alleviation and to acquire balanced growth in human development, the spread of human resources in basic amenities such as health, education, employment, etc., plays a vital role. Lack of human resources in backward regions is a main cause for under human development as well as poor performance. To post a right person in a backward region is an accurate solution to address the imbalanced growth. The success of this sentence is proved in a Mudukulathur block by filling a vacant teachers post through SBGF project. Ramanathapuram is one of the backward Districts with reference to HDI. The gender gap in literacy rate in the district is 14.3 percent, which is higher than the State average of 13.6 percent in 2011. Out of eleven blocks, seven blocks declared as backward blocks by SPC, Tamil Nadu. Mudukulathur Block is one among the seven. The literacy gap in this block is 19.08 percent, is higher than that of district and State. The block need to be improved the GER in Primary, Secondary and Higher Secondary Education for growth in HDI. Teachers Vacancy at High School and Higher Secondary School influences the retention rate and the success in the Board Examination.

In the proposed Mudukulathur block 2324 students are studying in the government High/Higher Secondary Schools in class 6th to 12th. As per the instruction of District Collector, a Level Fixing Exercise (Test to find basic skills) was conducted for the students. Result were very low in schools which were having vacancy. Mudukulathur block has eleven schools. Out of eleven, 6 schools are higher secondary schools. Nearly 20 vacancies exist in Mudukulathur block. In order to overcome this issue, "**Need for sufficient Teachers for better results in Mudukulathur block**" proposal, sent to SPC under SBGF and sanctioned. The total cost of the project is Rs. 11.40 lakh which is inclusive of Rs.1.14 lakh from community contribution. The performance of the part time teachers monitored by the district school education, the School Management Development Committee (SMDC) and parent teachers association.

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Results, through this project, SSLC board examination results boosted up from 78.56 percent in March 2013 to 93.84 percent in March 2014, likewise, +2 board examination results enhanced from 85.09 percent to 94.95 percent. So, the block and district pass out ratio has increased. School wise break up furnished below.

Table 5.12: Board examination result and growth rate

S. No	Name of the School	Passouts in SSLC (%)		Passouts in HSC (%)	
		March 2013	March 2014	March 2013	March 2014
1	GHSS, Mudukulathur	81.25	100	-	-
2	GHSS, Selvanayagapuram	100	100	-	-
3	GHSS, Keelathooval	41.67	94.44	-	-
4	GHSS, Alanganur	40	85.71	-	-
5	GHSS, Kakkoor	88	93.55	-	-
6	GHSS,Villangalathur	69.14	90.41	89.63	97.49
7	GHSS, Ulaiyur	77.14	91.84	65	100
8	GHSS, Valanadu	92.21	93.33	85.19	88.89
9	GHSS, Seyiamangalam	97.56	96.92	100	100
10	GHSS, Keeranur	96.43	100	89.47	100
11	GHSS, Puluthikulam	80.81	86	81.25	83.33
Total		78.56	93.84	85.09	94.95

Source: RMSA, Ramanathapuram

Box 5.3: Reading writing skills among primary and upper primary school children

As per the box 5.1. the efforts made by the education department, the district shows positive sign in terms of quality of education as stated in ASER 2013. The quality of education increased from 2005 to 2013.

Table 5.13: Status of quality of education in Ramanathapuram district

2005				2013 - 14					
District / State	Out of school children	Standard V children		% children (6-14) in private school	% children (6-14) out of school	Standard I-II learning level		Standard III-V learning level	
		% children can read level - 2	% children who can solve division and Subtraction			% children who can read letters, words or more	% children who can recognize numbers (1-9) or more	% children who can read a std I level text or more	% children who can do Subtraction or more
District	2.2	42.9	21.4	12.7	0.2	86.3	80.7	72.8	40.3
State	2.7	49.99	31.49	26.8	0.6	62.5	71.8	50.2	39.2

Source: ASER, Tamil Nadu

The table 5.10. clearly indicates about the improvement in Quality of education at district and State level from 2005 to 2013. Because of rural context, the influence of private school is very low, 12.7 percent in Ramanathapuram district followed by Nagappattinam district, 14.1 percent. This status is minimum when compared with the State, 26.8 percent and other district of Tamil Nadu. In 2005, quality of education of the district was lower than the State status. But the case is reversed during 2013. Even though the Ramanathapuram district is a rural and coastal based backward district, the education department as well as the district administration's efforts could improve the knowledge level of the students. As per the ASER 2013 report, out of 25 districts, Ramanathapuram district stands, first and fifth rank in standard I – II learning level, second and ninth rank in standard III-V learning level.

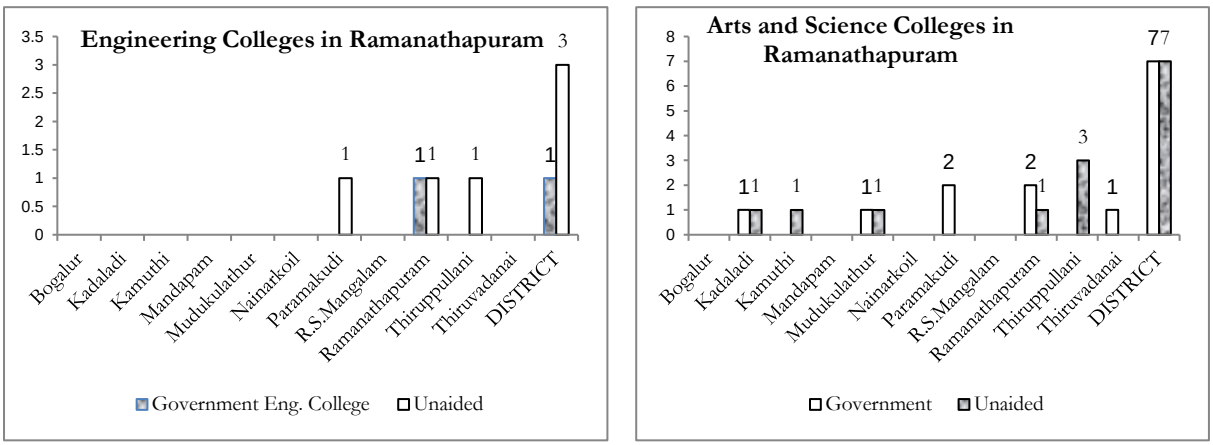
Box 5.4: Technology initiatives in education

Computer Aided Learning (CAL) - Sarva Shiksha Abhiyan has promoted innovative ways in Education System to make it more effective. One of the activity namely CAL ensures the students become more intellectual in their studies by promoting eager among the students in coming to school regularly. It also helps to bridge the gap between the urban and the rural students. Child centered Compact Discs were prepared in a way that all students can use them. In 2012-13, the total no. of Government schools having upper primary classes is 290 in which 720 Teachers were trained on Computer Aided Learning. The total no. of Government schools to be provided with CAL Centres 77 in which 32 have been proposed to provide with Computer Aided Learning (CAL) Centres. 7678 students are estimated to be benefited in these centres and 1000 teachers are to be trained on Computer Aided Learning.

Higher Education

The higher education in Ramanathapuram district is lower. After completing secondary education, most of the educated youths are not going for higher education because of various reasons, *viz*., economic backwardness, and accessibility to higher education, lack of proper guidance or poor grade in secondary. The unskilled youths migrate from the district to foreign countries in search of employment oppurtunities. Due to inadequate skills, the youths are unable to find profitable employment. It is one of the reasons for an increase in marginal workers.

Chart 5.4: Engineering, Arts and Science colleges in Ramanathapuram



Source: CEO, School Education, Ramanathapuram, 2013-14

In Ramanathapuram district, 4 Engineering colleges, 14 arts and science colleges, 4 polytechnics, 7 Diploma in Teachers Education (DTE), and 8 Teachers Training Education Centre (B.Ed colleges) offer higher education to the students. Except Nainarkoil and R. S. Mangalam blocks, other blocks have any one of the higher education institutions. Totally 23487 students are enrolled in these education institutions. Among these students, most of them are enrolled in arts and science college for their career followed by an engineering professional and polytechnic. Out of 4 engineering colleges, one college belongs to Anna University and remaining three are from private sectors. The cost of education is higher in private sectors.

Whereas in case of arts and science college, out of 14 colleges, the contribution of the Government and the private sector is equal, 1: 1. The list of colleges in Ramanathapuram district is furnished as table 5.13. On an average, nearly 15000 students yearly appear in secondary board examination. While assessing the data, the current student strength in higher education reflects that, nearly 50 percent of the students in the district continue their higher education after

completing the secondary board examination. Another 50 percent of the candidates leave their education and search for other options. Thorugh DIC vocational training programmes are given to improve their skill set.

Table 5.14: Higher Education in Ramanathapuram, 2013-14

Sl. No.	Block	Engg		Arts & science colleges		Polytechnic		DTE		B. ED	
		No.	No. of students	No	No of students	No	No of students	No	No of students	No	No of students
1	Bogalur	-						2	124	1 (R.K Samy Educational College)	100
2	Kadaladi	-		2 (1. Gov. Arts & Science, 2. Thiyagi Dharmakkan Amirtham Arts & science college)	1556					1 (Thiyagi Dharmakkan Amirtham Educational College)	100
3	Kamuthi	-		1 (Muthu Ramalinga Thevar Arts College)	462						
4	Mandapam	-				1 (Udayam Polytechnic)	537	1	41	1 (M.G.R, B. Ed College)	100
5	Mudukulathur	-		2 (1. Gov. Arts & Science 2. Sonai Meenal Arts & Science)	499			1	23		
6	Naiyanarkoil	-									
7	Paramakudi	1 (Ganapathy Chettiyar Engineering College)	520	2 (1. Gov Arts College, 2. Alagappa university)	1958	2 (1. Muthalamman polytechnic, 2. Varimaya Sudhan polytechnic)	1098	2	55	3 (1. Ganapathy B.Ed. College, 2. Karpaga Vinayagar B.Ed. College, 3. Ayiravaisya College of Education)	300
8	R. S. Mangalam	-									
9	Ramanathapuram	2 (1. Anna University, 2. Syed Ammal Eng.College)	2348	3 (1. Sethupathy Gov. Arts College, 2. Gov. Arts College for Women, 3. Syedammal Arts & Science)	4259			1	79	2 (1. CSI, 2. Mohamed Sathak Dasthagir B. Ed College)	200
10	Tirupullani	1 (Mohamed Sathak Eng. College)	2256	3 (1. Syed Hammed Arts & Science, 2. Caussenel Arts & Science, 3 Thassim Beevi Arts College for Women)	4617	1 (Mohamed Sathak Polytechnic)	2086				
11	Tiruvadanai	-		1 (Govt. Arts College)	169						
DISTRICT		**4**	**5124**	**14**	**13520**	**4**	**3721**	**7**	**322**	**8**	**800**

Source: CEO, School Education, Ramanathapuram

Conclusion

Despite the significant achievements in literacy rate and in gender, district has to focus on improving the literacy rate of 72.25 percent and enrollment in secondary education of 69.36 percent in Nainarkoil. Toilets for girls are lacking in 340 schools, which needs to be focused for enhancing the girls' upper primary and secondary education. Systematic effort needs to be put for enhancing secondary and higher education at the district level.

While comparing the 2011-12 data with 2013-14, 3 primary schools were promoted in Kadaladi (1 school) and Kamuthi (2 schools) and one primary school upgraded as upper primary school in Ramanthapuram block and 7 schools were reduced from 2011-12 to 2013-14 in Mandapam (1 School), Nainarkoil (1 School), Paramakudi (2 Schools), R. S. Mangalam (2 Schools) and Tiruvadanai (1 School) due to the parents' passion on private schools, predominantly, English medium teaching has attracted pupils towards private school.

Bogalur and Nainarkoil blocks show less than 20 pupil teacher ratio in primary school. Nainarkoil and Ramanathapuram blocks shows less than 20 pupil teacher ratio in upper primary school. The Pupil school ratio in Nainarkoil block is 69 in primary school and 59 in upper primary schools which is lower than the district and other blocks during 2013-14.

The GER in secondary education showed an increasing trend from 2012-13 to 2013-14. In 2013-14, the GER in secondary education was 95.54 percent. Bogalur, Kadaladi, Kamuthi, Mudukulathur and Nainarkoil blocks recorded less than 90 percent GER in secondary education in 2013-14. The dropout rate in secondary education during 2013-14 was 8.14 percent. The secondary drop out was very high in Kadaladi and Bogalur blocks than district and other blocks.

CHAPTER 6

GENDER

6. Gender

Introduction

In ancient India, women held a high place of esteem in the society as stated in the Rigveda and other scriptures. Ramanathapuram district, one of the historic territory honored the women as ruler. Ramanathapuram was an origin place of Princess Velu Nachiyar, daughter of Chellamuthu Sethupathy. She married the king of Sivagangai. Rani Velu Nachiyar was the first queen to fight against the British in India and succeeded, even preceding the famous Rani Laxmibai of Jhansi. Subsequently, another ruler Rani Mangaleswari Nachchiyar was made a Zamindarani. Ramanathapuram and Sivaganga sustained to be Zamins till the system of Zamindari was eliminated in 1948. But later on, because of the communal, political and fiscal changes, women were misplaced from their status in terms of education, employment, political contribution and health.

To overcome these issues, some positive changes are happening in the district. Female literacy rate, 73.52 percent is lower than the male literacy rate of 87.81 percent, however slightly higher than the female literacy of the State, 73.14 percent. A decade growth, the revolution in female literacy is nearly three fold higher than that of male literacy, which illustrates the existence of literacy gap which is sharply coming down.

The present chapter tries to look at the extent of inequality in status of women in Ramanathapuram district, access as well as control over resources, trend in female employment in different sectors, trend in political participation and analysis of outcome of gender inequality index across the blocks. The study uses data from census 2011 and 2001 and different line departments of Ramanathapuram District through the District Planning Cell for understanding gender.

Status of Women

Gender disparity defines those variations that exist in the availability and access of opputunities for men and women. Gender difference is persisting in Ramanathapuram district in terms of sex ratio, literacy rate, percentage of women workers in the agricultural and the non agricultural sector as well as agricultural wage rate. The total number of women population in Ramanathapuram district is 670787 and Male population is 682658, which shows 49.56 percent of the female population as of the 2011 census. District level general sex ratio is 983, which shows a decreasing trend over a decade from 1036 and the child sex ratio is also decreasing trend

of 961 in 2011 from 964 in 2001. It clearly exhibits the women's status at district, within a decade a sex ratio of the district has fallen below the State average.

Female literacy rate, 73.52 percent is less than the male literacy rate of 87.81 percent and slightly higher than the State, 73.14 percent, but the district literacy gap is higher than the State. A decade growth in female literacy is nearly threefold higher than that of male literacy. The growth rate observed in male and female literacy was 5.78 percent and 16.04 percent, respectively, which illustrates about the declining trend of gap in literacy. The girls gross enrollment ratio of 103.24 percent is higher than that of boys enrollment, 102.62 percent in primary education during 2013-14 and the boys GER in upper primary education is slightly higher than that of girls GER.

Table 6.1: Status of women population in Ramanathapuram

Sl. No	Particulars	District
1	Total Number of women	670787
2	Percentage of Total population	49.56
3	Sex-ratio	983
4	Female literacy rate	73.52
5	Female School enrollment	103.24 (primary), 100.18 (upper primary), 89.21 (Secondary)
6	MMR	49
7	% of women working in agriculture sector	69.84
8	% of women in non-Agri. Sector	30.16

Source: Census 2011, Health and CEO, School Education

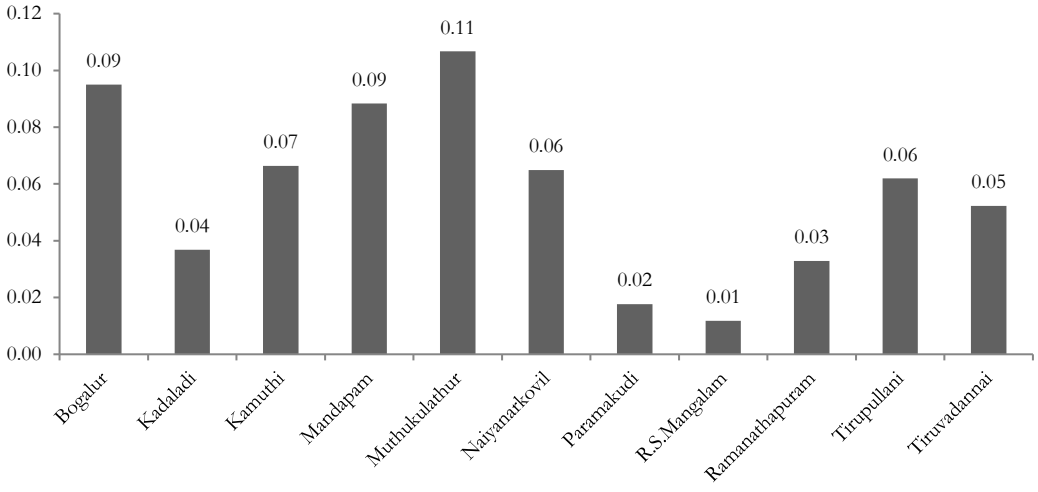
The typical work of female agricultural laborers or cultivator is limited to less skilled jobs, such as sowing, transplanting, weeding and harvesting. The percentage of women's participation in the agricultural sector is 69.84, higher than the male participation, 46.04 percent. In which, female agricultural labourers are nearly two fold higher than that of male agricultural labourers. It shows that female workers in Ramanathapuram district belong to socially and economically vulnerable sections.

30.16 percent of the female workers were involved in non-agricultural sector. It is less than the male participation, 53.96 percent. Habitually, female non-agricultural workers in Ramanathapuram were working as unskilled labours in small scale charcoal making industries, vending vegetables, sea products, small shops and so on. Among females, more number of women fall under unskilled labour because of inadequate literacy, lack of exposure to the outside world, low accessibility of raw material, low range of affordability, less connectivity between nearer cities, etc.

Box 6.1: Gender Inequality Index

The **Gender Inequality Index (GII)** is a new index for assessment of gender difference within State/ district. There are three important dimensions used to measure gender inequality of the blocks, viz., Health, Empowerment and labour market. These three dimensions have fourteen indicators to compute the GII. Outcome of GII reveals about the low range of gender inequality existing in the district, range of disparity noticed in inter block on GII is 0.10. Here, the GII range is very low when compared with Human development index of Ramanathapuram, 0.60. GII index value starts from R. S. Mangalam, 0.01 to Mudukulathur 0.11.

Chart 6.1: GII value of Ramanathapuram



Source: Ramanathapuram district GII computation, 2013- 14

In Ramanathapuram district, R. S. Mangalam (0.01), Paramakudi (0.02) and Ramanathapuram (0.03) ranks first 3 places in gender inequality index. Mudhukulathur (0.11), Bogalur (0.09) and Mandapam (0.09) blocks occupied the last three places in a GII. Except, Kadaladi, Mandapam and R. S. Mangalam, there was little/no variation between the HDI and GII ranks among the blocks. R. S. Mangalam and Kadaladi blocks has higher gender equality at the same time lower human development. Likewise, Mandapam block has higher human development and lower gender equality. Here, the less share of female elected representatives, low female work participation rate and privileged inequality among the Male - Female agricultural wage rate poses greater gender inequality in the Mandapam block during 2013–14.

