HUMAN DEVELOPMENT REPORT

Nagapattinam District

State Planning Commission

UNDP India

Union Planning Commission

NAGAPATTINAM

DISTRICT HUMAN DEVELOPMENT REPORT

DISTRICT ADMINISTRATION, NAGAPATTINAM

&

STATE PLANNING COMMISSION, TAMIL NADU

in association with

Rajiv Gandhi Chair For Panchayatiraj Studies,
Gandhigram Rural University, Gandhigram.

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Foreword

United Nations Development Programme has first published the Human Development Report in 1990. Since then 18 reports have been published covering all aspects of human life. The first report constructed a comprehensive index called – Human Development Index – reflecting life expectancy, literacy and command over the resources to enjoy decent standard of living. The famous Pakistani economist late Mahbub-ul-Haq has uniquely designed the first report, which kindled a new thinking in defining the quality of life of the people. Subsequent Human Development Reports added new indices such as human rights, gender equality, poverty, sanitation, drinking water, environmental issues, security, culture and language rights. Therefore, human development approach has been widening and covering new indices every year.

The Union Planning Commission published its first National Human Development Report in 2001 in which Tamil Nadu's achievements in education, health, family welfare were highlighted. Particular mention was made regarding the social reform movement in Tamil Nadu. "The state has, historically, been a hot bed of social reform movements, often precipitating political action in the desired direction. Social consciousness inspired by leaders such as Ramasamy 'Periyar' has influenced the people to become responsible parents, among other things, to adoption of family planning as a means to bridge the gap between increasing aspirations and availability of resources to meet these aspirations".

The states are also bringing out Human Development Reports highlighting the specific issues concerning to their states. As indicated in the National Human Development Report (2001), Tamil Nadu has been implementing comprehensive social development and welfare programmes covering child to old age people. It retains third position in the human development indices among the states in India, continuously since 1991 because of the Tamil Nadu government's commendable performance in the primary, secondary and tertiary sectors. The development strategy envisaged by Tamil Nadu government gives importance to equity and social justice. Therefore it is natural for the State Planning Commission to evaluate and ascertain many social and economic development schemes by encouraging human development studies in the districts.

The State Planning Commission with the cooperation of the UNDP and Union Planning Commission is utilising the services of the academia, scholars and policy makers to study, analyse and prepare reports on human development of different districts. These

studies would be helpful to arrive correct intervention programmes for the upliftment of deserving regions and deserving sections of the society.

I commend the services of the District Collector and officers of District Administration for the help they rendered to collect data and required information in the preparation of the Nagapattinam District Human Development Report. I convey my thanks to the Chief Secretary and senior officers of the Steering Committee for their valuable suggestions in this regard. I congratulate the efforts of the HDRC team at the Planning Commission and senior researchers of the Gandhigram Rural University, Gandhigram.

பொருள்கருவி காலம் வினைஇடனொடு ஐந்தும்
இருள்தீர எண்ணிச் செயல் - குறள் 675
(Resources, tools, time, place and deed;
Decide these five and then proceed – Kural 675)

The planning process, as thoughtfully defined by Thiruvalluvar, should prioritize schemes for strengthening and evolving appropriate social sector policies. In this context, the District Human Development Report of Nagapattinam will form a milestone in the overall planning and development of the state of Tamil Nadu.

(M.NAGANATHAN) 26.02.2009

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Foreword

Tamil Nadu has been a pioneer in implementing programmes for the development of people ensuring sustained growth tempered with social justice and equity. The State's Eleventh Five Year Plan aims at achieving employment generation, improving the livelihood of the people and reducing inequalities. While the State has been performing well in terms of Human Development indicators, it is necessary that the district differentials are analysed for bettering the well being of the individual.

The State Planning Commission in association with the United Nations Development Programme and Union Planning Commission under the Project "Strengthening State Plans for Human Development" has initiated the preparation of District Human Development Report (DHDR) for the districts of Dindigul, Sivaganga, Tiruvannamalai, Nagappattinam and Cuddalore. The objective of this exercise is to make an in depth analysis of the status of Human Development within a district based on the internationally accepted specific Human Development indicators. This would help to identify areas for intervention for location specific remedial actions.