Access and Control over Resource

Women's access and control over financial resources is crucial for the achievement of gender parity with women empowerment. It guides reasonable plus sustainable growth of the family or a locality. Gender equality in the allocation of resources has positive implications for human development including poverty reduction. Micro level effectiveness results through increased household productivity and macro level efficiency through attaining gender equality leading to

equitable economic growth. Subsequent to the entry of self-help group concept, the micro level effective access and control over resource of women has drawn closer.

A Self Help Group is a small, economically identical affinity group of the poor willingly coming together to save small amounts regularly, which are deposited in a common fund to meet members' emergency requirements and to offer security free loans resolute by the group. They have been documented as a useful tool to help the poor and as a substitute mechanism to meet the urgent credit requirements through thrift. Generally, a self-help group consists of 10 to 20 persons. SHGs are seen as instruments for a multiplicity of goals, including developing leadership abilities among poor women, skill development training, increasing school enrollments, improving nutrition as well as social security.

Box 6.2: Self help groups in Ramanathapuram district

Currently, 5149 SHG's are functioning in Ramanathapuram district consisting of 67586 members. The average member size of the SHG is 13, ranges from 12 to 15. Across the blocks, Ramanathapuram shows a higher number of SHG (3049 with 39637 members) followed by Paramakudi (414 SHG with 5382 members). The numbers of SHG at inter block range starting from Kamuthi, 73 SHG to Ramanathapuram, 3049. This range shows forty two fold. The total number of self-help groups usually depends upon the female population, number of BPL families, government schemes, accessibility and developmental issues of the block/district. Ramanathapuram district level BPL households are 81951 as of BPL survey by Pudhu Vazhalvu project during 2013.

Except, Bogalur, Paramakudi and Ramanathapuram blocks, other blocks have to be covered the potential member under SHG fold, which will safeguard the poor households by providing financial access. Total credit availed by the SHG's is Rs.89.76 crore during 2013-14, average loan size per group was Rs.1.74 lakh. Bogalur, Mandapam, R. S. Mangalam and Tiruvadanai blocks groups availed privileged amount of credit than other blocks. Strengthening of SHG movement with the effective fund flow for the same time proper utilization of fund through family counseling is a method for sustainable growth of women and towards attaining human development. Apart from government promoted groups, the intervention by the other NGOs in Ramanathapuram is unique in carrying development activities more than two decades.

Table 6.2: Access and control over resources, 2013-14

Sl. No	Blocks	Number of Self Help	Number of members	Credit availed (crore)	Average member	Average loan per group (lakh)
1	Bogalur	249	3237	6.98	13	2.80
2	Kadaladi	353	4942	5.42	14	1.54
3	Kamuthi	73	949	1.35	13	1.85
4	Mandapam	327	4251	9.56	13	2.92
5	Mudukulathur	92	1288	1.54	14	1.67
6	Nainarkoil	105	1575	1.94	15	1.85
7	Paramakudi	414	5382	7.06	13	1.71
8	R. S. Mangalam	130	1820	2.65	14	2.04
9	Ramanathapuram	3049	39637	45.98	13	1.51
10	Tirupullani	221	2873	3.6	13	1.63
11	Tiruvadanai	136	1632	3.68	12	2.71
District		**5149**	**67586**	**89.76**	**13**	**1.74**

Source: Tamil Nadu Women Development Corporation and Pudhu Vazhalvu Project, Ramanathapuram

Mahalir Thittam is a woman social-economic empowerment program executed by Tamil Nadu Corporation for Development of Women Ltd. It is based on the Self Help Group approach, is executed in partnership with non Governmental organizations and community based organizations. The SHG approach was started in a small way in Dharmapuri district in the year

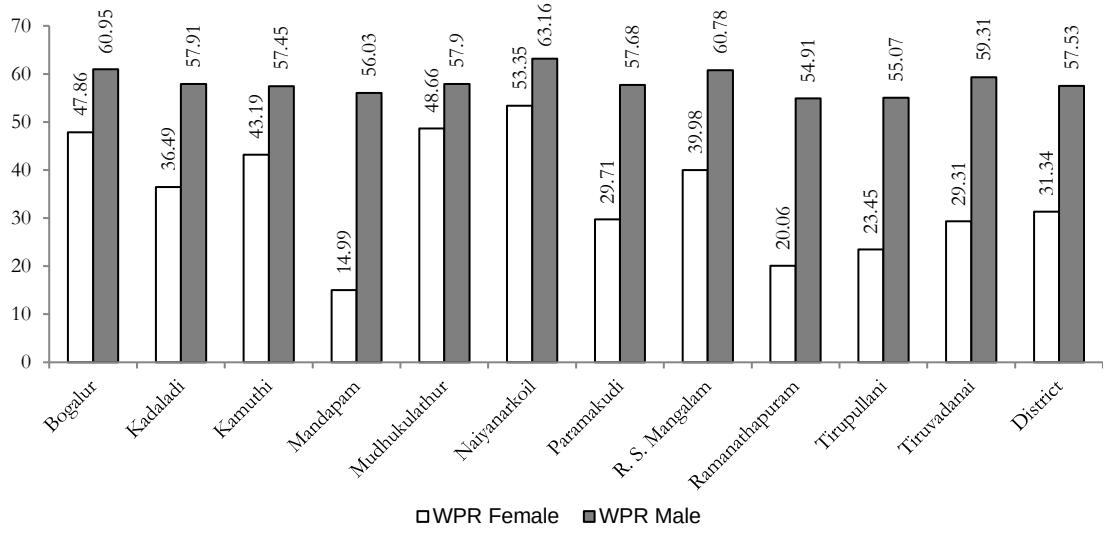
1989, and further extended to Madurai and Ramanathapuram district in the year 1992-93[12]. After the entry of Pudhu Vaazhvu project (PVP), the left out poor were also covered under SHG movement. PVP is an empowerment and poverty reduction project implemented by the Rural Development and Panchayat Raj Department (RD and PR) of the Government of Tamil Nadu with World Bank assistance.

Employment

Work participation rate

Gender in WPR: The male work participation rate (57.53 percent and 54.97 percent) is significantly higher than that of the female work participation rate (31.34 percent and 33.08 percent) in 2011 and 2001 respectively. Here the female work participation rate shows a decreasing trend and male work participation rate showed an increasing trend. The same trend was noticed in all blocks except Ramanathapuram (0.71 percent) and Paramakudi (0.61 percent), increase in female WPR in these two blocks were also too tiny. Another challenging issue here was the percentage of female marginal workers (27.90 percent) that was higher than that of male marginal workers (9.78 percent). In State, the male WPR (59.30 percent) and female WPR (31.80 percent) is higher than the district status. Male and Female WPR at the State level shows an increasing trend. But, the female WPR is slightly growing than that of male WPR. Nainarkoil block has higher range of female and male WPR of 53.35 percent and 63.16 percent respectively in 2011.

Chart 6.2: Work participation rate, 2011

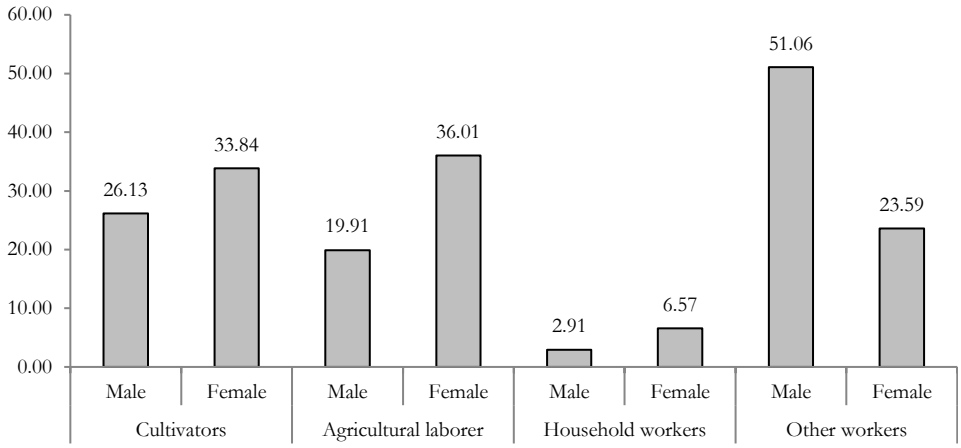


[12] Mahalir Thittam, Ramanathapuram

Source: Census 2011

Male main workers are higher than the female main workers. Due to untrained, under employment and lower education, female marginal workers were nearly two time higher than the male marginal workers in 2011. It is because of higher percentage of female agricultural labourers. In between the inter-census period 2001 and 2011, and a decade of change, male main workers showed a decreasing trend and female main workers maintained the same position.

Chart 6.3: Female employment in Different sectors



Source: Census 2011

Participation of female agricultural workers were higher than that of male agricultural workers. In which, female agricultural labourers, 36.01 percent are nearly two fold higher than that of male agricultural labourers, 19.91 percent. It shows female workers in Ramanathapuram district are socially and economically vulnerable sections. In case of cultivators, female cultivators, 33.84 percent was higher than that of male cultivators, 26.13 percent. In case of non-agricultural sector, male household workers, 2.91 percent was less than the female household workers of 6.57 percent and male other workers of 51.06 percent were higher than that of female household workers of 23.59 percent in 2011.

Trend in female employment

Now a days, Female participation in central, State, quasi Government sectors as well as in local bodies and private concerns show an increasing trend. In Ramanathapuram district, nearly 34208 employees are working in various Government and private sectors, out of which, 18456 males and 15752 are females. It is illustrated about the male participation, 53.95 percent are higher than that of female participation, 46.05 percent. In terms of employment opportunities, State Government contributes more, followed by private sector when compared to others. The female

participation seems higher in local bodies than male participation because of higher number of women workers in local government bodies viz., Panchayat union, block development office etc. One of the reason for the higher rate is due to the contribution of number of women sweepers. The female participation is lower in central government jobs.

Table 6.3: Trend in female employment, 2013-14

Sl. No.	Category	No. of male employee	No. of female employee	Total employee	Percentage of female participation	Percentage of male participation
1	Central Government	918	99	1017	9.73	90.27
2	State Government	8515	8405	16920	49.67	50.33
3	Central Quasi Government	674	212	886	23.93	76.07
4	State, Quasi Government	2353	753	3106	24.24	75.76
5	Local Body	1019	2738	3757	72.88	27.12
6	Private	4977	3545	8522	41.60	58.40
District		**18456**	**15752**	**34208**	**46.05**	**53.95**

Source: District Employment Officer, Ramanathapuram

Trends in Political participation

Political participation of women emerges to be a composite observable fact, a dependent variable such as the emotional, socioeconomic and political, which offer orientation to individuals either positively or negatively. In Tamil Nadu, 33 percent of reserved seats for are women in PRI's. Obstacles faced by women representatives as an effective Panchayat president are non – cooperation of the male members on the basis of gender bias, officials taking advantage of their innocence and poor education, elected women members are occasionally used as a stand in behind husband or men in the family.

All over the Ramanathapuram district, nearly 3869 elected representatives are their in the State assembly and local bodies, of which, 2374 males and 1495 were female. 38.64 percent of women were a member in the State assembly and local body. Inter – block disparity ranges from R. S. Mangalam (33.02 percent) to Paramakudi (43.83 percent) followed by Kadaladi, 43.04 percent. In the Tamil Nadu allocation of women's seat is 33 percent. Despite higher percentage of SHG in Mandapam and R. S. Mangalam, women in political participation is below the standard. The highest concentration of Muslim population is one of the reasons for lower political participation. Nongovernmental organizations and community organizations give the impression of being a political leader through leadership development programs. Women participation in politics is improving when compared to the previous years.

Table 6.4: Membership in State assembly and local bodies, 2011

S. No	Membership of women in State Assembly and local Body	Number of Male	Number of Female	Total	Female %	Male %
1.	Bogalur	114	80	194	41.24	58.76
2.	Kadaladi	315	238	553	43.04	56.96
3.	Kamuthi	282	187	469	39.87	60.13
4.	Mandapam	242	120	362	33.15	66.85
5.	Mudukulathur	240	154	394	39.09	60.91
6.	Nainarkoil	175	98	273	35.90	64.10
7.	Paramakudi	173	135	308	43.83	56.17
8.	R. S. Mangalam	213	105	318	33.02	66.98
9.	Ramanathapuram	153	107	260	41.15	58.85
10	Tirupullani	207	108	315	34.29	65.71
11	Tiruvadannai	260	163	423	38.53	61.47
District		**2374**	**1495**	**3869**	**38.64**	**61.36**

Source: Revenue department, Ramanathapuram

Conclusion

District level general sex ratio is 983, which shows decreasing trend over a decade from 1036 and the child sex ratio is also decreasing trend of 961 in 2011 from 964 in 2001, which clearly exhibits the women's status at district level. Within a decade, the sex ratio of the district has fallen below the State average. The district administration and health departments require to observe and prevent the sex selective abortions.

In Ramanathapuram, the typical work of the female agricultural labourers or cultivators is limited to less skilled jobs, such as sowing, transplanting, weeding and harvesting. In which, female agricultural labourers are nearly two fold higher than that of male agricultural labourers, which shows female workers in the district belong to socially and economically vulnerable sections.

Except, Bogalur, Paramakudi and Ramanathapuram blocks, other blocks have to be covered as potential member under SHG fold. It will safeguard the poor households through financial inclusion. Total credit availed by the SHG's is Rs.89.76 crore during 2013-14, Bogalur, Mandapam, R. S. Mangalam and Tiruvadanai block groups availed privileged amount of credit than other blocks. Strengthening of SHG movement with the effective fund flow and proper utilization of fund through family counseling means of brining sustainable growth of women for attaining equitable human development.

CHAPTER 7

SOCIAL SECURITY

7. Social Security

Introduction

Social security refers to the action programs of Government projected to endorse the welfare of the population in the course of assistance measures assuring access to enough resources for food, shelter, to promote health and well-being of the population at large. The potentially susceptible sections such as elderly, differently-abled, destitute widows also deserted wives. Marriage and maternity assistance is provided by the Government to the economically weaker sections towards sharing this financial load. A high dependency ratio can be a source of severe problems to the Government in terms of financial and social assistance.

The implementation of maternity assistance scheme by the Government is the main reason for attaining hundred percent institutional deliveries in Ramanathapuram district. The share of Government hospitals in institutional deliveries is higher and showed an increasing trend compared to the private hospitals because of the maternity assistance scheme.

The present chapter tries to look at the demographic profile and financial security of aged, assistance to differently - abled, marriage and maternity assistance programs implemented by the Government as well as functioning of various social security schemes in the district. The study uses data from different line departments of Ramanathapuram District through the District Planning Cell to understand the social security scenario in Ramanathapuram.

The Demographic profile of the aged

Population ageing is the most noteworthy result of the process well-known as demographic transition. Lowering of mortality rate means a longer life span for persons.The age limit of 65 years is roughly a universal benchmark in every analysis and is defined as ageing. However, in State and district, menopause and the arrival of grandchildren generally marked being old aged for women. There is a tendency for women, think themselves old at a younger age than men. In most parts, women survive longer than men approximately by four to eight years.

Ageing often related to worsening in health. Whereas the elderly may be troubled about how to survive with ill health, service delivery will be disturbed about providing for the wants of the elderly. Low birth rates united with long life expectancies, drive the population to an ageing civilization. The ageing population could cause mounting pressure on different socioeconomic aspects, including pension expenses, health care expenditures, fiscal regulation, savings levels etc.

Table 7.1: Demographic profile of aged in Ramanathapuram district

Percentage of Population aged above 60						
District/ State	Total population	Male	Female	Total population	Male	Female
	2001			2011		
District	8.72	8.75	8.69	9.80	9.71	9.88
State	8.83	8.71	8.94	10.41	10.13	10.69

Source: Census 2011

The total population of the district is 13,53,445 as per census 2011. Of which population aged 60+ is 1,32,575 (Male and female elderly population of 66,312 and 66,263 respectively). Male population aged 60+, 9.71 percent which was slightly lower than the female aged population of 9.88 percent. A similar status is articulated in the State also. The percentage of the aged in the district was 9.80, lower than the State average, 10.41 percent in 2011. The share of the ageing population in the district is less than the State in 2001 and 2011 census. The crude birth and death rate of the district was at 16.5 and 4.9 respectively. It has the correlation with the demographic transition of the district. The sex ratio of the elderly population was 999, as of 2011. The percentage of elderly population showed an increasing trend from 2001.

The increasing trend of the elderly population has its own implications on social functioning. The word "Dependency ratio" was coined by the demographers to represent the relative productivity of the persons forming the age structure of the society. The dependency ratio of the district plus State is computed based on the below mentioned formula.

Category	District	State
Child (0-14 years)	332286	17007503
Working (15-64 years)	939426	50345572
Old (65+)	79262	4727150
Child dependency ratio	35	34
Aged dependency ratio	8	9
Dependency ratio	44	43

Source: Census 2011

The data are shown as the proportion of dependents per 100 working age population. As of census 2011, the old age dependency ratio of Ramanathapuram district was 8 percent which is lower than State's average of 9 percent. The working age population is 65.74 percent. But, the total dependency ratio of the district, 44 percent is higher compared with the State, 43 percent. The higher dependency ratio has several labour market, economic and social implications.

The immediate requirement of the elderly population is proper health care, economic assistance and residence care. A variety of health issues are faced by the elderly day by day. Efforts to overcome these issues include strengthening of primary health care services by geriatric care units, to explore the option of initiating Mobile geriatric clinics, to lower the problem of accessibility in remote areas. Efforts should also be made for income generation to maintain themselves with supporting their families. However linkage of eligible, vulnerable people needs to be made to the Government economic assistance schemes for futuristic prospects.

While considering the life expectancy at birth and mounting pattern of elderly population, Government can not offer adequate economic assistance to each eligible individual in the future. The sustainable remedy for this issue is linkage of unorganized current workers force to labour, welfare department or fisherman or agricultural labour boards or micro pension schemes facilitated by a nongovernment organization with Life Insurance Corporation of India. The joint family system is the backbone of our nation. Breaking of joint family system is the core reason for the increasing trend of old age homes. Reconstructing the joint family system with a Government based institutional care would lead to greater security and improvement in the quality of their life.

In Ramanathapuram district, three old age homes are functioning in Parthibanoor (Kamuthi block), Mudukulathur and Sundranenthal (Paramakudi block) with the capacity of 25 senior citizens in each home. Except, Parthibanoor home, other two homes are also having orphanage home facility. In these two homes, the number of the elderly population is lower then the home capacity. In these homes, some elders due to misunderstanding with their family usually join the old age home and after being convinced by their family, they vacate the home, which is usual practice in the district.

Financial security

The older population experiences a number of problems ranging from an absence of guaranteed, adequate income to support themselves and their dependents. Particularly in rural areas and drought prone area with a lower range of Per capita income like Ramaanthapuram, families experience economic disaster, as their livelihoods do not support income throughout the year. In this situation, the caring of the elderly population is difficult. The implementation of the old age pension scheme by Government is a sustainable remedy for elderly population, vulnerable groups.

NOAP scheme (National Old Age Pension Scheme) which is initiated by the Central Government affords for a pension to the old people living in the conditions of insolvency. Indira Gandhi National Old Age Pension Scheme (IGNOAPS) implemented in Tamil Nadu. Under Central assistance of Rs. 200 per month per beneficiary is afforded and State Governments have been advised to add equally so that a pensioner could get at least Rs. 400/- per month. Now, in Tamil Nadu, the total benefit has increased up to Rs.1000 per beneficiary per month. Apart from this, under the Annapurna Scheme 10 kgs of food grains per month are offered free of cost to the senior citizens through the regular public distribution system.

Out of 65.74 percent of the working group population, nearly 94 percent of the total work force is employed in the unorganized sector in Ramanathapuram district as of 2011. They retire from their employment exclusive of any economic security like pension or extra post retirement settlements. The organized sector workforce who includes the employees of the Central, State governments, of local government bodies, and of major private sectors comprises about 35000 workers of the total district workforce of 6.03 lakhs.

Accordingly, the Ministry realizes that poverty mitigation program aimed at the aged alone cannot give a solution to the income and social security problems of the elderly. Through the labour welfare department, every young worker in unorganized sectors can construct enough savings during their working life, which would provide as a shield beside poverty in old age. In Ramanathapuram district, through the labour welfare board, the fisherman welfare board and agricultural labour welfare department, eligible members from unorganized sectors are covered under the above specified sources.

Table 7.2: Financial assistance to aged people and vulnerable sections, 2013-14

Sl. No	Category	Coverage
1	OAP	51992
3	Destitute Widows and deserted wives	18877
4	Unmarried woman's pension	344
Total		**71213**

Source: Revenue department, Ramanathapuram

Total population aged 60 and above is 132575, among these populations, 51992 beneficiaries are getting benefits under IGN-OAP Scheme. Around 39.22 percent of the elderly population is getting benefit. The district administration should take steps to capture the eligible elderly population to assist economic benefits. Apart from old age pension, the other vulnerable

sections viz., differently abled, destitute widows, deserted wives as well as unmarried women are also getting pension benefits from the Government.

Box 7.1: Micro Pension Scheme for the Poor

In order to avoid financial insecurity of elder population, implementation of micro pension scheme among the self help group members with the coverage of their spouse during their working period results security to the aging prospects. In Ramanathapuram district, as of the 2011 census, nearly 94 percent of the total workforce depend on unorganized sector. After 10 to 15 years, the government and labour, welfare department could not satisfy the financial requirement of the elderly population. It can be overcome by means of introducing micropension scheme to the unorganized labour.

The experience shows the awareness and pays attention to alternative pension systems or models is the need for the hour. One of them is micro financed saving schemes. Micro finance is by definition geared to the poor. By introducing long term saving and insurance schemes for the poor micro finance institutes and NGO's try to fill the gap in old age security between State provisions and the unorganized sector. Among the few micro financial products designed to save for old age throughout the world, the micro pension schemes offered in India are amongst the successful pioneers, like the DHAN Foundation through its people institutions. According to the Caroline E. van Dullemen, Jeanne G. M. de Bruijn, 2011 study in Tamil Nadu, a large majority of members of micro finance organizations in all age categories (women) like to participate in a micro pension scheme. The micro pension scheme was implemented in Ramanathapuram district with the support of peoples' institutions promoted by DHAN Foundation and Life Insurance Corporation of India, Madurai. This scheme has three pillars,

- The first pillar implies a State provision, Indira Gandhi National Old Age Pension Scheme
- The second pillar refers to formal labour related savings done by employers and employees, a provision related to the formal sector
- The third pillar refers to private savings. With respect to the poor and unorganized workers in the unorganized, informal sector, this pillar is often centered around Micro Finance Institutes.

The third pillar savings amount is managed by the LIC of India. At the age of retirement, the benefiaciary gets the pension amount in annuity basis to their savings bank accounts. 760 members from Ramanathapuram district are enrolled in micro pension scheme with LIC of India.

Differently Abled

Differently abled was first projected (in the 1980's) as a substitute to disabled, handicapped, etc., On the grounds that it awarded a more positive communication and so avoided inequity towards people with disabilities. Disability is the effect of a destruction that may be physical, cognitive, mental, sensory, emotional, developmental, or some mixture of these. It may be present from birth, or it happens during a person's lifetime. The types of disabilities can be classified as Physical, Sensory, Vision, Hearing impairment and Somatosensory impairment, Balance disorder, Intellectual disability, Mental health and emotional disabilities.

Table 7.3: Differently abled persons in Ramanathapuram district

District	Total	Male	Female
Ramanathapuram	23432	12842	10590

Source: Census 2011

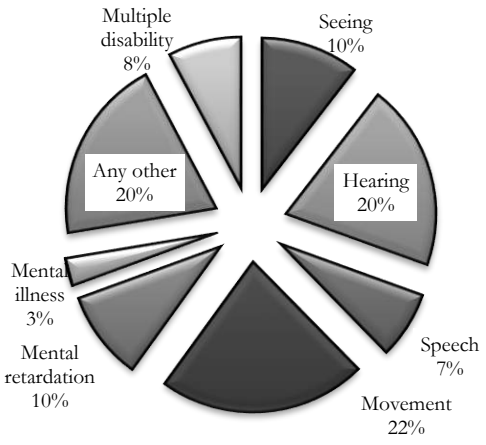
In Ramanathapuram district, 4320 differently abled persons are getting the various government scheme benefits, nearly, 18.44 percent of eligible persons. The left out eligible persons would be covered under the fold of government economic assistance for their prospects.

Benefit for Diffently abled persons (2013-14)				
Source	**Scheme**	**BC**	**SC**	**Total**
Central	IGN-DPS	1066	223	**1232**
State	DD AP PHP	2464	581	**3088**
Total		**3530**	**804**	**4320**

Source:Line Depatment, Ramanathapuram

The differently abled persons at district level is 23432 as of 2011, of which male and female population is 12842 and 10590 respectively. Among the total population, 1.73 percent of the persons are differently abled in Ramanathapuram district. Out of 23432, nearly 3024 differently abled persons are aged 60+. These persons required additional support of health care and need based institutional support. The percentage of differently abled persons was higher in Mudukulathur, Kamuthi and Tiruvadanai blocks. The same status was lower in Tirupullani, Mandapam and Nainarkoil. Out of 23432 differently abled persons, physical disability (differently abled in movement, 22 percent) occupies higher percentage followed by disability in hearing and any others, 20 percent.

Chart 7.1: Types of differently abled persons in Ramanathapuram



Source: Census 2011

Box 7.2: Marriage and Maternity assistance program

A variety of schemes are executed by the government to prosper the girl child's life. The following Schemes are implemented by the social welfare department to the beneficiary. During 2013 - 14, 3170 girls have got the benefit of marriage assistance scheme and 12430 female (56 percent of the eligible ANC) got the benefit of maternity assistance. The implementation of maternity assistance scheme by the government is the core reason to attain hundred percent institutional delivery in Ramanathapuram district. The share of institutional deliveries in government hospitals is higher and increasing trend than that of private hospitals because of maternity assistance scheme. The government hospital's share increased from 57 percent to 64 percent in 2011-12 to 2012-13. The different types of marriage assistance scheme implemented in the district are furnished here.

1. Moovalur ranmamirtham ammaiyar marriage Assistance scheme – Girls belonging to below poverty line Families and to support the educational grade of poor girls, Rs.20,000/- by Cheque/ Demand Draft have given to 2927 Poor families Girls during 2013 - 14.
2. Annai Therisa Ninaivu Orphan Girl marriage Assistance scheme - To assist financially the Orphan Girls for their marriage, Rs.20,000/- by cheque/ Demand Draft have given to 9 Orphan Girls in the district during 2013 - 14.
3. EVR Maniyammaiyar Ninaivu Widow daughter marriage Assistance scheme – To aid the poor mothers who are widows by giving financial assistance for their daughter's marriage and to encourage the educational grade of poor girls, Rs.20,000/- by cheque/ Demand Draft have given to 209 poor Girls for the same period.
4. Dr.Dharmambal Ninaivu Widow Remarriage Assistance scheme offered to 5 beneficiaries and Dr.Muthulakshmi Reddy Ammaiyar Ninaiyu Intercaste marriage Assistance scheme to the 20 beneficies.

Table 7.4: Marriage and maternity Assistance provided to women, 2013-14

Sl. No	Category	No. of women assisted
1	Moovalur ranmamirtham ammaiyar marriage Assistance scheme	2927
2	Annai Therisa Ninaivu Orphen Girl marriage Assistance scheme	9
3	EVR Maniyammaiyar Ninaivu Widow daughter marriage Assistance scheme	209
4	Dr.Dharmambal Ninaivu Widow Remarriage Assistance scheme	5
5.	Dr.Muthulakshmi Reddy Ammaiyar Ninaiyu Intercaste marriage Assistance scheme	20
Total		3170
Maternity assistance		12430

Source : Social welfare department, Ramanathapuram

Crime against women

The number of crimes against women has increased to 260 in 2014 from 130 in 2013. On an average, district shows an increasing trend of crime rate against women, which needs to be focused for women empowerment. Among the different categories of crime against women, eve teasing shows higher rate compared to the other crimes followed by cruelty by husband.

Table 7.5: Crime against women

S. No.	Category	Number of Cases						
		2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
1	Rape (Sec 376 IPC)	6	10	16	6	9	7	9
2	Attempt to commit Rape	4	1	--	1	--	1	--
3	Molestation / Outraging modesty	34	22	14	14	15	23	12
4	Kidnapping and abduction Women (Sec.366 IPC)	16	52	50	51	35	15	27
5	Eve teasing and 4 of the Tamil Nadu Prohibition of Harassment of women Act -2002	22	66	85	66	91	62	185
6	Dowry death by other means	2	1	1	1	3	1	3
7	Cruelty by husband or 14 his relatives Sec.498(A) IPC and Dowry prohibition Act	30	40	43	28	45	21	24
Total		**114**	**192**	**209**	**167**	**198**	**130**	**260**

Source: District Superintendent of police, Ramanathapuram

Whereas, attempt to commit rape cases have fallen to zero in 2012 from 4 in 2008. Molestation/Outraging modesty in the district has fallen to 15 in 2012 from 34 in 2008. The other cases have shown an increased trend. The number of rape cases has gone up to 9 from 6 during 2008 to 2012. Kidnapping and abduction of Women cases have increased from 16 to 35 for the same period. Dowry death by other means and cruelty by husband or his relatives, the number of crimes increased from 2 and 30 to 3 and 45 respectively for the same period.

In Ramanathapuram district, the inter community clash is threatening the youth development. It affects the human development of the district. Because of lack of employment to the youth, younger population is involved in community clashes. Again the crime against scheduled caste is proving the fact that, it is increasing trend. Proper awareness, engaging the youth for social causes and skill training to the youth population will reduce the crime rate.

Throughout the district, the weed *Prosophis* is affecting the social and economical growth of the human being. This weed demolishes the underground water level and the weed occupies nearly 40,000 hectares in the district geographical area. It grown as dense pushes, which creates space for many malpractices. Removal of these plant species will minimize the crime rate.

Conclusion

Around 39.22 percent of the elderly population is getting monthly pension benefit through IGN – OAP scheme, the district administration should screen the eligible elderly population to assist economic benefits. Apart from economical assistance, the senior citizens require the health care services from government. Strengthening of primary health care services by geriatric care units for elderly, and to explore the option of initiating Mobile geriatric clinics, to lessen the problem of accessibility is the way out of health care issues. In terms of financial viability, efforts should be made for income generation maintaining themselves and their families. Breaking of joint family system in the society is the major reason for rising old age home. Hence reconstructing the joint family system should address the problem of maintenance of elderly population in a sustainable way in the society. It may resolve the senior citizens' problem of health, financial security and institutional care.

In Ramanathapuram district, 4320 differently abled persons are getting the various government scheme benefits, ie, nearly, 18.44 percent of eligible persons. The left out eligible persons would be covered under the Government fold for economic assistance for their prospects.

On an average, district shows an increasing trend of crime rate against women which indicates more women are coming forward in reporting, which is a sign of empowernment. Among the different categories of crime against women, eve teasing shows higher crime rate followed by cruelty, by husband compared with other crimes. Proper awareness, skill training to the youth population, creating livelihood opportunities and last but not least *Prosophis* weed out will reduce the crime rate.

CHAPTER 8

INFRASTRUCTURE

8. Infrastructure

Infrastructure development has a key role to play in both economic growth and poverty reduction. Failure to accelerate investments in rural infrastructure will make a mockery of efforts to achieve the Millennium Development Goals in poor developing countries while at the same time severely limit opportunities for these countries to benefit from trade liberalization, international capital markets and other potential benefits offered by globalization.

Dr.Md. Tarique, Kurukshetra: 21st Jan 2008

Rural infrastructure and economic development

Introduction

Infrastructure is essential organizational and physical structure. It can be normally defined as the set of interconnected structural elements that offer the outline supporting a whole structure of development. It is a vital term for judging a State or district development. Infrastructure facilities in the block places crucial role to decide human development index in addition to multidimensional poverty index.

The entry of East Coast Road (ECR) is a bequest of the district in terms of industrial growth and connectivity with the nearer cities. Except Tirupullani, other urban based blocks have a higher number of commercial banking services than that of rural based blocks.

The present chapter tries to look at the extent of the infrastructure provided across the blocks. The status of physical and organizational structures like road, electricity, telecommunication, transport facilities offered to the district, services of financial as well as insurance institutions analyzed. These infrastructure facilities play a very important role in poverty reduction and human development. The study uses data from various line departments of Ramanathapuram District through the District Planning Cell.

Roads

A separate Highways Department (HD) was established in 1946 and renamed as Highways and Minor Ports Department (HMPD) on 2008. HMPD of Tamil Nadu is primarily liable for the construction and maintenance of roads, including national highways, State highways as well as major district roads in Tamil Nadu. Modern roads are normally paved, smoothed or otherwise primed to allow easy travel. Historically, many roads were simply identifiable routes without proper construction or maintenance. This variable is increasing and a higher value indicates the likelihood of human development.

The Ramanathapuram town is located on southeast Tamil Nadu and connected by NH 49 to Madurai from Rameswaram. East Coast Road is the major coastal road in east Tamil Nadu which connects the State capital Chennai and Ramanathapuram; this road also connects Ramanathapuram with Pondicherry, Tuticorin and Kanyakumari. The entry of ECR is a bequest of the district in terms of industrial growth, additionally connected with the cities nearby.

Table 8.1: Distribution of Total Road length, 2013-14

S. No	Block / District	Total road length	Mud	GL	WBM	BT	CC
1	Bogalur	46.3	3.3	4.7	2.5	33.4	2.4
2	Kadaladi	454.3	61.0	8.8	43.6	331.5	9.4
3	Kamuthi	621.2	107.9	39.2	52.1	402.0	20.0
4	Mandapam	606.6	124.5	48.3	69.1	316.5	48.1
5	Muthukulathur	554.7	90.2	18.3	94.8	335.3	16.1
6	Nainarkoil	217.6	46.8	6.4	19.9	135.6	9.0
7	Paramakudi	367.5	27.9	1.2	42.3	278.8	17.3
8	R.S.Mangalam	512.3	66.9	42.5	29.7	360.8	12.3
9	Ramanathapuram	475.3	123.0	13.9	56.0	238.0	44.3
10	Tirupullani	412.8	48.8	15.0	53.8	254.6	15.0
11	Tiruvadanai	506.2	75.8	9.2	35.3	372.7	8.9
District		**4774.8**	**776.2**	**207.4**	**499.2**	**3059.3**	**202.7**

Source: BDO, MC, EO, TP, Ramanathapuram

The total road length in the district is 4774.8 Kms, of which in rural context the road length is 4374.3 Kms and in case of urban it is 400.5 Kms. Among the various types of roads Bituminous Tar roads were higher (3059.3 Kms, 64 percent) followed by mud roads (776.2 Kms, 16 percent). The status of cement concrete and gravel road length is lower (202.7 Kms, 4 percent and 207.4 Kms, 4 percent, respectively) followed by WBM road (499.2 Kms, 10 percent). Across the blocks, road length shows large disparity. It ranges from Bogalur (46.3 Kms) to Kamuthi (621.2 Kms). Kamuthi block has good road facility, covering nearly 13 percent of the total road length of the district, followed by Mandapam, 12.7 percent[13].

The bituminous tar road is predominantly present in all blocks, it ranges from Paramakudi, 75.9 percent to Ramanathapuram, 50.1 percent. Among the blocks, the Mud road length was higher in Ramanathapuram (25.9 percent) to Bogalur (7.21 percent). The GL road length was higher in

[13] Percentage calculated through Block specific road type road length with the concern Block total road length

Bogalur (10.1 percent) and lower in Paramakudi (0.3 percent, 1.2 Kms). The Water Bound Macadam (WBM) road length was higher in Mudukulathur (94.8 Kms, 17.1 percent) and lower in Bogalur (5.4 percent). The Cement concrete (CC) road length was higher in Ramanathapuram (44.3 Kms, 9.3 percent) and lower in Tiruvadanai (1.8 percent) during 2013 - 14.

Electricity

Electrification is a fundamental requisite for the socioeconomic development of the areas. It is an essential parameter for agricultural, industrial growth and to improve quality of life. It generates employment opportunity in rural and urban areas. The presence of a number of 230/110 KV substations in the district is 1, number of 110/33 and 33/11 KV substations are 5 respectively. Similarly, the number of 66/11 KV substations is two[14], serving the electricity need of the district.

Table 8.2: Electricity

Sl. No	Block	Revenue Village	Hamlets	Towns	Population covered	No. of street lights in 2012-13	No. of street lights in 2013-14
1	Bogalur	23	91	-	39525	1941	2697
2	Kadaladi	53	285	Sayalgudi (TP)	162071	11260	11282
3	Kamuthi	49	346	Abiramam (TP) Kamuthi (TP)	135658	6507	6598
4	Mandapam	19	200	Mandapam (TP) Rameswaram (M)	210334	11011	11533
5	Mudukulathur	38	169	Mudukulathur (TP)	96638	4670	6791
6	Nainarkoil	36	113	-	48358	3254	3257
7	Paramakudi	34	163	Paramakudi (M)	177259	7071	7722
8	R. S. Mangalam	41	325	R. S. Mangalam (TP)	84742	4587	4643
9	Ramanathapuram	25	120	Ramanathapuram (M)	145452	4868	6199
10	Tirupullani	25	240	Keelakarai (M)	126121	6388	6499
11	Tiruvadanai	57	310	Thondi (TP)	127287	7258	7301
District		**400**	**2362**	**11**	**1353445**	**68815**	**74522**

Source: Ad Panchayat, EE & MC, Ramanathapuram

In Ramanathapuram district, 400 revenue villages, 2362 hamlets, 7 town Panchayats and 4 municipalities were covered by 68815 street lights in 2012-13 and 74522 in 2013-14. The total

[14] http://www.ramnad.tn.nic.in/PROFILE.HTM#ELECTRICITY

population covered under electrification is 1353445. The total number of street lights ranges from Kadaladi, 11533 to Bogalur, 2697 during 2013-14.

Access to drinking water[15] - Ramnad Cauvery Water Supply Scheme

Ramanathapuram district is severely affected by the scarcity of potable water due to salinity, brackishness and poor sources. The district has suffered from water shortage for many years and the district could not supply even the minimum quantity of 40 litre of potable water per person. Because of non-availability of potable water, the district is lagging behind in economic and industrial development when compared to the other districts in Tamil Nadu. Various water supply schemes like Individual Power Pumps (1161 IPPs), mini power pumps (485), stand alone schemes (11), combined water supply schemes (36) and desalination plant (20) have been implemented but the source could not sustain schemes due to quantity as well as quality problems. Even improvement of Ooranies could not provide potable and quality water.