Based on the conclusions and recommendations in the Reports, the policies and programmes implemented in the districts need to be provided with interventions that recognize the inter district and inter block differences in levels of achievement with respect to health, income and education indices. Better knowledge of the achievements of the district/block with reference to their indicators will lead to transparency which in turn increases the involvement of the community leading to better governance.

It is a matter of great satisfaction that the UNDP and the Union Planning Commission have come forward to support this initiative and

offer technical guidance. I take this opportunity to place on record my sincere thanks to the concerned District Collectors and their colleagues for sharing data on various parameters for the preparation of the report. I appreciate all the stakeholders for their contributions to this report. I am sure that these efforts will prove meaningful in improving the overall Human Development status of the district by quelling the intra district disparities.

(K.ARULMOZHI)

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06-08-2009

FOREWORD

I acknowledge the maiden effort taken by the State Planning Commission, UNDP and Gandhigram Rural University, Dindigul for preparing the District Human Development Report. The basic objective of the report is to bring out the Socio-economic current status of the people of Nagapattinam district compared to the State and National.

The planning is the first step towards the process of development. I would like to remind the adage that "One who fails to plan is nothing but the plan to fail". Therefore, it is imperative need to plan for achieving of millennium development goals such as universal education, Nil IMR, MMR, higher-standard of living, balanced socio-economic development of communities, creating the gainful employment opportunities, and exploitation of the available local resources.

In earlier days, the human development was measured by Per-capita income. Then it was measured by intake of calorific value. Unfortunately, these two criteria have not reflected effectively certain crucial aspects such as gender equality, literacy rate, health care, etc. Therefore, the new tool of HDI was introduced which take care of all the above factors of Human Development.

This report consists of profile of Nagapattinam district such as, demography, education, agriculture, infrastructure and economy.

I also acknowledge the contributions made by the former Collectors of Nagapattinam district Dr. J. Radhakrishnan, I.A.S., Thiru. Tenkasi S. Jawahar, I.A.S. and Thiru. M. Jayaraman, I.A.S. towards preparation of this report.

This report reflects the strength and weakness of our District. This will guide the officials to prepare the micro as well as macro level planning for various Departments to bring about Social Economic Development of the District. This report emphasis the importance of Fishing industry, Food processing and Agricultural based industries in this district. This provides basic ideas to improve economic development of this district from the above locationally advantaged sectors.

According to the Panchayat Raj Institutions, the District Panchayat Council is the body, to suggest the ideas for development of various sectors of the economy. This report surely will guide the District Panchayat Council for taking in further appropriate level of action. So far we have no basic document like this report for guiding the preparation and execution of the schemes to suit for our need of this district.

This report will guide the officials to concentrate the area where the attention is required. This report proved a lot of information to sociologist, and also the health planner, academicians community leaders.

It is high time to release this report for further economic and social development of our Nagapattinam District. In this connection, I am much happy to receive this report form the State Planning Commission, Chennai.

6/8/09

C. Munianathan

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ACKNOWLEDGEMENTS

As per the provisions of the 74th Constitutional Amendment Act of India, preparing a *District Development Plan* is mandatory. This provision is made in order to ensure bottom up approach in the planning process. To strengthen this process further, the State Planning Commission with the support of the Planning Commission of India and UNDP has taken an initiative to prepare District Human Development Report from the perspective of Human Development. The task of preparing this report has been assigned to us by the State Planning Commission in collaboration with the District Administration. The task is stupendous as breaking down the data at the sub – district level is difficult for the officials who have never before undertaken such an exercise. But we found it an interesting exercise. In this process, the District Administration has to play an important role in terms of collecting data for this exercise. It is also a difficult task. But it has to be completed and hence it was made a team work. A team was formed at the district level and assignments were handed down to officials by the District Collector. Periodical review was done by the District Collector meticulously. The State Planning Commission, the District Administration and the Rajiv Gandhi Chair of Gandhigram Rural University worked as another team. The whole process of preparing the District Human Development Report of Nagapattinam District was a learning exercise for the district officials, the Rajiv Gandhi Chair project staff and the academicians who were involved in this exercise.