Considering all the above factors, the Tamil Nadu Government laid the foundation stone in 2007 for a mega combined water supply scheme with river Cauvery as a source in Trichy district at an estimated cost of Rs.616.00 crore to solve the drinking water issue in Ramanathapuram, Sivagangai and Pudukottai districts. In Ramanathapuram district, 4 municipalities, 7 town Panchayats and 2332 rural habitations in 11 blocks have benefitted through this scheme. Now, the district can provide the Per capita supply of 90 litres in the municipality, 70 litres in town Panchayats and 40 litres in rural habitations. This potable and quality water supply provides multifaceted benefits for the worst drought affected Ramnathapuram districts. But, the water requirement of the district per day based on the population is 5,41,37,800 litres. The fulfillment of this entire requirement is still inadequate. Water supply throughout the year is a cause of concern in the district.

Communication system

Telecommunication is getting in touch with a distance by technical way, mostly in the course of electrical signals or electromagnetic waves. It is strongly associated with our Day-to-Day activity. Prior to 15 years, one landline connection per village was a matter of prestige and restricted to economically well off. Now cell phone for every person has become an essential component of our life people wish connectivity. Low cost cell phones are accessible in the market. It is affordable to poor also. Telecommunication has a close relationship with industrialization and

[15] http://www.twadboard.gov.in/twad/rmd_water.aspx

human development. Accessibility of health, education, and other essential services come closer to the society after the entry of cellular services. Even the unconnected remote villages are connected by means of cellular connection. Current days, number of options exist with cellular services, starting from the LPG booking to fund transfer depends upon the users. The correct way of cellular usage also contribute to economic and human development of the district.

Table 8.3: Communication systems, 2012-13

Sl. No	District	No. of Telephone exchange	No. of PCO	No. of land line	No. of HH with connection	Number of Mobile phone towers
District		2	2617	4200	4200	112 (BSNL)

Source: BSNL, Ramanathapuram

Through the above mentioned data sheet, table 8.3. the district is having good communication facility. Connectivity among the people is well sited through 2 BSNL telephone exchanges, 2617 PCO's, and 112 BSNL mobile phone towers. The coverage of other networks is also well established in district to boost up the communication.

Financial institutions

A financial institution is an institution that offers financial services for its clients or members. Most of the financial institutions are regulated by the Government. It provides financial assistance to the individuals, institutions and industries for the purpose of socioeconomic development. It is the main tool for human development in terms of offering a credit at lower interest rate to enhance secure livelihood, higher education, and creating employment opportunities among the poor. It facilitates the individuals to deposit money for their future. After the linkage between financial institutions with self help groups, the stranglehold of money lenders have reduced. In Ramanathapuram district, the commercial bank coverage is higher than that of cooperative societies. The lead bank of the district is Indian Overseas Bank.

In Ramanathpuram district, 131 cooperative societies with 259125 members and 106 commercial banks with 1200819 account holders are financially included. The number of cooperative societies ranges from Mandapam (4) to Kamuthi (24). Commercial banks show ranges from Nainarkoil (2) to Ramanathapuram (23). In Mandapam, Ramanathapuram and Tirupullani block, the cooperative societies are less, 4, 5 and 6 respectively, but the commercial banks are in high numbers in Mandapam and Ramanathapuram 18 and 23 respectively.

Table 8.4: Financial institutions, 2013-14

Sl. No	Block	Cooperative societies	Number of Members	Commercial Banks	Number of account holders
1	Bogalur	7	14495	2	18642
2	Kadaladi	21	41618	8	78534
3	Kamuthi	24	38678	5	58426
4	Mandapam	4	16628	18	179191
5	Mudukulathur	16	25527	4	38972
6	Nainarkoil	6	10374	2	19575
7	Paramakudi	10	18057	16	213951
8	R. S. Mangalam	14	24824	6	15556
9	Ramanathapuram	5	19243	23	337278
10	Tirupullani	6	22348	13	135864
11	Tiruvadanai	18	27333	9	104830
District		**131**	**259125**	**106**	**1200819**

Source: LDM, Cooperative department, Ramanathapuram

Paramakudi block also having a considerable number of commercial banks, 16. Urban based blocks have a higher number of commercial banking services than that of rural based blocks. Rural based blocks are having higher number of cooperative societies than urban context. Kadaladi (21), Kamuthi (24), Mudukulathur (16), R. S. Mangalam (14) and Tiruvadanai (18) blocks has higher no. of cooperative societies because of agrarian domain.

Insurance

The insurance companies are responsible for risk management. They afford us reasonable risk transfer of loss, from one entity to another. Risk coverage now expands as life insurance, health insurance, vehicle insurance, crop insurance, livestock insurance, asset insurance, etc., A vigorous insurance sector is a boon to a country's economy. The sector assists long-term funds for infrastructure development and concurrently strengthens the risk-taking ability of the country.

Table 8.5: Insurance, 2013-14

Sl. No	Name of the companies	No. of branches	Polices Issued
1	LIC, Ramnathapuram	2	12445
2	LIC, Paramakudi	3	17965
3	Oriental Insurance	1	1864
4	Star Health Insurance	1	2000
5	New India Assurance	1	3878
Total		8	38152

Source: Insurance companies, Ramanathapuram

In Ramanathapuram district, 8 branches offering services to the populace, in which the share of Life Insurance Corporation of India is high compared with Oriental insurance, Star health insurance and New India assurance. At district level, the life insurance service penetration is low. The total population of the district is 1353445 as of census 2011. Policies issued by insurance companies are 38152, which shows 3 percent of the population risk covered by the insurance companies. In case of risk, poor could suffer higher, the entire family path transfer to negative lane in terms of moral and economic assistance. Risk factor has direct linkage with human development. Any case of unexpected threat, affects child education, income of the family, standard of living, housing and increases debt. It poses a strong link to poor human development performance

In terms of life risk coverage, the contribution of nongovernmental organizations and community based organizations is immense with the collaboration of Life Insurance Corporation of India (LIC), regional office, Madurai. The poor could not allot the huge volume of money for their risk coverage. Aam Aadmi Bima Yojana (AABJ), a group insurance scheme provided by the LIC of India, particularly for the poor people with the minimum premium amount with central Government subsidy. Under this AABJ, the scholarship facilities too are available for the member's two children who are undergoing higher and higher secondary education.

Transport facilities

Transportation can be defined as the facility consisting of means and equipment required for the movement of passengers or goods. Mobility of people is of principal significance for financial growth, development and for empowering the poor. The State transport activities in the district offer economical, comfortable, secure, trustworthy, capable, environmentally sustainable, and commuter friendly transport system to the people. Three types of transport facilities exist in the district, *viz*., Road, Rail and Air.

Road transport

Two Bus terminals include the "Old Bus-stand", and the "New Bus-stand" in the Ramanathapuram district headquarters. Apart from these terminals, block headquarters, municipalities and town Panchayats have the bus terminals. Buses that connect the nearby villages and smaller towns terminate at the Old bus-stand. The State Transport Corporation, Karaikudi runs long-distance buses to important cities in Tamil Nadu and terminate at new bus-stand.

Table 8.6: Transport facilities, 2011

Name of the Corporations	Year of Formation	Headquarter	District covered	No.of buses as on 31st March 2012
T.N.S.T.C, Karaikudi.	1.04.1983	Karaikudi	Ramanathapuram and Sivagangai	685

Source: District Handbook, Ramanathapuram

Intra and inter block connectivity in Ramanathapuram district is inadequate. Currently, the inter district or city connectivity by far after the entry of ECR and mounting the transport facility by buses, lorries, trucks and other means. Adequate transport facility in Ramanathapuram district is the need for the hour for human development by means of attaining education, health services and employment opportunities. Because of inadequate transport facilities, people depends on two wheelers, share autos, auto rickshaws and taxis.

Though Dhanushkodi, which was shattered by 1964 cyclone, continues to attract tourists across the country, the lack of proper transport facilities is an important obstacle to boost tourism. The Tamil Nadu State Transport Corporation runs bus service up to Muhuntharayar Chaththiram. From there, tourists have to travel by "four wheel drive" vehicle operated by private players to reach Arichamunai. Many tourists complain that the available transport facilities are insufficient to meet the demand of tourists. They also mention the arbitrary fee collected by four wheel drive operators. For this purpose, many tourists skip Danushkodi. The tourism department should ensure transport facility in tourist places as well as pilgrim places to attract tourists. It boosts up the socioeconomic status of the district.

Rail transport

The town is well connected by railroad to major cities in India through Madurai junction. There are daily trains available in Madurai, Karaikudi, Thiruchirapalli, Chennai and weekly trains to Tirupathi, Kanyakumari, Coimbatore, Bhubaneshwar, Okha and Varanasi. The facility of few daily passenger trains to Rameswaram, Karaikudi, and Madurai is available.

Train Transport facility at Ramanathapuram

Item	Broad Gauge
Route Length (in Km.)	98.62
Track Length (in Km.)	115.09
Number of Railway Stations	9

Source: District Handbook, Ramanathapuram, 2011

Annai Indira Gandhi Bridge

The 2.2 km. length Bridge connecting the Rameswaram Island and the mainland is the longest bridge in India constructed over a bay. It is also called as Pamban Bridge. Similarly railway bridge connecting the island is noted for its unique opening to allow passage of ships through the sea.

Air transport

Madurai Airport is 125 kilometers away. Tuticorin airport is about 100 kilometers away.

Water Resources

Another major strength of the district is the water resources of Vaigai, gundar, and Manimuthar rivers flowing into the district. Major source of irrigation in the district are tanks, but they have to be renovated to get maximum benefit. The tank is a main source of irrigation in Ramanathapuram. Throughout the district 1694 tanks are available. Vaigai basin is an important water source for nine blocks out of eleven blocks, around 20 percent of the water sources depends on Vaigai basin. Tiruvadanai block with Manimuthar basin and Kamuthi, Mudukulathur and Kadaladi block have Gundar water basin. Out of 1694 tanks, nearly 70 percent of the tanks are minor irrigation tanks. There is a great opportunity for renovating water bodies under MGNREGA by villagers. But, MGNREGA work is not enough to deepen the water bodies. Encroachment removal and machine deepening is the need of the hour to effectively catch the rain water. Mandapam, a purely coastal block has least waterbodies in the district. Tiruvadanai block has the largest number of waterbodies followed by Kamuthi and R. S. Mangalam. List of irrigation tanks are furnished in Table 8.7.

Table 8.7: Irrigation Tank, 2013-14

S. No	Name of the Block	Minor irrigation Tanks		PWD Tanks			Total
		Ex-zamin	Panchayat	Vaigai Basin	Gundar Basin	Manimuthar	
1	Ramanathapuram	5	42	34	-	-	**81**
2	Tirupullani	5	52	22	-	-	**79**
3	Mandapam	-	-	1	-	-	**1**
4	Paramakudi	77	12	49	-	-	**138**
5	Bogalur	49	5	33	-	-	**87**
6	Nainarkoil	47	7	45	-	-	**99**
7	Tiruvadanai	83	115	62	-	27	**287**
8	R.S.Mangalam	68	106	77	-		**251**

9	Kamuthi	45	169	0	38		**252**
10	Mudukulathur	38	104	12	28		**182**
11	Kadaladi	20	143	-	74		**237**
Total		**437**	**755**	**335**	**140**	**27**	**1694**

Source: District web site, Ramanathapuram

Box 8.1: Establishment of farm pond to avoid crop failure in Ramanathapuram, drought prone area

The tank is a main source of irrigation in Ramanathapuram. Throughout the district 1694 tanks are available. Vaigai basin is an important water source for nine out of eleven blocks, around 20 percent of the water sources depends on Vaigai basin. Tiruvadanai block with Manimuthar basin and Kamuthi, Mudukulathur and Kadaladi block has Gundar basin. Out of 1694 tanks, nearly 70 percent of the tanks are minor irrigation tanks. Most of the farming families in the districts solely depend on rain-fed agriculture. In this case farmers can not harvest their yield every year, because of uneven distribution of rainfall and resultant frequent crop failure. In this situation Farm ponds play a vital role to overcome to a certain extent the climatic vagaries, which have a drastic effect on the livelihood of farm families, depending solely on rain-fed agriculture. Farm Pond is a small scale water harvesting structure established in a farmland to collect and store water during the monsoon, the runoff water above the surface in the catchment area is collected. The water stored in the ponds is used to irrigate and survive crops at the time of water shortage. It is suitable for farming families involved in small scale farming.

Two hundred farm ponds established in the Orivayal watershed area, Kadaladi block had a tremendous impact on increasing the cultivable area, productivity and also led to increase the ground water table. Ninety five farm ponds were constructed with the support of NABARD-WDF and hundred and five farm ponds have been constructed through European Union and other assistance in 2009-2010 through DHAN people institutions. The concept of every household having a tree to create a healthy environment is suggested by the government. Likewise, in rain-fed farming areas, we should work with the aim that each and every farm family should have a farm pond of their own to supplement irrigation to the standing crops at critical growth stages. Except for the farmers who constructed farm ponds in the Orivayal watershed, the other farmers in nearby villages faced crop failure due to inadequate rains. However the farmers who constructed farm ponds had a good harvest. On an average, production and income of farm ponds host of farmers before and after construction in 2009-10 is furnished below. The farmers benefited an increase in income by 50 percent over the previous year.

Crop	**Before Farm Pond (Acre)**	**After Farm Pond (Acre)**
Chillies (Production in Kg)	500 – 750	1250 – 1500
Income (in Rs.)	25000 – 37500	62500 - 75000

The experience shows that farm ponds are not a liability but an asset which can insure as well as ensure the sustainability of livelihoods. More than 200 farm ponds which can support irrigation to more than 500 hectares were created. Orivayal watershed, Kadaladi block works is recognized as a good watershed model by NABARD to showcase their watershed implementation program. It also remains as a source of inspiration to other farmers in Ramnad. Ground water level in the project site drastically improved and all watershed programs can replicate this model to ensure vibrancy in watershed program.

Fisheries[16]

The unique feature of the district is the longest coastline measuring about 271 kms accounting for nearly 1/4th of the total length of the coastline of the State. Ramanathapuram district is the chief fish producing district in the State. Fish production share to GDDP primary sector is on par with agricultural production of the district. During 2010-11, fish production of the district was Rs. 34117 lakh followed by Nagapattinam and Thoothukudi, Rs. 31864 lakh and Rs. 18789 lakh respectively at constant prices[17]. Infrastructure facility available for fishing activity is furnished in table.

Fisheries Details	Nos.
Mechanized Boats	2861
Country boats	8403
Jetties	4
Fishermen population	124387
Marine Fishing Villages	78
Landing Centers	17
Fishing crafts	3*
Fishing gears	72885

*Mandapam, Rameshwaram and Ramnad
Source : District handbook Ramanathapuram 2012

Fish production by trawl net followed by gill net is higher than that of other types. Researches are conducted in various disciplines of fisheries such as Seaweeds culture, chunks, Pearl culture, Sea Cucumber. New technologies are transferred to fishermen by the Central Marine fisheries Research Institute, established at Mandapam in 1947. Kurusadai Marine Biological Research Station at Mandapam, under the control of the State Fisheries Department conducts useful research on fauna and flora of the island.

Gulf of Mannar biosphere reserve and National Park

The national park located in the area of Thoothukudi and Ramanathapuram districts near Mandapam. It consist of 623.23 ha.area (21 islands). The park is believed to be the earliest marine biosphere reserve in Southeast Asia. It is also one of the richest marine biodiversity areas of the world. The important floral species in the park are Algal communities, Sea grasses, Coral

[16] http://www.ramnad.tn.nic.in/fisheries.HTM
[17] DOES, Ramanathapuram

reefs, Salt marshes and Mangroves. Similarly, marine species like Dugong dugong, Turtles, Dolphins and Balano-glossus, Green sea turtle, Seahorse, Sea cucumber, Sea Anemone, Olive Ridley turtle, Leather back turtle, Loggerhead turtle, etc. creates the park live. Another important feature of the park is a Glass bottomed boat available for the visitors.

Bird Sanctuary

Mela-Keela Selvanoor Bird Sanctuary is located near Sayalkudi in Kadaladi block. The sanctuary was declared in the year 1998. This is the biggest bird sanctuary in Tamil Nadu. The total area of the sanctuary is 593.08 ha. It forms part of Melaselvanoor and Keelaselvanoor villages.

Chitrangudi Bird Sanctuary: The bird sanctuary was declared in 1989, with an estimated area of 47.63 ha. The sanctuary area is within the community tank embankments and its immediate water holding channel, measuring approximately 15 meters from the bottom of the embankment. Most notable features of the sanctuary are the prominent growth of Babul (*Acacia nilotica*) trees. Chitrangudi Bird Sanctuary is otherwise known as "Chitrangudi Kanmoi". It is a part of the Chitrangudi village of Mudukulathur Taluk, Ramanathapuram district. An aerial view of the sanctuary gives out a crescent or fishtail shape. The Kanmoi starts at a northern point where a channel from the Gundar flows into the Kanmoi through an aqua duct. Total length of the embankment is 4.010 Kms. There are 5 sluices that drain water to the agricultural lands. Excess water is let out during flood conditions through a sluice gate about 0.5 km from the inlet aqua duct towards Chitrangudi village.

Salt[18]

Coasts off Tuticorin, Ramanathapuram and Nagapattinam are considered as the core centres of salt production in the State. Some areas in Kanyakumari and Marakkanam in the northern coast also contribute to a smaller extent. Tamil Nadu Salt Corporation Limited (TNSC) is a fully owned enterprise of the Tamil Nadu Government. It was established in 1974 at Valinokkam, Kadaladi in Ramanathapuram District, Tamil Nadu. TNSC cultivates salt set in an area of 5524 acres of land and the project is called ***Mariyur Valinokkam Salt complex (MVSC)***. It has a capacity to produce 2 to 2.5 lakhs tones per annum by developing around 3200 acres of land and providing employment to 1200 of the workers in the direct / indirect system.

[18] http://www.tnsalt.com/main_category.php?main_id=Mw==

Conclusion

The inadequate infrastructure facility minimizes the average growth of primary, secondary and tertiary sector of Ramanathapuram district when compared with the State. The total road length in the district is 4774.8 Kms, of which in rural areas, the road length shows 4374.3 Kms and in case of urban it ranged 400.5 Kms. Among the various types of roads, Bituminous Tar roads were higher (3059.3 Kms, 64 percent) followed by mud roads (776.2 Kms). Nearly 16 percent of the roads in Ramanathapuram district belonged to mud type, which can simply be eroded by rain and wind. It should be replaced by other advanced road type to improve connectivity.

The inter and intra block road connectivity has a huge gap, still remote villages in the district did not have road or Government transport facilities. It is the key for deprived industrial growth, the cost of transporting goods from market to areas where there is demand is rising because of lack of transport facility. So, the raw material cost is increasing and this prevents industrial growth. The entry of East Coast Road (ECR) is a bequest of the district in terms of industrial growth and connectivity with nearer cities. The proper utilization of ECR facilities is the need of the hour to induce economic as well as human development.

The contribution of financial and insurance institutions in human development is substantial. Policies issued by insurance companies are 38152. It shows 3 percent of the population risk only are covered by insurance companies. Any case of risk the poor could suffer is higher. Risk factor has direct linkage with human development. Any case of unexpected threat, affects child education, income of the family, standard of living, housing and external debt. The awareness about crop insurance in Ramanathapuram district is higher than that of life insurance. Awareness creation and designing simple life insurance premium which is affordable for the poor will ensure cent percent insurance coverage and minimize the risk.

CHAPTER 9

SUMMARY AND WAY FORWARD

9. Summary and Way Forward

Introduction

The report documents the well being of the people in the district. The conventional indicator of economy (GDDP) does not indicate the real nature of human development. Ramanathapuram District Human Development Report illustrates that the development of employment, health, education, gender equity, access to basic needs and social security of the vulnerable communities, while assessing the current status, the district administration and Government needs to advance human development by implementing suitable schemes.

This report documents with transparency and in depth the block level, rural – urban and gender-wise differential data on human development, which guide policy makers, researchers and all those attracted to the development of the district and its people. The present chapter endeavors to emphasize Ramanathapuram district's approach and outlook for human development.

Human Development in District

- Human development means greater access to knowledge, better diet and health services, secure livelihoods, safety against the offense and physical sadism, satisfying leisure hours, political, intellectual freedom and sense of involvement in how a society behaves.
- In Ramanathapuram district, Ramanathapuram (0.92), Paramakudi (0.78) and Mandapam (0.76) blocks occupies first three ranks. Mudukulathur (0.45), Kadaladi (0.40) and Bogalur (0.32) falls in the last three ranks in human development index. The range between the higher value and lower value is 0.60 ((Ramanathapuram (0.92) to Bogalur (0.32)), which indicates the inter block disparity among the block is high in terms of human development.
- Generally, the standard of living indicators are relatively higher in an urban context. Similarly, focus on education and health dimensions are high in urban-based blocks, it leads to better human development. Urban context blocks such as Ramanathapuram, Paramakudi, Mandapam and Tirupullani occupied first four places in the human development index during 2013-14.
- Bogalur has secured 11th rank, last rank in Ramanathapuram district in terms of HDI due to backward in health and education dimensions. In these dimensions, totally six indicators were analyzed, of which, Bogalur block falls in the bottom three categories in

five indicators, such as, IMR (22.20), MMR (341.30), U5MR (22.18), Literacy rate (75.56 percent) and GER in secondary education (65.25 percent).

- Likewise, Kadaladi and Mudukulathur blocks falls in the 10th and 9th rank in Ramanathapuram district in the human development index during 2013 - 14. Kadaladi block is backward in the following indicators, low range of Access to cooking fuel (14.55 percent), access to toilet facilities (47.38 percent), Access to pucca houses (86.71 percent), GER in primary (99.79 percent) and GER in secondary education (56.92 percent), high range of IMR (16.40) and U5MR (18.85). Likewise, Mudukulathur block is backward in access to drinking water (88 percent), MMR (326.37), Literacy rate (74.74 percent) and GER in primary education (99.67 percent).
- Gender inequality is usually visible in access to education, health, contribution in political, financial transaction, pay rate, defence under the act, favoritism for male kids, higher poverty rates for female-headed families, sadism against women and so on.
- The performance in Health, Empowerment and labour market is fine in best performing blocks *viz*., R. S. Mangalam (0.01), Paramakudi (0.02) and Ramanathapuram (0.03) blocks. Mandapam (0.09), Bogalur (0.09) and Mudukulathur (0.11) blocks falls as last three ranks in GII. Range of disparity noticed in Ramanathapuram district on Gender Inequality Index is 0.10. Here the range is very low when compared to the Human development index differential of Ramanathapuram, 0.60.
- In Mandapam block, low share of female elected representatives in RLBs and ULBs (33.15 percent), low female work participation rate (14.99 percent) and minimum female wage rate for agricultural works (Rs.130) causes higher gender inequality, so that, the block places 9th rank and GII value is 0.09. Correspondingly, high maternal mortality (341), low female literacy (65.5 percent), share of female children 0-6 years (48.6 percent), female work participation rate in non agricultural sector (13.81 percent) and minimum female wage rate for agricultural works (Rs.140) results Bogalur block in 10th rank with 0.09 GII value.
- Correspondingly, high maternal mortality (341.30), low female literacy (65.5 percent), share of female children 0-6 years (48.6 percent), female work participation rate in non agricultural sector (13.81 percent) and minimum female wage rate for agricultural works (Rs.140) results in Bogalur block getting a 10th rank with 0.09 GII value out of eleven blocks in Ramanathapuram district.
- Mudukulathur block ranks 11th in GII with 0.11 index value and occupies last rank among eleven blocks in Ramanthapuram district due to high MMR (326), low range of

female (65.2 percent) and male literacy (84.3 percent), minimum percentage of female workers in the non agricultural sector (8.57 percent) and lowest female wage rate for agricultural works (Rs.140).

- Range of disparity noticed in CDI is 0.56, the range starts from Bogalur (0.26) to Ramanathapuram (0.82). Here the range is very high when compared to GII of Ramanathapuram 0.10 and less when compared to HDI, 0.60.
- Health and education dimensions have been taken to analyze the child development, these dimensions are well performing in top three blocks, *viz*., Ramanathapuram, Mandapam and Tirupullani blocks.
- Kadaladi and Kamuthi blocks occupies 9th and 10 places correspondingly with 0.39 index value. The percentage of malnourished children are high, 39.90 percent across the Ramanathapuram district, which is the major contributing factor for backwardness of Kamuthi block in CDI. In Kadaladi block, the contributing factor for inferior child development are High U5MR (18.8), malnourishment children (39.56 percent), low child sex ratio (949), GER in primary education (99.79 percent) and GER in secondary education (56.92 percent).
- Among eleven blocks, Bogalur ranks 11th in CDI with 0.26 index value because of high U5MR (22.2), children never enrolled in school (1.82 percent), low child sex ratio (945), enrollment in secondary education (65.25 percent) and transition rate from upper primary to secondary (86.17 percent).
- The multidimensional poverty index is a composite index of diverse poverty variables. a wide range of disparity, 0.57 was observed among the blocks. Range starts from Ramanathapuram block (0.13) to Kadaladi (0.71). Like HDI, MPI computed based on health, education and standard of living dimensions. In these dimensions, performance are better in top three blocks, such as, Ramanathapuram, Paramakudi and Tirupullani blocks.
- Mudukulathur block is placed 9th rank with a MPI value of 0.54, because of high proportion of Higher Order Birth rate (8.7 percent), drop out in secondary education (7.20 percent) as well as, low proportion of access to drinking water (88 percent). Likewise, Tiruvadanai block ranks 10th out of eleven blocks for the reason of high drop out in primary education (1.89 percent) and low access to drinking water (86.69 percent).
- Kadaladi block ranks 11th place with 0.71 MPI value. Out of ten indicators used for MPI computation, eight indicators are backward in Kadaladi block, such as, high IMR (16.40), HOB (9 percent), malnourished children (39.56 percent), drop out in primary education

(1.5 percent), drop out in secondary education (12.03 percent), minimum range of cooking fuel (14.55 percent) and access to toilet facilities (47.38 percent).

- While assessing the four indices, Ramanathapuram block occupies the first rank in HDI, CDI and MPI, Paramakudi block occupies the second rank in HDI, GII and MPI, Tiruvadani block occupies the fifth rank in HDI, GII and MPI and Nainarkoil occupies the eighth rank in HDI, CDI and MPI. In terms of HDI and CDI, Bogalur block occupies the eleventh rank. Likewise, in HDI and MPI, Mudukulathur block ranks ninth. R. S. Mangalam occupies the seventh rank in CDI and MPI, and Tirupullani block occupies third rank in CDI and MPI.

Employment, Income and Poverty

- Employment, income and poverty have a close relationship with one another. Secured livelihood, standard earnings and poverty free life openly unite by the human development of the district.
- A fast increasing technically skilled workforce will enhance standard of living and quality of life. Importance should be placed on self-employment ventures in both agriculture and allied activities, particularly chilly processing, as well as in small-scale industries in coastal livelihoods.
- Ramanathapuram district is the chief fish producing district in the State. Fish production share to GDDP primary sector is on par with agricultural production of the district, which increases "pressure on sea".
- Nainarkoil block stands first in WPR among 11 blocks in 2001 and 2011 census as 59.99 percent and 58.22 percent respectively. Mandapam block stands least in WPR as 31.58 percent and 35.70 percent in 2001 and 2011 census respectively. While assessing the top three blocks in WPR, nearly 80 to 85 percent of the workforce involved in agricultural activities and rural based blocks, whereas for bottom three blocks, nearly 60 to 80 percent of the workers involved in non agricultural activities and urban based blocks. Here, the female WPR was very low. Female WPR in urban context was 14.20 percent less than the rural context, 38.76 percent in 2011; similarly, the percentage of nonworkers' in these bottom three blocks were more than 60 percent. Urban areas have immense potential of employment opportunity; wage rate for non agricultural activity is higher when compared with the agricultural wage rate, leads a low range of female work participation.

- The WPR shows negative growth in Bogalur (-3.80 percent), Kamuthi (-0.91 percent), Nainarkoil (-1.77 percent) and R. S. Mangalam (-1.63 percent) blocks. Whereas, in Kadaladi (0.81 percent), Mandapam (1.79 percent), Mudukulathur (0.25 percent), Paramakudi (1.82 percent), Ramanathapuram (1.82 percent), Tirupullani (3.56 percent) and Tiruvadanai (0.56 percent) blocks shows positive growth.
- WPR was higher in Nainarkoil; but the percentage of main workers was lower than that of the district. Consequently, in Nainarkoil block, 7.35 percent of the agricultural laborers have increased, simultaneously, the percentage of cultivators has reduced from 58.62 percent to 47.71 percent in 2001 to 2011 census.
- Agricultural laborers are economically vulnerable groups and they have increased. Kadaladi, Mandapam and R. S. Mangalam block shows a decreasing trend of agricultural laborers. Kamuthi block has a higher percentage of agricultural laborers. Mandapam block has the lowest percentage of agricultural laborers due to coastal nature.
- The Per capita income of Ramanathapuram district was Rs. 44707 at constant prices in 2011-12 was lower when compared to the State per capita income of Rs. 63996. The district occupied the 24th place out of 32 districts in per capita income during 2011 - 12. Kanniyakumari district had the highest Per capita income of Rs. 96070; followed by Kancheepuram, Thiruppur, Virudhunagar and Thiruvallur which had a per capita income of over Rs.83000, which is twenty thousand higher than that of Ramanathapuram.
- 7.55 percent of annual average growth rate was observed from 2004 - 05 to 2011-12, lower than the State, 9.52 percent. Particularly in 2007 - 08, the Per capita income of the district showed negative growth of 4.51 percent due to a reduction in the primary and secondary sector, in the primary sector, production from agriculture and allied activities has reduced as Rs. 22279 lakh in 2007 - 08 from Rs. 34053 lakh in 2006 - 07 at constant price, likewise, in the secondary sector, production from manufacturing goods in registered sectors has declined as Rs. 35460 lakh in 2007 - 08 from Rs. 74508 lakh in 2006 - 07.
- Sectoral contribution to Gross District Domestic Product (GDDP) is a vital indicator to appraise the economic growth of the district. Among the three sectors, the primary sector is the major sector in terms of employment. Though the proportion of agricultural and allied activity workers has decreased as 42.1 percent in 2011 from 49.3 percent in 2001, still agriculture was by far the biggest contributor to employment in rural areas. While analyzing the series of data from 2004 -05 to 2011 - 12, the growth rate of primary sector GDDP has increased to 16.29 percent in 2011 - 12 from -15.40 percent in 2007 -

08 at constant prices. The annual average growth rate of the primary sector in the district is 2.91 percent.

- According to the head count ratio, Ramanathapuram district has 31.27 percent of below poverty line families as of 2013-14. Bogalur (36 percent), Kadaladi (34.39 percent), Nainarkoil (45.63 percent), R. S. Mangalam (41.67 percent) and Tiruvadanai (41.44 percent) blocks stand higher percentage of BPL families than that of district poverty status. Mandapam (22.52 percent), Ramanathapuram (20.78 percent) and Tirupullani (19.88 percent) blocks shows less than 25 percent of BPL families. Wide range of inter – block disparity exists in the presence of BPL families. Range starts from Tirupullani (19.88 percent) to Nainarkoil (45.63 percent), range nearly two fold.

Demography, Health and Nutrition

- Ramanathapuram district shows improvement in health indicators, *viz*., decline trend of infant mortality, maternal mortality, stillbirth rate and an ensured hundred percent institutional delivery. The district is moving towards population stability by reducing trend of crude birth and death rate. The population growth rate of the district is less than that of the state. However, a wide range of inter block disparity exists in the district because of isolated coastal and plain areas. Because of the remoteness, accessibility of health services is getting delayed. It is one of the reasons for the health backwardness of the district.
- The population growth rate is low in Bogalur, 4.10 percent and Nainarkoil, 5.96 percent due to the rural context with agrarian nature and no town Panchayat too. Cultivators are decreasing and agricultural laborers are an increasing trend from 2001 to 2011, as, the population move towards urban for employment.
- Kadaladi and Kamuthi are rural based blocks and human development in these blocks illustrates the 10^{th} and 7^{th} rank among 11 blocks. The high order birth rate of Kadaladi block is higher than that of the district. Being the backward blocks, the high population growth rate adds pressure on the poverty level and has a bearing on the low level of human development and implementation of family planning methods is the need of the hour in these two blocks.
- The population distribution in rural and urban areas is 69.66 percent and 30.34 percent, respectively, which shows district was less urbanized than that of the State population's average of 51.60 percent and 48.40 percent, respectively. However, the population growth rate in rural and urban context clearly exhibits the district current trend in

urbanization. The overall population growth rate of the district is 13.96 percent, but in an urban context this illustrates about 35.82 percent, which is 5.5 fold higher than the rural population growth rate of 6.50 percent.

- Urban based blocks, *viz*., Mandapam, Paramakudi, Ramanathapuram and Tirupullani have higher population density than that of rural blocks because of the growth rate of secondary and tertiary sectors.
- LEB of the district was improved as 68.9 years, 71.2 years and 70.1 years for male, female and combined respectively in 2013 - 14. However, the district performance was lower than the State average of 71.8 years, 75.2 years and 73.4 years for male, female and combined respectively in the same period. Both the cases, the female LEB were higher than the male LEB.
- IMR is a crucial factor to analyze human development. IMR of the district has reduced to 13 in 2013-14 from 21 in 2009 and lower than the State IMR of 21, except, Ramanathapuram and Tiruvadanai, other blocks have high range of IMR than the district.
- The maternal mortality rate of the district is reduced to 49 in 2013-14 from 104 in 2009, lower than the State MMR of 68 and the district achieved the millennium development goal.
- The MMR at district shows variation from 2007 to 2013 - 14. The MMR status of Bogalur, Nainarkoil, R. S. Mangalam and Ramanathapuram block showed zero in 2009 and R. S. Mangalam block was maintaining the same status in 2013-14 too, the MMR range starts from 0 in R. S. Mangalam to 341 in Bogalur which shows that inter block disparity is huge.
- The district institutional delivery status is slightly reduced as 99.99 percent in 2013-14 from 100 percent in 2012-13 and the district status is slightly higher than the State average of 99.90 percent. One home delivery was recorded in Ramanathapuram and R. S. Mangalam blocks in 2013-14. The influence of private hospitals is declining in institution delivery and the share of GH and PHC showed an increasing trend.
- Ramanathapuram district has 67.92 percent of the children in normal nutrition stage and 32.08 percent of malnourished children in 2013 -14. The malnourishment child's status in the district ranged between 12.63 percent in Ramanathapuram block to 39.9 percent in Kamuthi, which explains that the existence of wide inter-block disparity.
- Under nutrition in backward blocks like Tirupullani, Mandapam, R. S. Mangalam, Kamuthi and Kadaladi were occurring due to many reasons like food habits, poverty,

lack of education, ignorance, poor sanitation, carelessness, contaminated food, infections and other diseases. The higher order birth rate was also positively correlated with undernourishment issue. Due to all these factors the children take inadequate food which does not cater to their actual requirement or if they take enough food which is not absorbed properly due to infestations, leading to micronutrient deficiencies which causes increased rate of morbidity among children.

- Out of 3.36 lakh households, 1.38 lakh HH only have sanitation facilities. Open defecation is the common problem observed in rural areas. In the rural context, only 28.05 percent of the HH has a toilet facility, whereas in urban context, sanitation facility is better than that of rural context, 79.79 percent. To reach the MDG target, the district requires to facilitate still 1.23 lakh IHHL constructions with proper technical awareness.
- 56.46 percent of the households accessed Individual Household Latrine in Ramanathapuram district in 2013 – 14. The range starts from 32.83 percent in Nainarkoil block to 79.39 percent in Ramanathapuram block. Urban context blocks, such as, Mandapam, Paramakudi, Ramanathapuram and Tirupullani blocks have a higher percentage of IHHL coverage than the district average and other rural context blocks.
- Several reasons have combined for the non-adoption of latrine. The most common are related to the poverty, socio-cultural issues and technical difficulties. Even if the district has 56.46 percent of IHHL, the usage is meagre because of water scarcity. IHHL with proper technical awareness about construction of low cost plus low water usage latrines will provide 100 percent sanitation and hygiene.
- To post a right person in a backward region like Ramanathapuram is an accurate solution to address the imbalanced growth in terms of health. Actual sanctioned post in all PHC and hospitals is 136; however, the doctors' availability is 104. The human resource shortage is highly observed in rural based blocks like Bogalur, Kadaladi, Kamuthi, Mudukulathur, Nainarkoil, R. S. Mangalam, Tiruvadanai and one post in Paramakudi.
- Ramanathapuram district shows an increasing trend in the case of HIV positive. It shows danger sign and awareness about the HIV AIDS is desired for the hour. Female positive cases sharply increased and male female gap in terms of HIV infection is getting minimized. It is an alarming symptom and there is need to provide special attention to minimize the present situation. The range of spread is higher among 30-39 years age group followed by 40-49 years.

- The leprosy status in Ramanathapuram district is declining trend in 2013-14. Kamuthi, Paramakudi, R. S. Mangalam and Tirupullani blocks show an increase in leprosy occurrence, these blocks need constant follow up to minimize the issue.
- Kadaladi, Mandapam, R. S. Mangalam, Ramanathapuram, Tirupullani and Tiruvadanai blocks coastal regions are reporting Malaria cases, which are indigenous in transmission, as Mosquito breeding potential is higher in these areas. Fisherman community are also highly vulnerable to get Malaria.

Literacy and Education

- The literacy rate of Ramanathapuram has increased to 80.72 percent in 2011 from 72.96 percent in 2001, slightly higher than that of the State, 80.09 percent in 2011. Total literates in Ramanathapuram District are 978,946. A decade (2001-2011), literacy growth rate is higher in Ramanathapuram, 10.63 percent than that of State, 9.04 percent.
- The district has gender inequality in literacy rate, but, the literacy gap is reduced to 14.29 percent in 2011 from 19.65 percent in 2001, slightly higher than the State. However, the growth rate of female literacy, 16.04 percent is nearly three fold higher than that of male literacy of 5.78 percent, which shows that the existence of literacy gap is sharply coming down.
- Girls fare well at enrollment in primary and upper primary, completion rate and transition rate from primary to upper primary and upper primary to secondary despite the poor child sex ratio, but the same does not get reflected in the drop out in primary education. Urban context plays an important role in improving the literacy rate.
- According to the human development index, the least faring blocks of Kadaladi and Mudukulathur have a higher range of literacy growth rate than that of State, district and other blocks. It is one of the positive signs to fasten the human development in these two blocks.
- As per the 2011 census, the literacy rate in rural and urban areas of Ramanathapuram is 77.03 percent and 89.24 percent respectively. Alike, the male and female literacy rate for the same period is 85.29 percent and 68.68 percent in a rural area and 93.58 percent and 84.77 percent in an urban area, respectively, which shows the wide literacy gap, however, hopeful trend was observed in the growth rate of rural literacy rate and female literacy rate from 2001 to 2011.
- The gross enrollment ratio in primary education for the district has increased to 102.93 percent in 2013-14 to 100.08 percent in 2012-13.