I am deeply indebted to Mr. Bindhumadhavan, IAS, the then Member – Secretary, and Dr. K.Arulmozhi, IAS, Member – Secretary, State Planning Commission, for having initiated and carried out this exercise respectively and for making us involved in this process. With the same enthusiasm, the District Collectors, Thiru J. Radhakrishnan, IAS, Thiru T.S. Jawahar, IAS, and Thiru M. Jeyaraman, IAS, played an active role in helping us in collecting data from various agencies and sources and the staff working in various projects of the Rajiv

Gandhi Chair helped us in preparing this report. Many NGOs, individuals and panchayats actively participated in all the deliberations. A few students and members of the staff learnt from the exercise and prepared Village Human Development Reports while the teachers and the students were engaged in our outreach programme. Totally it was a learning experience for many in this field. It will certainly help the district authorities to improve the living conditions of the people from the perspective of human development. Many officials and panchayat leaders involved in this work internalized the human development perspective and this will help the district to improve its score on Human Development. Hence I express my sincere thanks to the UNDP, the State Planning Commission, the District Administration, Ms. T. Rajarajeswari, Mr. Chandrasekhar Bahinipathi of MIDS and the Rajiv Gandhi Chair, Gandhigram Rural University, for having participated in the preparation of the Nagapattinam District Human Development Report.

G. PALANITHURAI

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CHAPTER 1

Introduction

'Human Development is defined as the process of enlarging people's range of choices. The most critical of these wide ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect' (UNDP, 1990).

Human development is about people, towards expanding their choices to live a full, creative life with freedom and dignity. Economic growth, increased trade and investment, technological advancement is all very important, but these are means, and not ends. Fundamental to expanding human choices is building human capabilities for human development through a range of things that people can do. The basic capabilities for human development are living a long and healthy life, being educated, having a decent standard of living and enjoying political and civil freedoms to participate in the life of one's community.

Human Development Reports: Origin and Concept

Human development is not a new concept, but it picked up its thread very recently. Many philosophers like Aristotle and Immanuel Kant talked about human development and emphasised that wealth is not the ultimate goal but only the means through which we seek to achieve certain ends. Human development owes its origin to the dichotomy between the concept of economic growth and development. Earlier development was associated only with economics and the economic development of a country was traditionally assessed in terms of Gross Domestic Product (GDP). The greater the volume of the GDP per capita, the higher the state's development and prosperity. But the GDP measure of development ignores the welfare of the people. Countries with high per capita income were confronting problems like high inequality, poor living conditions for many segments of the society, gender inequality and lack of access to health care and so on. It became increasingly clear that growth in income may not correspond with development of human beings in all aspects. It is for these reasons that economists like Amartya Sen and Mahabub ul Haq considered GDP an inadequate measure of development, and emphasized a shift in measurement of development from wealth to improvement in the lives of people.

The concept of "Human Development" which evolved in 1980s emphasises economic growth as a measure of development but presently it goes beyond economic growth models, human resource development and other welfare approaches. It places human beings at the core of development and stresses people's involvement as an end in itself and not a means of development. Human development brings together the production and distribution of commodities and the expansion and use of human capabilities. In brief, it is a paradigm which is equally applicable to developing and industrial countries. Measurement of Human development is based on the components of namely, equity, sustainability, participation, empowerment and efficiency. Thus, sustainable human development implies engendering the development paradigm.

In 1990, the United Nations Development Programme (UNDP) published its first Human Development Report (HDR) by introducing a new method of measuring human development by combining indicators of life expectancy, educational attainment and income into a composite development index i.e., the Human Development Index (HDI) introduced by Mahabub ul Haq. Since then the UNDP has been publishing HDRs every year, improving on the indicators. Calculation of the HDI has undergone a number of changes since its inception. To compare the levels of development across countries, HDRs have proposed simple composite indices such as (1) Human Development Index (HDI) with parameters of life expectancy at birth (LEB), literacy rate and gross domestic product (GDP) Per Capita (PPP US $); (2) Gender Development Index (GDI) with its parameters which are the same as those of HDI but adjusts the achievements to reflect the achievements between men and women; (3) Gender Empowerment Measure (GEM), that captures gender inequalities in female and male percentage shares of parliamentary seats, their shares of position of legislators, senior officials and management and also percentage shares of professional and technical positions and estimated earned income (PPPUS$); and (4) Human Poverty index (HPI), reflecting the status of human development, gender development, empowerment of women, dealing with parameters for probability at birth of not surviving to age 60, percentage of adults (aged 16-65) lacking functional literacy skills, percentage of people living below the poverty line and rate of long term unemployment (12 months or more).

In the year 2000, the UN General Assembly highlighted eight goals for development known as *Millennium Development Goals* to be achieved by 2015. They are: to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, combat Human Immuno-deficiency Virus (HIV), Acquired Immuno-deficiency Syndrome (AIDS), eradicate malaria and other diseases, ensure environmental sustainability and develop global partnership for development.

Most of these goals have quantifiable and monitorable targets to measure the progress against standards set by international communities.

Performance of States on HDI: A Comparision

The Union Planning Commission has stipulated three indices for preparing the State HDRs. First, HDI with parameters covering consumption expenditure (Per Capita Per Month), literacy rate for those in the age group of seven years and more, intensity of formal education (estimated), life expectancy at age one and Infant Mortality Rate (IMR). Second, HPI with parameters of proportion of people living below poverty line, proportion of population not receiving medical attention at birth, proportion of population living in kutcha houses and people without access to basic amenities. And the third is Gender Equality Index (GEI) which denotes the proportion of attainment levels of females to that of males; instead of per capita monthly expenditure, economic attainments for males and females are captured by taking the respective worker population ratios.

The National HDR prepared by the Planning Commission, Government of India, during the year 2001 placed Tamil Nadu in the third position with a HDI value of 0.531 among 15 major states, as shown in Table 1.1. Specific data on each of the indicators such as LEB, literacy and income suggests that, while Tamil Nadu is placed well above the all-India average, it still lags behind some States. For example, Kerala is well ahead of Tamil Nadu in literacy and LEB while Maharashtra is ahead in LEB and income. Therefore, Tamil Nadu's focus in the next decade should be to reach the levels attained by Kerala in health and educational aspects, while aiming at increasing the levels of LEB similar to those of Punjab or Maharashtra in order to reduce poverty and inequality.

Table 1.1

Human Development Index for India

State	1981 Value	1981 Rank	1991 Value	1991 Rank	2001 Value	2001 Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.360	4	0.431	5	0.509	6
Haryana	0.360	5	0.443	6	0.479	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.500	1	0.591	1	0.638	1

State	1981 Value	1981 Rank	1991 Value	1991 Rank	2001 Value	2001 Rank
Madhya Pradesh	0.245	14	0.328	13	0.394	12
Maharastra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.404	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	**0.343**	**7**	**0.466**	**3**	**0.531**	**3**
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8
All India	0.302		0.381		0.472	

Source: National Human Development Report 2001, Planning Commission, Government of India, March 2002.

State Human Development Reports

The States are expected to allocate more resources to priority sectors, especially to the social sector, for human development in the state, district and community levels. The HDRs can act as powerful tools to initiate widespread dialogue on development alternatives for States. They can also be used to support additional funding for the development programmes of the states in collaboration with international donors.

In India, Madhya Pradesh was the first state to bring out its Human Development Report in 1995 with 22 other states succeeding in preparing their state Human Development Reports at various subsequent stages.

Tamil Nadu was the sixth state in the Indian Union and the second South Indian State to publish its first SHDR on 14th July 2003. The SHDR provided insights into the process of development in the state, characterized by heavy industrialization, urbanization, better growth rates (marginally ahead of fifteen major states) and poverty levels which are below the national average. Tamil Nadu is relatively a middle income state (fifth among the major states) and has attained impressive progress in human development indicators, along with its gender sensitive policies. It is looked upon as a role model of a middle income state that has tried to enhance the level of human development through the formulation and implementation of programmes that address the needs of the poor, vulnerable and marginal sections of the population in the State. The report not only identified problem areas, but also assessed the success of Tamil Nadu, especially in the areas of women's empowerment and social development. Based

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on the results of the report, it highlighted further thrust areas for government and civil society in the state.

Human Development Index

Tamil Nadu's HDI (2001) was 0.657 as compared to 0.571 for India as a whole. Tamil Nadu is also placed well in the South Asian context. It fares better than countries such as Pakistan, Nepal, Bhutan and Bangladesh with HDI values of 0.508, 0.463, 0.454 and 0.440 respectively and global HDI ranks of 138, 144, 145 and 150. Only the Maldives and Sri Lanka with HDI values of 0.716 and 0.721 respectively fared better than Tamil Nadu. Their HDI ranks in the world were 93 and 90. Tamil Nadu's good performance (medium human development rank) and its placement well above the all-India average can be better understood if the HDI is disaggregated. The State's per capita income is above the national average and it occupies fifth place in the ranking of 15 major States in India. Tamil Nadu has the second lowest fertility rate, next only to Kerala. Life expectancy at birth for males and females is 64.85 and 65.20, respectively. The literacy rate has been increasing over the years and reached the level of 73.47 per cent in 2001, next only to Kerala and Maharashtra.