- Tamil Nadu Government initiated numerous steps to improve the quality of education in Government schools. Hence, the recent trend shows that parents were fascinated with English medium school than that of Tamil medium which reflects declining trend of enrollment in Government schools and few schools are reaching pupil school ratio of less than 10.
- The completion rate in upper primary education is in increasing trend. The growth shows from 96.5 percent in 2011-12 to 97 percent in 2013-14, but, upper primary completion rate is slightly less than that of the primary education completion rate. The completion rate in upper primary education ranges from 93.6 percent in Mandapam to 99.7 percent in Nainarkoil during 2013-14. Bogalur, Mudukulathur, Nainarkoil, R. S. Mangalam, Ramanathapuram and Tirupullani blocks are performing better than the district average.
- Kadaladi, Mandapam and Tiruvadanai block have lower completion rates in upper primary education than that of the district, because of its coastal nature and inadequate school accessibility.
- Scarce accessibility of school and inadequate transport facility is the main reason for lower secondary education in rural based blocks than that of urban based blocks and district average.
- Bogalur, Kadaladi, Kamuthi, Mudukulathur, Nainarkoil and Paramakudi blocks have higher dropout rates than that of district status. Higher percentage of BPL families, getting poor grades, inadequate transport facility and insufficient school accessibility pose a higher proportion of dropout in secondary education.
- District level nearly, 1325 primary and 456 upper primary schools were in 2376 habitations during 2013-14. In 2011-12, 115 high and 114 higher secondary schools were existing. While comparing the 2011-12 data with 2013-14, 3 primary schools were promoted in Kadaladi (1 school) and Kamuthi (2 schools) and one primary school upgraded to upper primary school in Ramanathapuram block and 7 schools reduced from 2011-12 to 2013-14 in Mandapam (1 School), Nainarkoil (1 School), Paramakudi (2 Schools), R. S. Mangalam (2 Schools) and Tiruvadanai (1 School) blocks due to the parents' passion for private schools, predominantly, English medium teaching attracting the pupil towards private school.
- The PTR of the district ranges from R. S. Mangalam (1:19) to Kamuthi (1:28) in primary education and in upper primary education ranges from R. S. Mangalam (1:21) to Tiruvadanai (1:31). Upper primary pupil teacher ratio is higher than the primary education.

- In 2013 – 14, the pupil teacher ratio has reduced from 2011-12 and the pupil school ratio was increased simultaneously in the same year. Bogalur and Nainarkoil blocks showed less than 20 pupil teacher ratio in primary school. Nainarkoil and Ramanathapuram blocks showed less than 20 pupil teacher ratio in upper primary school. The Pupil school ratio in Nainarkoil block is 69 and 59 in primary and upper primary school, respectively, during 2013 – 14, which is lower than the district ratio.
- The GER in secondary education has increased from 85.66 percent in 2012-13 to 95.54 percent in 2013-14, which is from 56.92 percent in Kadaladi to 105.22 percent in Ramanathapuram. Bogalur, Kadaladi, Kamuthi, Mudukulathur and Nainarkoil blocks recorded less than 90 percent GER in secondary education in 2013 - 14.
- The Dropout rate in secondary education has increased from 5.81 percent in 2012-13 and 2011-12 to 8.14 percent in 2013-14, out of eleven blocks, six blocks has the severity of secondary dropout rate, the secondary dropout is very high in Kadaladi and Bogalur blocks than district in 2013-14 due to higher rates of BPL families, getting poor grades, inadequate transport facilities and insufficient school accessibility. The dropout rate in the secondary education range starts from 0 percent in Paramakudi to 11.99 percent in Kadaladi.

- The higher education in Ramanathapuram district is lower. After completing secondary education, most of the educated youths are not going for higher education because of various reasons, *viz*., economical backwardness, and accessibility to higher education, lack of proper guidance or poor grade in secondary. Except, Nainarkoil and R. S. Mangalam blocks, other blocks had atleast one of the higher education institutions.

Gender

- Female literacy rate, 73.52 percent is lower than the male literacy rate of 87.81 percent, however slightly higher than the female literacy of the State, 73.14 percent. A decade growth, the revolution in female literacy is nearly three fold higher than that of male literacy, which illustrates about the existence of literacy gap is sharply coming down.
- The typical work of female agricultural laborers or cultivator is limited to less skilled jobs, such as sowing, transplanting, weeding and harvesting. The percentage of women's participation in the agricultural sector is 69.84, higher than the male participation, 46.04 percent. In which, female agricultural labourers are nearly two fold higher than that of

male agricultural labourers. It shows female workers in Ramanathapuram district is socially and economically vulnerable sections.

- Except, Kadaladi, Mandapam and R. S. Mangalam, there is little/no variation between the HDI and GII ranks among the blocks. R. S. Mangalam and Kadaladi blocks has higher gender equality at the same time lower human development. Likewise, Mandapam block has higher human development and lower gender equality. Here, the less share of female elected representatives, low female work participation rate and privileged inequality among the Male - Female agricultural wage rate poses greater gender inequality in the Mandapam block during 2013 – 14.
- 5149 SHG's are functioning in Ramanathapuram district consist of 67586 members. The average member size of the SHG is 13, ranges from 12 to 15. Across the blocks, Ramanathapuram shows a higher number of SHG (3049 with 39637 members) followed by Paramakudi (414 SHG with 5382 members). The numbers of SHG at inter block range starting from Kamuthi, 73 SHG to Ramanathapuram, 3049.
- Except, Bogalur, Paramakudi and Ramanathapuram blocks, other blocks have to be covered the potential member under SHG fold, which will safeguard the poor households through financial access. Total credit availed by the SHG's is Rs.89.76 crore during 2013-14, average loan size per group was Rs.1.74 lakh. Bogalur, Mandapam, R. S. Mangalam and Tiruvadanai blocks groups availed privileged amount of credit than other blocks.
- Apart from Government promoted groups, the intervention by the other NGOs in Ramanathapuram is unique in carrying development activities more than two decades.
- The female work participation rate is decreasing trend and male work participation rate is increasing trend. The same trend noticed in all blocks except Ramanathapuram (0.71 percent) and Paramakudi (0.61 percent), increase in female WPR in these two blocks is also too tiny. Another challenging issue here is the percentage of female marginal workers (27.90 percent) are higher than that of male marginal workers (9.78 percent). In State, the male WPR (59.30 percent) and female WPR (31.80 percent) is higher than the district status. Male and Female WPR at the state level is increasing trend. But, the female WPR is slightly growing than that of male WPR. Nainarkoil block has higher range of female and male WPR of 53.35 percent and 63.16 percent respectively in 2011.
- In Ramanathapuram district, nearly 34208 employees are working in various Government and private sectors, out of which, 18456 males and 15752 are females. It is

illustrated about the male participation, 53.95 percent is higher than that of female participation, 46.05 percent.

- All over the Ramanathapuram district, nearly 3869 elected representatives in the state assembly and local bodies, of which, 2374 males and 1495 are female. 38.64 percent of women are a member in the state assembly and local body. Inter – block disparity ranges from R. S. Mangalam (33.02 percent) to Paramakudi (43.83 percent) followed by Kadaladi, 43.04 percent.

Social Security

- The implementation of maternity assistance scheme by the Government is the core reason to attain hundred percent institutional deliveries in Ramanathapuram district. The share of Government hospitals in institutional delivery is higher and increasing trend than that of private hospitals because of the maternity assistance scheme.
- Around 39.22 percent of the elderly population is getting benefit, the district administration should take steps to capture the eligible elderly population to assist economic benefit. Apart from old age pension, the other vulnerable sections viz., differently abled, destitute widows, deserted wives as well as unmarried women are also getting pension benefits from the Government.
- In Ramanathapuram district, 4320 differently abled persons were getting the various Government scheme benefits, nearly, 18.44 percent of eligible persons. The left out eligible persons should be covered under the fold of Government economic assistance for their prospects.
- The differently abled persons at district level is 23432 as of 2011, of which male and female population is 12842 and 10590 respectively. Among the total population, 1.73 percent of the persons are differently abled in Ramanathapuram district.
- Out of 23432, nearly 3024 differently abled persons are aged 60+. These persons required additional support of health care and need based institutional support.
- The percentage of differently abled persons was higher in Mudukulathur, Kamuthi and Tiruvadanai blocks. The same status was lower in Tirupullani, Mandapam and Nainarkoil.
- Out of 23432 differently abled persons, physical disability (differently abled in movement, 22 percent) occupies higher percentage followed by disability in hearing and any others, 20 percent.

- The number of crimes against women has increased to 260 in 2014 from 130 in 2013. On an average, district shows an increasing trend of crime rate against women, which needs to be focused for women empowerment. Among the different categories of crime against women, eve teasing shows higher rate when compared to other crimes followed by cruelty by husband.

Infrastructure

- The entry of East Coast Road (ECR) is a bequest of the district in terms of industrial growth and connectivity with the nearer cities.
- In Ramanathapuram district, 400 revenue villages, 2362 hamlets, 7 town Panchayats and 4 municipalities covered by 68815 street lights in 2012-13 and 74522 in 2013-14. The total population covered under electrification is 1353445. The total number of street lights ranges from Kadaladi, 11533 to Bogalur, 2697 during 2013 - 14.
- Except Tirupullani, other urban based blocks have a higher number of commercial banking services than that of rural based blocks.
- The total road length in the district is 4774.8 Kms, of which in rural areas, the road length is 4374.3 Kms and in case of urban it is 400.5 Kms. Among the various types of roads, Bituminous Tar roads were higher (3059.3 Kms, 64 percent) followed by mud roads (776.2 Kms, 16 percent). The status of cement concrete and gravel road length is lower (202.7 Kms, 4 percent and 207.4 Kms, 4 percent, respectively) followed by WBM road (499.2 Kms, 10 percent). Across the blocks, road length shows vast disparity. It ranges from Bogalur (46.3 Kms) to Kamuthi (621.2 Kms). Kamuthi block is having good road facility, covering nearly 13 percent of the total road length of the district, followed by Mandapam, 12.7 percent[19].
- Nearly 16 percent of the roads in Ramanathapuram district are of mud type, which get eroded by rain and wind. It should replaced by other advanced road type to improve the connectivity.
- The district had a 230/110 KV substation and five 110/33 and 33/11 KV substations. Similarly, there were two 66/11 KV substations[20], serving the electricity needs of the district.

[19] Percentage calculated through Block specific road type road length with the concern Block total road length

[20] http://www.ramnad.tn.nic.in/PROFILE.HTM#ELECTRICITY

- In Ramanathpuram district, 131 cooperative societies with 259125 members and 106 commercial banks with 1200819 account holders are financially included. The number of cooperative societies ranges from Mandapam (4) to Kamuthi (24). Commercial banks show ranges from Nainarkoil (2) to Ramanathapuram (23). In Mandapam, Ramanathapuram and Tirupullani block, the cooperative societies are less, 4, 5 and 6 respectively, but the commercial banks are high in Mandapam and Ramanathapuram 18 and 23 respectively.
- Paramakudi block also having a considerable number of commercial banks, 16. Urban based blocks have a higher number of commercial banking services than that of rural based blocks. Rural based blocks are having higher number of cooperative societies than urban areas. Kadaladi (21), Kamuthi (24), Mudukulathur (16), R. S. Mangalam (14) and Tiruvadanai (18) blocks has higher no. of cooperative societies because of agrarian domain.
- The inter and intra block road connectivity has a huge gap. Still remote villages in the district are not having road or Government transport facilities. It is the key basis for deprived industrial growth, the cost of transporting goods from market to needy area is rising because of lack of transport facility. So that, the raw material cost is rising and this prevents the industrial growth.
- The contribution of financial and insurance institutions in human development is significant. Policies issued by insurance companies were 38152. It shows that 3 percent of the population risk only was covered by insurance companies. In any case of risk, poor would suffer higher. Risk factor has direct linkage with human development. Any case of unexpected threat, affects child education, income of the family, standard of living, housing and outside debt. The awareness about the crop insurance in Ramanathapuram district is higher than that of life insurance. Awareness creation and designing simple life insurance premium which would be affordable by the poor should ensure cent percent insurance coverage, as it minimizes the risk.

Way forward

Physical, historical, cultural, geographical and economical pattern of the district has close relation to human development. This information facilitates the human development measures of greater access to knowledge, better nutrition and health services, secure livelihoods, security against crime and physical violence, satisfied leisure hours, political and cultural freedom, and sense of participation in community activities. Ramanathapuram is a developing district, in terms of

human and economic development. Tamil Nadu Vision 2023 aims at making the State a "Numero UNO" State in India to achieve the levels of Human Development on par with the developed countries. The Human Development reports brought out by the state planning commission has brought the achievements and intra block disparities in human development attainments which demands to create basic infrastructure at the habitation level for addressing the specific issues.

The DHDR documented that, there are significant inter-block disparities in levels of success with respect to income, education and health. The Human Development Index, Gender Inequality Index, Child Development Index and Multidimensional poverty index, which is a composite index also reveals these disparities. Therefore, as a follow out from the Report, suitable polices and programmes require to be created and outlined to districts/blocks/Panchayats, which are lagging behind in respect of human development. Human and fiscal resource allocation to the backward areas will enhance human development, better performance would also entail community contribution, good governance and decentralized development. Points for fixation in the policy are listed here:

- Based on the indices computation and field reality, Human development in Nainarkoil, R. S. Mangalam and Tiruvadanai blocks needs improvement, hence, inclusion of these three blocks as backward blocks under SBGF will improve the overall Human Development of the district.
- Institutional provisions for economic assistance to self-employment ventures need to be promoted with the support of District Industries Centre (DIC). Promotion of charcoal makers' and Jaggary producers' companies should be incorporated of possible way of getting market linkage and better price for the products. Additionally, all workers will have to be brought under state-assisted or insurance-based social security umbrella.
- The present situation illustrates that the district is dynamic with a younger generation in terms of social capital. Channelling the existing social capital into right way will induce the human development of the district. The district may face a higher range of the older population in future. As per the chapter 3, the unorganized workers and marginal workers of the district was higher than that of the State which leads to risks with old age care and maintenance by the society and Government, which will be overcome by implementation of savings cum pension schemes to the unorganized workers with the help of insurance companies by the district.
- Still, people in rural areas have some barrier in latrine usage like odor, waste disposal as

well as geographical barrier of water scarcity. To break these barriers, technical services with proper orientation could facilitate the district to reach the MDG target.

- According to the 4th chapter, a number of priority points identified in the district to attain high faring human development, i.e. to increase the child sex ratio by preventing sex-selective abortions through social auditing of scan centers along with hospitals, to reduce malnourishment among 0-5 years children by integrating minor millet based diet through ICDS program, efforts to reduce anaemia among adolescent girls and pregnant women, improve quality of primary health centers with adequate infrastructure facilities and human resource placement.
- Emphasis should be on supply of safe drinking water throughout the year. Sanitation and self hygiene is another core pillar for sustainable health care in Ramanathapuram. Prevalence of Malaria in coastal areas is a common health issue. The district administration is taking steps to break the malaria epidemic disease since continuous emphasis is required on malaria control.
- Ramanathapuram has the richest source of saline water, six blocks are of coastal nature. Installation of desalination plant like Naripaiyur, Kadaladi block reveals permanent solution for the drinking water problem.
- Despite the significant achievements in literacy rate and in gender, district has to focus on improving the literacy rate of 72.25 percent and enrollment in secondary education of 69.36 percent in Nainarkoil.
- Toilets for girls are lacking in 340 schools, which needs to be focused for enhancing the girls' upper primary and secondary education.
- Systematic effort needs to be put for enhancing secondary and higher education at the district level.
- District level general sex ratio is 983, which shows decreasing trend over a decade from 1036 and the child sex ratio is also decreasing trend of 961 in 2011 from 964 in 2001, which clearly exhibits the women's status at district level. Within a decade, the sex ratio of the district has fallen below the State average. The district administration and health departments are required to observe and prevent sex selective abortions.
- Throughout the district, the weed *Prosophis* is affecting the social and economical growth of the human being. This weed demolishes the underground water level and creates water scarcity. This weed occupies nearly 40,000 hectares of the district.
- The awareness about the crop insurance in Ramanathapuram district is higher than that of life insurance. Awareness creation and designing simple life insurance premium which

would be affordable by the poor should ensure cent percent insurance coverage and decrease the risk.

- In terms of life risk coverage, the contribution of nongovernmental organizations and community based organizations is immense with the collaboration of Life Insurance Corporation of India (LIC). The poor could not allot the huge volume of money for their risk coverage. Aam Aadmi Bima Yojana (AABJ), a group insurance scheme provided by the LIC of India, particularly for the poor people with the minimum premium amount with central government subsidy. Under this AABJ, the scholarship facilities too are available for the member's two children who are undergoing higher and higher secondary education.
- Apart from economic assistance, the senior citizens require health care services from Government. Strengthening of primary health care services by geriatric care units for elderly, and exploring the option of initiating Mobile geriatric clinics, to lessen the problem of accessibility for remote areas. Breaking of joint family system in the society is the major reason for rising old age homes. Hence reconstructing the joint family system should address the elderly population trouble by sustainable way in the society. It may resolve the senior citizens' problem of health, financial security and institutions care.
- Out of 65.74 percent of the working group population, nearly 94 percent of the total work force is employed in the unorganized sector as of 2011. They retire from their employment exclusive of any economic security like pension or extra post retirement settlements. In these cases, the Government program aimed at the aged alone cannot give a solution to the income and social security problems of the elderly, which can be overcome by means of the Labor welfare board, fishermen welfare board and agricultural labour welfare board savings initiatives. A micro pension scheme by the community institutions to the unorganized labors will provide sustainable solutions for the issues.
- Strengthening of SHG movement with the effective fund flow, proper utilization of fund through family counseling is an authentic sustainable growth of women for improving human development.
- Creation of a farm pond structure with community contribution enables the farmers to get better income from farming activity. Farm Pond is a small scale water harvesting structure established in a farmland to collect and store water during the monsoon, the runoff water above the surface in the catchment area is collected.