Human Development Index—Inter-district Variations

HDI has been constructed for 29 districts in Tamil Nadu using the UNDP methodology. As indicated above, the HDI for the State is 0.657. This value varies from 0.757 to 0.584 at the district level. Chennai district takes the top position while Dharmapuri is placed at the bottom. The high per capita income of Chennai has considerably influenced its HDI value. Chennai's literacy rate and life expectancy are also fairly high. However, this district cannot be a representative district for Tamil Nadu because of its urban character. The gap between the HDI value of Chennai, the first ranked district and Kanniyakumari, the second ranked district is substantial (0.045). In the case of other districts, the gap in achievement is not very wide. Eleven districts have a HDI value above the State HDI value. An attempt has also been made to present an overview of the status of human development in the districts with respect to each of the indicators separately. The best performing five districts and the least performing five districts have been identified in Table 1.2.

Box 1.1 State of Human Development

The HDI value ranges from 0 to 1 and the value for a country shows the distance that it has to travel to reach the maximum possible value of 1—or its shortfall—and also allows inter-country comparisons.

Of the 174 countries, for which the HDI was constructed this year, 46 are in the high human development category (with an HDI value equal to or more than 0.800), 93 in the medium human development category (0.500–0.790) and 35 in the low human development category (less than 0.500)

Source: UNDP, 2000.

Table 1.2

Top and Bottom Five Districts in Human Development Indicators

Indicators	Top 5	Bottom 5
Per capita Income	Chennai	Villupuram
	Kancheepuram	T.V. Malai
	Coimbatore	Sivagangai
	Madurai	Tiruvarur
	Thoothukudi	Thanjavur
Literacy Rate	Chennai	Dharmapuri
	Kanniyakumari	Villupuram
	Thoothukudi	Salem
	Trichy	Erode
	Madurai	Perambalur
Combined Gross Enrolment Ratio	Chennai	Dharmapuri
	Thoothukudi	Villupuram
	Madurai	Pudukottai
	Kanniyakumari	Kancheepuram
	Theni	Virudhunagar
Life Expectancy at Birth	Chennai	Dharmapuri
	Kanniyakumari	Perambalur
	Coimbatore	Madurai
	Kancheepuram	Theni
	Nilgiris	Thanjavur

Source: Tamil Nadu Human Development Report, Government of Tamil Nadu, 2003.

Chennai is the only district which figures among the top five districts in the State in all the human development indicators considered for computing the indices. Next comes Kanniyakumari in literacy, longevity and combined GER followed by Thoothukudi in literacy and enrolment ratio, Coimbatore in per capita income and longevity, Trichy in literacy and Kancheepuram in per capita income and longevity. Dharmapuri ranks the lowest in literacy rate, gross enrolment ratio (GER) and longevity and Villupuram in per capita income.

A closer examination of the level of achievement in these indicators of human development help us gain some insights into their inter-relationship. The importance of income for achieving higher standards of living is well known. Income gives people the ability to buy goods and services, i.e. as income

increases, it widens the range of consumption options. Nonetheless, high literacy and health can be achieved even with low per capita income. Kanniyakumari is a typical example of this. Similarly, the reverse is also true. For example, even though per capita income is relatively high in Kancheepuram district, its performance in literacy and health is relatively low.

Nagapattinam district ranked 13 in the Human Development Index (HDI) and 12th place in Gender Development Index (GDI) among the districts in Tamil Nadu. The sex ratio of the district was better at 1014 as against the State average of 985.The HDI value for Nagapattinam is 0.654 and GDI is 0.652, whereas the state average HDI is 0.657 and GDI is 0.654.

The top down approach in planning and execution vitiates the basic pillars of Human Development viz., equity and participation. The constitutional amendment strengthened the concept of human development through the grassroots by creation of rural and urban local bodies. With the preparation of Tamil Nadu State Human Development Report, the inter district disparities kindled the interest to anlayse the human development issues further. Hence it was decided to prepare District Human Development Reports in order to gain deeper understanding of the issues at the district level.