ANNEXURES

Annexure Tables

Annexure 1: Human Development Index, Ramanathapuram

S. No.	Block	Standard of Living					Health			Education		
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
		2011	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2013-14	Census 2011	Edcn Dept	Edcn Dept
				(Habitation)						2011	2013-14	2013-14
1	Bogalur	22.56	48.22	100.00	100	96.38	22.20	341.30	22.18	75.56	100.36	65.25
2	Kadaladi	14.55	47.38	100.00	100	86.71	16.40	80.19	18.85	75.98	99.79	56.92
3	Kamuthi	17.84	40.91	100.00	100	96.38	14.50	161.03	17.71	77.33	100.07	82.83
4	Mandapam	43.86	60.91	98.38	100	92.83	13.30	95.00	16.20	85.09	100.19	96.57
5	Mudukulathur	22.99	49.30	88.00	100	94.71	14.40	326.37	16.32	74.74	99.67	75.24
6	Nainarkoil	23.31	32.83	90.52	100	98.50	16.10	134.41	17.47	72.25	100.33	71.78
7	Paramakudi	44.24	65.14	100.00	100	93.41	14.60	47.19	15.20	84.35	100.25	100.04
8	R.S.Mangalam	19.18	51.74	93.10	100	94.46	15.00	10.00	18.30	77.96	100.02	97.19
9	Ramanathapuram	42.33	79.39	92.23	100	93.71	4.30	79.00	6.70	86.91	100.83	105.22
10	Tirupullani	45.60	63.28	96.25	100	90.34	15.00	148.00	15.80	81.96	100.09	98.15
11	Tiruvadanai	20.36	51.48	86.69	100	93.91	10.50	111.00	12.70	81.05	99.90	97.18
	Maximum	45.60	79.39	100.00	100.00	98.50	24.42	375.43	24.40	86.91	100.83	105.22
	Minimum	13.09	29.55	78.02	90.00	78.04	4.30	0.00	6.70	65.03	89.70	51.23

Annexure 1: Human Development Index, Ramanathapuram contd…

S. No.	Block	Standard of Living Index					Health Index			Education Index			Standard of Living Index	Health Index	Education Index	Overall Index	Rank
		Access to Cooking Fuel index	Access to Toilet Facilities index	Access to Drinking Water index	Access to Electricity index	Access to Pucca Houses index	IMR index	MMR index	U5MR index	Literacy Rate index	GER Primary index	GER Secondary index					
1	Bogalur	0.29	0.37	1.00	1.00	0.90	0.11	0.09	0.13	0.48	0.96	0.26	0.63	0.11	0.49	0.32	11
2	Kadaladi	0.04	0.36	1.00	1.00	0.42	0.40	0.79	0.31	0.50	0.91	0.11	0.37	0.46	0.36	0.40	10
3	Kamuthi	0.15	0.23	1.00	1.00	0.90	0.49	0.57	0.38	0.56	0.93	0.59	0.50	0.47	0.67	0.54	7
4	Mandapam	0.95	0.63	0.93	1.00	0.72	0.55	0.75	0.46	0.92	0.94	0.84	0.83	0.58	0.90	0.76	3
5	Mudukulathur	0.30	0.40	0.45	1.00	0.81	0.50	0.13	0.46	0.44	0.90	0.44	0.54	0.31	0.56	0.45	9
6	Nainarkoil	0.31	0.07	0.57	1.00	1.00	0.41	0.64	0.39	0.33	0.96	0.38	0.41	0.47	0.49	0.46	8
7	Paramakudi	0.96	0.71	1.00	1.00	0.75	0.49	0.87	0.52	0.88	0.95	0.90	0.88	0.61	0.91	0.78	2
8	R.S.Mangalam	0.19	0.45	0.69	1.00	0.80	0.47	1.00	0.34	0.59	0.93	0.85	0.54	0.54	0.78	0.61	6
9	Ramanathapuram	0.90	1.00	0.65	1.00	0.77	1.00	0.79	1.00	1.00	1.00	1.00	0.85	0.92	1.00	0.92	1
10	Tirupullani	1.00	0.68	0.83	1.00	0.60	0.47	0.61	0.49	0.77	0.93	0.87	0.80	0.52	0.86	0.71	4
11	Tiruvadanai	0.22	0.44	0.39	1.00	0.78	0.69	0.70	0.66	0.73	0.92	0.85	0.50	0.69	0.83	0.66	5

Source: Census, 2011 and Ramanathapuram district line department

Annexure 2: Gender Inequality Index, Ramanathapuram

Indicators	MMR	Share of Institutional Deliveries	Share of Ante Natal Coverage	Female Literacy	Male Literacy	Share of female Children (0-6) years	Share of male Children (0-6) years	Share of Female Elected Representatives in RLBs and ULBs	Share of Male Elected Representatives in RLBs and ULBs	Female Work Participation Rate	Male Work Participation Rate	Female Work Participation Rate in Non-Agri Sector	Male Work Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
Bogalur	341.30	100.0	100	65.5	85.3	48.6	51.4	41.24	58.76	47.86	60.95	13.81	64.08	140	200
Kadaladi	80.19	100.0	100	67.5	84.3	48.7	51.3	43.04	56.96	36.49	57.91	28.48	72.69	140	200
Kamuthi	161.03	100.0	100	68.6	86.0	48.8	51.2	39.87	60.13	43.19	57.45	17.10	74.06	140	200
Mandapam	95.00	100.0	98.0	80.7	89.4	49.5	50.5	33.15	66.85	14.99	56.03	79.08	78.47	130	250
Mudukulathur	326.37	100.0	100	65.2	84.3	49.8	50.2	39.09	60.91	48.66	57.90	8.57	72.71	140	200
Nainarkoil	134.41	100.0	100	61.1	83.6	48.7	51.3	35.90	64.10	53.35	63.16	8.48	58.33	150	200
Paramakudi	47.19	100.0	100	77.5	91.0	48.7	51.3	43.83	56.17	29.71	57.68	43.56	73.38	150	200
R.S.Mangalam	10.00	99.9	100	69.7	86.4	48.9	51.1	33.02	66.98	39.98	60.78	18.32	64.52	140	200
Ramanathapuram	79.00	100.0	100.0	82.2	91.6	48.9	51.1	41.15	58.85	20.06	54.91	49.01	82.11	150	200
Tirupullani	148.00	100.0	94.0	75.9	87.7	49.4	50.6	34.29	65.71	23.45	55.07	46.84	81.58	140	200
Tiruvadanai	111.00	100.0	100	73.2	88.8	48.7	51.3	38.53	61.47	29.31	59.31	27.34	68.60	140	200

Annexure 2: Gender Inequality Index contd…

S. No.	Block	Indices														
		Health index			Empowerment index						Labour index					
		1	2	3	4	5			6	7	8	9			10	11
		MMR index	Share of Institutional Deliveries index	Share of Ante Natal Coverage index	Female Literacy index	Male Literacy index	Share of female Children (0-6) years index	Share of male Childrn (0-6) years index	Share of Female Elected Representatives in RLBs and ULBs index	Share of Male Elected Representatives in RLBs and ULBs index	Female Work Participation Rate index	Male Work Participation Rate index	Female Work Participation Rate in Non-Agri Sector ndex	Male Work Participation Rate in Non-Agri Sector index	Female Agri. Wage rate index	Male Agri. Wage rate index
1	Bogalur	0.03	1.00	1.00	0.66	0.85	0.49	0.51	0.41	0.59	0.48	0.61	0.14	0.64	0.70	0.29
2	Kadaladi	0.12	1.00	1.00	0.68	0.84	0.49	0.51	0.43	0.57	0.36	0.58	0.28	0.73	0.70	0.29
3	Kamuthi	0.06	1.00	1.00	0.69	0.86	0.49	0.51	0.4	0.6	0.43	0.57	0.17	0.74	0.70	0.29
4	Mandapam	0.11	1.00	0.98	0.81	0.89	0.5	0.5	0.33	0.67	0.15	0.56	0.79	0.78	0.39	1.00
5	Mudukulathur	0.03	1.00	1.00	0.65	0.84	0.5	0.5	0.39	0.61	0.49	0.58	0.09	0.73	0.70	0.29
6	Nainarkoil	0.07	1.00	1.00	0.61	0.84	0.49	0.51	0.36	0.64	0.53	0.63	0.08	0.58	1.00	0.29
7	Paramakudi	0.21	1.00	1.00	0.77	0.91	0.49	0.51	0.44	0.56	0.3	0.58	0.44	0.73	1.00	0.29
8	R.S.Mangalam	1.00	1.00	1.00	0.7	0.86	0.49	0.51	0.33	0.67	0.4	0.61	0.18	0.65	0.70	0.29
9	Ramanathapuram	0.13	1.00	1.00	0.82	0.92	0.49	0.51	0.41	0.59	0.2	0.55	0.49	0.82	1.00	0.29
10	Tirupullani	0.07	1.00	0.94	0.76	0.88	0.49	0.51	0.34	0.66	0.23	0.55	0.47	0.82	0.70	0.29
11	Tiruvadanai	0.09	1.00	1.00	0.73	0.89	0.49	0.51	0.39	0.61	0.29	0.59	0.27	0.69	0.70	0.29

Annexure 2: Gender Inequality Index contd…

S. No.	Block	Female Health Index	Male Health Index	Female Emp Index	Male Emp Index	Female LF Index	Male LF Index	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
1	Bogalur	0.31	1	0.51	0.64	0.36	0.48	0.38	0.67	0.49	0.65	0.57	0.42	0.54	0.09	10
2	Kadaladi	0.50	1	0.52	0.63	0.42	0.49	0.48	0.68	0.56	0.75	0.57	0.46	0.58	0.04	4
3	Kamuthi	0.40	1	0.51	0.64	0.37	0.50	0.42	0.68	0.52	0.70	0.58	0.43	0.56	0.07	8
4	Mandapam	0.47	1	0.51	0.67	0.36	0.76	0.44	0.80	0.57	0.73	0.59	0.56	0.62	0.09	9
5	Mudukulathur	0.31	1	0.50	0.64	0.31	0.49	0.36	0.68	0.47	0.66	0.57	0.40	0.53	0.11	11
6	Nainarkoil	0.42	1	0.47	0.65	0.36	0.47	0.41	0.67	0.51	0.71	0.56	0.41	0.55	0.06	7
7	Paramakudi	0.60	1	0.55	0.64	0.51	0.49	0.55	0.68	0.61	0.80	0.59	0.50	0.62	0.02	2
8	R.S.Mangalam	1.00	1	0.48	0.67	0.37	0.48	0.56	0.68	0.62	1.00	0.57	0.43	0.63	0.01	1
9	Ramanathapuram	0.50	1	0.55	0.65	0.46	0.51	0.50	0.69	0.58	0.75	0.60	0.48	0.60	0.03	3
10	Tirupullani	0.40	1	0.50	0.66	0.42	0.50	0.44	0.69	0.54	0.70	0.58	0.46	0.57	0.06	6
11	Tiruvadanai	0.45	1	0.52	0.65	0.38	0.49	0.45	0.68	0.54	0.72	0.59	0.44	0.57	0.05	5

Source: Census 2011, Ramanathapuram district line department

Annexure 3: Child Development Index, Ramanathapuram

S. No.	Block name	Health			Education					Health index			Education index					Overall index	Rank
		U5MR	Juvenile Sex Ratio	Percentage of Malnourished Children	Enrollment in Primary	Enrolment in Secondary	Children Never Enrolled in Schools	Transition Rate from Primary to Upper Primary	Transition rate from Upper Primary to Secondary	U5MR	Juvenile Sex Ratio	Percentage of Malnourished Children	Enrolment in Primary	Enrollment in Secondary	Children Never Enrolled in Schools	Transition Rate from Primary to Upper Primary	Upper Primary to Secondary		
		2013-14	2011	2013-14	2013-14	2013-14	2013-14	2013-14	2013-14	Index	Index	Index	Index	Index	Index	Index	Index		
		1	2	3	4	5	6	7	8	1		2	3	4	5				
1	Bogalur	22.2	945	23.44	100.36	65.25	1.82	99.15	86.17	0.00	0.00	0.60	0.59	0.17	0.00	0.71	0.00	0.26	11
2	Kadaladi	18.8	949	39.56	99.79	56.92	0.60	99.27	98.14	0.22	0.09	0.01	0.10	0.00	0.75	1.00	0.93	0.39	9
3	Kamuthi	17.7	953	39.90	100.07	82.83	0.40	98.93	95.31	0.29	0.17	0.00	0.34	0.54	0.87	0.17	0.71	0.39	10
4	Mandapam	16.2	981	36.58	100.19	96.57	0.43	98.90	97.64	0.39	0.78	0.12	0.45	0.82	0.86	0.10	0.89	0.55	2
5	Mudukulathur	16.3	991	30.63	99.67	75.24	0.32	99.00	95.46	0.38	1.00	0.34	0.00	0.38	0.92	0.34	0.72	0.51	6
6	Nainarkoil	17.5	949	23.84	100.33	71.78	1.29	99.23	87.21	0.30	0.09	0.59	0.57	0.31	0.32	0.90	0.08	0.40	8
7	Paramakudi	15.2	948	26.98	100.25	100.04	0.28	98.91	97.91	0.45	0.07	0.47	0.50	0.89	0.94	0.12	0.91	0.54	4
8	R.S.Mangalam	18.3	959	39.72	100.02	97.19	0.45	99.13	95.15	0.25	0.30	0.01	0.30	0.83	0.84	0.66	0.70	0.49	7
9	Ramanathapuram	6.7	956	12.63	100.83	105.22	0.48	99.05	99.06	1.00	0.24	1.00	1.00	1.00	0.82	0.46	1.00	0.82	1
10	Tirupullani	15.8	977	35.42	100.09	98.15	0.19	98.86	97.60	0.41	0.70	0.16	0.36	0.85	1.00	0.00	0.89	0.55	3
11	Tiruvadanai	12.7	950	24.61	99.90	97.18	1.00	99.02	98.34	0.61	0.11	0.56	0.20	0.83	0.50	0.39	0.94	0.52	5
	Maximum	22.18	991	39.90	100.83	105.22	1.82	99.27	99.06										
	Minimum	6.70	945.	12.63	99.67	56.92	0.19	98.86	86.17										

Source: Census 2011, Ramanathapuram district line department

Annexure 4: Multidimensional Poverty Index, Ramanathapuram

S. No.	Block Name	Health			Education		Living Standards				
		IMR	HOB	Malnourished Children	Drop out in primary	Drop out secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Pucca house	Access to Electricity
		2013-14	2013-14	2013-14	2013-14	2013-14	2011	2013-14	2013-14	2013-14	2011
		1	2	3	4	5	6	7	8	9	10
1	Bogalur	22.20	6.7	23.44	0.75	9.57	22.56	48.22	100.00	96.38	100
2	Kadaladi	16.40	9.0	39.56	1.5	12.03	14.55	47.38	100.00	86.71	100
3	Kamuthi	14.50	8.0	39.90	0.62	2.78	17.84	40.91	100.00	96.38	100
4	Mandapam	13.30	4.08	36.58	1.09	1.26	43.86	60.91	98.38	92.83	100
5	Mudukulathur	14.40	8.7	30.63	0.62	7.20	22.99	49.30	88.00	94.71	100
6	Nainarkoil	16.10	9.0	23.84	0.64	6.56	23.31	32.83	90.52	98.50	100
7	Paramakudi	14.60	3.2	26.98	0.56	1.05	44.24	65.14	100.00	93.41	100
8	R.S.Mangalam	15.00	5.00	39.72	0.77	4.68	19.18	51.74	93.10	94.46	100
9	Ramanathapuram	4.30	2.64	12.63	0.85	0.93	42.33	79.39	92.23	93.71	100
10	Tirupullani	15.00	3.47	35.42	0.59	1.52	45.60	63.28	96.25	90.34	100
11	Tiruvadanai	10.50	4.98	24.61	1.89	6.61	20.36	51.48	86.69	93.91	100
	Maximum	22.20	9.0	39.90	1.89	12.03	45.6	79.39	100.00	98.50	100
	Minimum	4.30	2.6389	12.63	0.56	0.93	14.55	32.83	86.69	86.71	90.00

Annexure 4: Multidimensional Poverty Index, Ramanathapuram contd…

S. No.	Block Name	Health index			Education index		Living Standards index					Overall index	Rank
		IMR index	HOB index	Malnourished Children index	Drop out in primary index	Drop out in secondary index	Access to cooking fuel index	Access to toilet facilities index	Access to drinking water index	Pucca house index	Access to Electricity index		
		1	2	3	4	5	6	7	8	9	10		
1	Bogalur	0.00	0.36	0.60	0.86	0.22	0.26	0.33	1.00	0.82	1.00	0.46	6
2	Kadaladi	0.32	0.00	0.01	0.29	0.00	0.00	0.31	1.00	0.00	1.00	0.71	11
3	Kamuthi	0.43	0.16	0.00	0.95	0.83	0.11	0.17	1.00	0.82	1.00	0.45	5
4	Mandapam	0.50	0.77	0.12	0.60	0.97	0.94	0.60	0.88	0.52	1.00	0.31	4
5	Mudukulathur	0.44	0.04	0.34	0.95	0.44	0.27	0.35	0.10	0.68	1.00	0.54	9
6	Nainarkoil	0.34	0.00	0.59	0.94	0.49	0.28	0.00	0.29	1.00	1.00	0.51	8
7	Paramakudi	0.42	0.92	0.47	1.00	0.99	0.96	0.69	1.00	0.57	1.00	0.20	2
8	R.S.Mangalam	0.40	0.63	0.01	0.84	0.66	0.15	0.41	0.48	0.66	1.00	0.48	7
9	Ramanathapuram	1.00	1.00	1.00	0.78	1.00	0.89	1.00	0.42	0.59	1.00	0.13	1
10	Tirupullani	0.40	0.87	0.16	0.98	0.95	1.00	0.65	0.72	0.31	1.00	0.30	3
11	Tiruvadanai	0.65	0.63	0.56	0.00	0.49	0.19	0.40	0.00	0.61	1.00	0.55	10

Source: Census 2011, Ramanathapuram district line department

Annexure 1.1: Crude Birth Rate

District	**14.4**
State	**15.9**

Source: DDHS, Ramanathapuram

Annexure 1.2: Infant Mortality Rate

District/State	2013-14
District	**13**
State	**12**

Source: Vital Events Survey

Annexure 3.1: Block wise work participation rate for Ramanathapuram district

Sl. No	Block	2001	2011
		WPR	WPR
1	Bogalur	58.30	54.50
2	Kadaladi	46.48	47.29
3	Kamuthi	51.29	50.39
4	Mandapam	33.91	35.70
5	Mudukulathur	53.03	53.27
6	Nainarkoil	59.99	58.22
7	Paramakudi	42.10	43.92
8	R.S.Mangalam	51.92	50.29
9	Ramanathapuram	35.78	37.59
10	Tirupullani	36.12	39.67
11	Tiruvadanai	43.86	44.42
District		**43.83**	**44.55**

Source: Census 2001 and 2011

Annexure 3.2: Trend in Main/ Marginal workers

Sl. No	Block	2011	2001	2011	2001
		MW		MLW	
1	Bogalur	67.53	80.80	32.47	19.20
2	Kadaladi	73.95	74.10	26.05	25.90
3	Kamuthi	82.30	85.11	17.70	14.89
4	Mandapam	84.60	83.95	15.40	16.05
5	Mudukulathur	85.40	88.48	14.60	11.52
6	Nainarkoil	78.48	84.49	21.52	15.51
7	Paramakudi	89.07	89.61	10.93	10.39
8	R.S.Mangalam	80.84	81.57	19.16	18.43
9	Ramanathapuram	84.81	84.21	15.19	15.79
10	Tirupullani	83.48	83.05	16.52	16.95
11	Tiruvadanai	65.71	79.75	34.29	20.25
District		**80.62**	83.26	**19.38**	16.74

Source: District Census Handbook - 2001 & 2011

Annexure 3.3: Block wise worker composition in 2011

Sl. No	Block	Cultivators	Agricultural labours	Household workers	Other workers
1	Bogalur	35.9	42.5	1.6	20.0
2	Kadaladi	30.5	29.9	2.6	37.0
3	Kamuthi	22.6	51.5	1.4	24.5
4	Mandapam	6.1	8.4	3.8	81.8
5	Mudukulathur	55.3	29.7	1.1	13.8
6	Nainarkoil	47.7	37.7	1.4	13.2
7	Paramakudi	22.5	18.4	13.1	46.0
8	R.S.Mangalam	53.0	18.7	1.8	26.4
9	Ramanathapuram	20.2	14.1	2.6	63.1
10	Tirupullani	19.7	20.1	7.3	52.9
11	Tiruvadanai	34.9	25.2	3.8	36.1
District		28.8	25.5	4.2	41.5

Source: Census 2011

Annexure 3.4: Percentage of HH provided employment under MGNREGA, 2013 - 14

S. No	Block wise/District	Total No. of HH	HH provided jobs under MGNREGA	% of HH provided with jobs
1	Bogalur	10462	8873	84.81
2	Kadaladi	39014	31444	80.60
3	Kamuthi	33279	29089	87.41
4	Mandapam	23749	23265	97.96
5	Mudukulathur	27239	25632	94.10
6	Nainarkoil	12301	10492	85.29
7	Paramakudi	20165	15656	77.64
8	R.S.Mangalam	18615	16984	91.24
9	Ramanathapuram	17806	11436	64.23
10	Tirupullani	21780	17898	82.18
11	Tiruvadanai	24369	19020	78.05
District		**248779**	**209789**	**84.33**

Source: BDO/PD, DRDA, RD & PR Department

Annexure 3.5: Sector wise growth rate for Gross District Domestic Product, District vs. State

S. No.	Year	District			State		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1	2005-06	1.76	19.07	11.85	12.12	14.54	14.02
2	2006-07	-7.70	6.87	14.73	12.76	13.62	16.57
3	2007-08	-15.40	-19.38	7.22	-4.13	3.90	9.33
4	2008-09	14.53	-8.37	7.75	-2.27	-2.06	10.56
5	2009-10	8.32	-9.10	5.24	6.51	21.14	6.90
6	2010-11	2.60	17.72	11.12	7.23	15.52	12.80
7	2011-12	16.29	3.37	6.01	10.12	3.96	8.77

Source: National Accounts Statistics

Annexure 3.6: Block wise Percentage of BPL families, 2013-14

Sl. No	Name of the Block	No of Household	Poor	Very Poor	Total	BPL families
1	Bogalur	10040	1612	2002	3614	**36.00**
2	Kadaladi	26260	4042	4988	9030	**34.39**
3	Kamuthi	36646	4757	6767	11524	**31.45**
4	Mandapam	35215	5221	2708	7929	**22.52**
5	Mudukulathur	22010	3401	3388	6789	**30.85**
6	Nainarkoil	13768	2075	4207	6282	**45.63**
7	Paramakudi	17567	1922	3195	5117	**29.13**
8	R.S.Mangalam	22991	6048	3532	9580	**41.67**
9	Ramanathapuram	23200	2087	2735	4822	**20.78**
10	Thirupullani	24519	1999	2876	4875	**19.88**
11	Thiruvadanai	29895	4972	7417	12389	**41.44**
District		**262111**	**38136**	**43815**	**81951**	**31.27**

Source : Project Director, Mahalir Thittam

Annexure 4.1: Population growth rate (2001-2011)

Block	Growth rate
Bogalur	4.10
Nainarkoil	5.96
Tirupullani	6.85
Mudukulathur	8.96
Ramanathapuram	10.68
R.S.Mangalam	10.70
Paramakudi	13.47
District	13.96
Tiruvadanai	14.20
State	15.61
Kadaladi	17.82
Kamuthi	19.56
Mandapam	23.28

Source: Census 2001 and 2011

Annexure 4.2: Demographic Profile

Age	District	State
0-4	7.36	7.32
5-9	8.03	7.69
15-19	18.47	17.23
20-29	18.47	18.12
30-39	15.97	16.15
40-49	12.83	13.55
50-59	8.89	9.43
60-64	3.94	3.86
65-69	2.48	2.59
70-79	2.57	2.93
80+	0.81	1.03

Source: Census 2011

Annexure 4.3: Trend in CBR and CDR

S. No	Block wise/District /State	CBR			CDR		
		2011	2012	2013	2011	2012	2013
1	Bogalur	16.3	16.1	15.0	6.1	8.0	8.3
2	Kadaladi	18.4	17.0	16.1	4.4	5.1	5.1
3	Kamuthi	18.8	16.5	16.9	5.7	6.2	6.4
4	Mandapam	16.2	12.9	13.9	4.7	3.5	4.7
5	Mudukulathur	17.9	16.3	16.3	5.5	6.3	6.7
6	Nainarkoil	16.8	15.9	15.3	6.1	8.0	7.7
7	Paramakudi	14.9	13.0	12.8	3.6	6.2	3.7
8	R.S Mangalam	16.2	16.8	14.9	4.4	5.6	5.4
9	Ramanathapuram	15.8	18.7	5.2	4.9	3.8	4
10	Tirupullani	16.3	18.7	15.6	4.3	5.1	6.0
11	Tiruvadanai	14.1	9.2	10.5	4.5	4.9	3.9
District		**16.5**	**15.6**	**13.9**	**4.9**	**5.7**	**5.6**

Source: DDHS, Ramanathapuram

Annexure 4.4: Infant mortality rate in Ramanathapuram

Block /District	2013 - 14
Bogalur	22.2
Kadaladi	16.4
Kamuthi	14.5
Mandapam	13.3
Mudukulathur	14.4
Nainarkoil	16.1
Paramakudi	14.6
R.S.Mangalam	15.0
Ramanathapuram	4.3
Tirupullani	15.0
Tiruvadanai	10.5
District	**13**
State	**12**

Source: Vital events survey

Annexure 4.5: Status of Institutional delivery in Ramanathapuram, 2013-14

Home	PHC	GH	Private Hospitals
0.01 %	**25.86 %**	**42.45 %**	**31.68 %**

Source: DDHS, Ramanathapuram

Annexure 4.6: Percentage of malnourished children in Ramanathapuram, 2013-14

Sl. No	Block wise/District	2012-13								
		Normal	%	SUW children	%	MUW children	%	Weighed children of 0 - 5 yr	AECs	% of underweight (MUW+SUW)
1	Bogalur	1718	77	20	0.89	506	22.55	**2244**	62	23.44
2	Kadaladi	4775	60	60	0.76	3065	38.8	**7900**	178	39.56
3	Kamuthi	7956	60	21	0.16	5262	39.75	**13239**	189	39.9
4	Mandapam	8128	63	62	0.48	4627	36.1	**12817**	195	36.58
5	Mudukulathur	3905	69	51	0.91	1673	29.72	**5629**	139	30.63
6	Nainarkoil	2163	76	15	0.53	662	23.31	**2840**	83	23.84
7	Paramakudi	4633	73	60	0.95	1652	26.04	**6345**	145	26.98
8	R.S.Mangalam	3780	60	13	0.21	2478	39.52	**6271**	133	39.72
9	Ramanathapuram	6106	87	17	0.24	866	12.39	**6989**	127	12.63
10	Tirupullani	3850	65	18	0.3	2094	35.12	**5962**	108	35.42
11	Tiruvadanai	6965	75	32	0.35	2242	24.27	**9239**	136	24.61
District		**53979**	68	**369**	**0.46**	**25127**	31.62	**79475**	1495	32.08

Source: ICDS, Ramanathapuram

Annexure 4.7: IFA tablet consumption among pregnant women and adolescent girls, 2013-14

Sl. No	Block	% of pregnant women took IFA tablets	% of adolescent girls took IFA tablets
1	Bogalur	92.26	100
2	Kadaladi	92.79	100
3	Kamuthi	89.81	100
4	Mandapam	109.29	68.63
5	Mudukulathur	91.88	100
6	Nainarkoil	93.68	100
7	Paramakudi	90.74	100
8	R. S. Mangalam	102.12	75.13
9	Ramanathapuram	47.03	62.29
10	Tirupullani	115.49	49.21
11	Tiruvadanai	104.60	100
District		**93.03**	**83.51**

Source: DDHS, Ramanathapuram

Annexure 4.8: Sanitation facility in Ramanathapuram, 2013 - 14

Sl. No	Block wise/District	Total Number of HHs	Number of HHs is with Toilet facilities	% of HHs provided with toilets
1	Bogalur	11235	5417	48.22
2	Kadaladi	37342	17691	47.38
3	Kamuthi	36217	14818	40.91
4	Mandapam	49538	30176	60.91
5	Mudukulathur	28129	13867	49.30
6	Nainarkoil	11826	3883	32.83
7	Paramakudi	43638	28425	65.14
8	R.S.Mangalam	22226	11499	51.74
9	Ramanathapuram	39467	31333	79.39
10	Tirupullani	32690	20686	63.28
11	Tiruvadanai	29776	15329	51.48
TOTAL		**342084**	**193124**	**56.46**

Source: www.mdws.gov.in, RD&PR Department, Ramanathapuram

Annexure 5.1: Literacy Rate

Block/District	Total literacy rate 2011	Total literacy rate 2001
Ramanathapuram	86.91	80.35
Mandapam	85.09	78.81
Paramakudi	84.35	76.63
Tirupullani	81.96	73.30
Tiruvadanai	81.05	72.98
District	**80.72**	**72.96**
R. S. Mangalam	77.96	70.02
Kamuthi	77.33	70.33
Kadaladi	75.98	65.67
Bogalur	75.56	67.66
Mudukulathur	74.74	66.13
Nainarkoil	72.25	66.13

Source: Census 2001 and 2011

Annexure 5.2: Gender, Literacy Rate

S. No.	Blocks	Male literacy rate	Female literacy rate
1	Bogalur	85.34	65.53
2	Kadaladi	84.32	67.53
3	Kamuthi	85.96	68.57
4	Mandapam	89.39	80.70
5	Mudukulathur	84.30	65.22
6	Nainarkoil	83.60	61.11
7	Paramakudi	91.00	77.49
8	R. S. Mangalam	86.44	69.68
9	Ramanathapuram	91.60	82.19
10	Tirupullani	87.70	75.90
11	Tiruvadanai	88.84	73.18
District		**87.81**	**73.52**
State		**86.77**	**73.14**

Source: Census 2011

Annexure 5.3: Transition Rate from upper primary to Secondary

Block/District	Boys	Girls	Total
Bogalur	80.86	91.49	86.17
Kadaladi	98.48	97.80	98.14
Kamuthi	95.05	95.57	95.31
Mandapam	98.54	96.73	97.64
Mudukulathur	96.26	94.66	95.46
Nainarkoil	90.48	83.94	87.21
Paramakudi	97.82	98.00	97.91
R.S.Mangalam	93.82	96.48	95.15
Ramanathapuram	99.31	98.81	99.06
Tirupullani	97.46	97.74	97.60
Tiruvadanai	98.55	98.13	98.34
District	**95.15**	**95.40**	**95.27**

Source: CEO, RMSA, Ramanathapuram

Annexure 5.4: Engineering, Arts and Science College, Ramanathapuram

S. No.	Block	Engineering		Arts and Science	
		Government	Unaided	Government	Unaided
1	Bogalur				
2	Kadaladi			1	1
3	Kamuthi				1
4	Mandapam				
5	Mudukulathur			1	1
6	Nainarkoil				
7	Paramakudi		1	2	
8	R.S.Mangalam				
9	Ramanathapuram	1	1	2	1
10	Tirupullani		1		3
11	Tiruvadanai			1	
DISTRICT		**1**	**3**	**7**	**7**

Source: CEO, School Education, Ramanathapuram

Annexure 6.1: GII Value of Ramanathapuram

S. No.	Block	GII	
		GII	Rank
1	Bogalur	0.09	10
2	Kadaladi	0.04	4
3	Kamuthi	0.07	8
4	Mandapam	0.09	9
5	Mudukulathur	0.11	11
6	Nainarkoil	0.06	7
7	Paramakudi	0.02	2
8	R.S.Mangalam	0.01	1
9	Ramanathapuram	0.03	3
10	Tirupullani	0.06	6
11	Tiruvadannai	0.05	5

Source: GII Computation, Ramanathapuram, 2013-14

Annexure 6.2: Gender, Work Participation Rate for 2011

Sl. No	Block	2011	
		WPR Female	WPR Male
1	Bogalur	47.86	60.95
2	Kadaladi	36.49	57.91
3	Kamuthi	43.19	57.45
4	Mandapam	14.99	56.03
5	Mudukulathur	48.66	57.90
6	Nainarkoil	53.35	63.16
7	Paramakudi	29.71	57.68
8	R. S. Mangalam	39.98	60.78
9	Ramanathapuram	20.06	54.91
10	Tirupullani	23.45	55.07
11	Tiruvadanai	29.31	59.31
District		**31.34**	**57.53**
State		**31.80**	**59.30**

Source: Census 2011

Annexure 6.3: Female employment in Different sectors

Cultivators		Agricultural labours		Household workers		Other workers	
Male	Female	Male	Female	Male	Female	Male	Female
26.13	33.84	19.91	36.01	2.91	6.57	51.06	23.59

Source: Census 2011

Annexure 7.1: Types of differently abled persons in Ramanathapuram

S. No.	*Types of Differently abled*	*Percentage*
1.	Seeing	10
2.	Hearing	20
3.	Speech	7
4.	Movement	22
5.	Mental Retardation	10
6.	Mental illness	3
7.	Any other	20
8.	Multiple disability	8

Source: Census 2011

Technical Notes

Construction of Indices

Introduction

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

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

Indicators for HDI

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

Indicators for measuring HDI

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

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

Method of Estimating HDI

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

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

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

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

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

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

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

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

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

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

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

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

Construction of Gender Inequality Index (GII)

Introduction

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

Indicators considered for measuring GII

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

Method

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

For females

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

For Males

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

2. Aggregating across gender group using a Harmonic mean.

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

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

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

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

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

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

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

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

Construction of Child Development Index (CDI)

Introduction

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

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

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

Indicators for Child Development

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

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

Computation of Child Development Index

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

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

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

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

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

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

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

Multidimensional Poverty Index

Indicators

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

Computation of Multidimensional Poverty Index

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

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

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

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

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

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

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

Abbreviations

AABJ	Aam Aadmi Bima Yojana
ABL	Activity Based Learning
AD	Anno Domini
AD	Auto Disabled
AIDS	Acquired Immuno Deficiency Syndrome
ALM	Adults Learning Mathematics
ANC	Antenatal care
APL	Above Poverty Line
ART	Antiretroviral Therapy
ASER	Annual Status of Education Report
ATMA	Agriculture Technology Management Agency
AWC	Anganwady Centres
B.Ed.	Bachelor of Education
BC	Backward Caste
BCC	Behavior Change Communication
BDO	Block Development Officer
BMI	Body Mass Index
BPL	Below Poverty Line
BSNL	Bharat Sanchar Nigam Ltd
BT	Bituminous Tar
Ca	Calcium
CAL	Computer Aided Learning
CBR	Crude Birth Rate
CC	Cement Concrete
CDI	Child Development Index
CDR	Crude Death Rate
CEO	Chief Education Officer
Cl	Chlorine
CSR	Child Sex Ratio
CSR	Corporate Social Responsibility
D.T.Ed.	Diploma in Teachers Education
DD	Demand Draft

DHAN	Development of Humane Action
DIC	District Industries Centre
DISE	District Information System for Education
DNC	Denotified Caste
DOES	Department of Economics and Statistics,
DPC	District Planning Cell
DRDA	District Rural Development Agency
DSO	District Supply Officer
DVD	Digital Video Disc
ECR	East Coast Road
EER	Elementary Education Register
EGS	Education Guarantee Scheme
EO	Extension Officer
FGT Index	Foster, Greer, and Thorbecke Index
FPS	Floating Point System
G	Gram
G returns	Geographical Returns
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GH	Government Hospital
GHSS	Government Higher Secondary School
GII	Gender inequality Index
GL	Gravel
Ha	Hectare
Hb	Hemoglobin
HD	Highway Department
HDI	Human Development Index
HH	Household
HIV	Human Immunodeficiency Virus
HMPD	Highways and Minor Ports Department
HOB	High Order Birthrate
HSC	Health Sub Centre
ICDS	Integrated Child Development Services
IFA	Iron Folic Acid

IGNOAPS	Indira Gandhi National Old Age Pension Scheme
IHHL	Individual Household Latrine
ILO	International Labor Organization
IMR	Infant Mortality Rate
IP	Inpatient
IPP	Individual Power Pumps
IQ	I*ntelligence quotient*
ISI	Indian Standard Institute
K	Potassium
KAP	Knowledge, Attitute and Practice
Kg	Kilo Gram
Km	Kilo meter
KV	Kilo Volts
LDM	Lead District Manager
LEB	Life Expectancy at Birth
LIC	Life Insurance Corporation
LPG	Liquefied Petroleum Gas
MBC	Most Backward Caste
MC	Municipal Corporation
MDG	Millennium Development Goal
MDT	Multi Drug Therapy
Mg	Magnesium
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIDS	*Madras Institute of Development Studies*
MLW	Marginal Worker
Mm	Milli Meter
MMR	Maternal Mortality Rate
MPI	Multidimensional Poverty Index
MT	Metric Tones
MVSC	Mariyur Valinokkam Salt complex
MW	Main Worker
Na	Sodium
NABARD	National Bank for Agriculture and Rural Development
NCBI	National Centre for Biotechnology Information

NDDP	Net District Domestic Product
NGO	Non Governmental Organization
NH	National Highway
NMR	Neonatal Mortality Rate
NOAP	National Old Age Pension Scheme
NRHM	National Rural Health Mission
NRSTC	Non Residential Special Training Centre
OAP	Old Age Pension
OP	Out Patient
PCO	Public Call Office
PD	Project Director
PDS	Public Distribution System
PGR	Population growth rate
PHC	Primary Health Centre
PO	Project Officer
PRI	Panchayat Raj Institutions
PTR	Pupil Teacher Ratio
PVP	Pudhu Vaazhvu project
PWD	Public Works Department
R. S. Mangalam	Rajasinga Mangalam
RD & PR	Rural Development and Panchayat Raj Department
RSTC	Residential Special Training Centre
RGSEAG	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
Rs.	Rupees
RTE	Right To Education
SABL	Simplified Activity Based Learning
SALM	Simplified Active Learning Method
SBGF	State Balanced Growth Fund
SBR	Still Birth Rate
SC	Scheduled Caste
SHG	Self Help Groups
SMDC	School Management Development Committee
SPC	State Planning Commission

SSA	Sarva Shiksha Abhiyan
SSLC	Secondary School Leaving Certificate
ST	Scheduled Tribes
STEP	Support for Training & Employment Program for Women
T.N.S.T.C	Tamil Nadu State Transport Corporation
TB	Tuberculosis
TLM	Teaching, Learning Material
TN	Tamil Nadu
TP	Town Panchayat
TV	Television
U5MR	Under 5 Mortality Rate
UEE	Universalization of Elementary Education
UNDP	United Nations Development Programme
UNRISD	United Nations Research Institute for Social Development
WBM	Water Bound Macadam
WHO	World Health Organization
WPR	Work Participation Rate

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