The UNDP - Planning Commission supported Project on Strengthening State Plans for Human Development" supported the initiative to prepare District Human Development Reports. The rationale behind the preparation was the preparation of district level plans mandated by the 73rd and 74th Constitutional Amendment Acts. It was hoped that preparation of a DHDR would give an opportunity for preparing district plans from a human development lens. Initially five districts were considered for the preparation of Human Development Reports. They are Dindigul, Nagapattinam, Sivagangai, Cuddalore and Thiruvannamalai.

District Planning Committee

Planning in general is conceived of as allocation of resources to achieve centrally directed, defined economic objectives. Its conscious effort is to achieve desired ends.India has a rich experience of the local approach to socioeconomic development since the inception of the Community Development Programme in 1952. For proper planning at the local level, the Central Planning Commission in 1954 issued guidelines to the States with regard to the preparation of plans concerning agricultural production, industries and cooperation. During the period, 1950-61 an effort was made not only to decentralize the administration at the district and block levels but also to promote the establishment of a three tier system at the village, block and District Panchayat levels.

In 1969, the Planning Commission framed guidelines for a District Plan, which stressed the need for decentralized planning by involving government, local bodies and progressive farmers and entrepreneurs in the assessment of

available resources and the existing administrative situation and in fixing of priorities.

Thus decentralized planning is a system through which the planning process is brought close to the people, who are the ultimate target of development. It is neither a substitute to centralized planning nor an exclusive bottom-up process of planning. It is, in fact, a two-way process which begins at the top level (national or state level) as well as at the grassroots level (local level) simultaneously, and merge at a point below which centralized planning becomes irrelevant and above which micro planning is meaningless.

Following the 1969 guidelines, some of the States prepared District Plans, but it did not make any significant impact on decentralized planning. Since then, many steps were taken for decentralized planning through plans, working groups and committees. Apart from these, Article 242ZD of the Seventy Fourth Amendment to the Constitution 1992, emphasized that in every state a District Planning Committee will be appointed at the district level to consolidate the plans prepared by the Panchayats and Municipalities in the district as a whole. While preparing the District Plan, the District Planning Committee shall keep in mind the locational aspect of any project, and aim at the integrated development of infrastructure and environmental conservation, sharing of natural resources and financial resources.

In accordance with this, a District Planning Committee was constituted under the Tamil Nadu Panchayat Act 1994 under section 241 to consolidate the plans prepared by the District Panchayats, Panchayat Union Councils and the Municipal Corporation in the district and prepare a draft development plan for the district as a whole.

Thus in exercise of the powers conferred by sub-section (1) of section 241 of the Tamil Nadu Panchayat Act 1994 (Tamil Nadu Act of 21 of 1994) the Governor of Tamil Nadu constituted a District Planning Committee in 29 districts. Under sub-clause (IV) of clause (a) of sub-section (2) of section 241 of the Tamil Nadu Panchayat Act 1994 (Tamil Nadu Act 21 of 1994) as amended by the Tamil Nadu Panchayats (sixth Amendment) ordinance, 2000, the Governor of Tamil Nadu specified the number of persons to be elected as members of the District Planning Committee as 5 members to be elected from District Panchayat and 3 members to be elected from Town Panchayat, Councillors of Municipal Corporation and Municipal Councils to assist in the formulation of long term district perspective plans, helping in evolving short term strategy, indicating programmes/schemes and ensuring smooth implementation.

Context of District Human Development Report

The processes of preparing DHDR was one of the important steps taken by the UNDP, after dealing with National Human Development Reports and State Human Development Reports in the selected states. This is the first attempt tried at the district level. The preparation of DHDRs of the selected districts in the state is to create awareness about the Human Development concept and using it in the district plan for the development projects through people's participation at grassroots level.

Hitherto, the planning exercises were carried out from top level to grassroot level. But the need and approach have been changed. Planning from the grassroots is felt more appropriate for development. In planning for development, the human development indicators serve as an important criterion and for this, the Human Development Report at the grassroots level will be of greater use. So, the Planning Commission, Government of Tamil Nadu, with the help of UNDP, initiated this process of preparing District Human Development Report in selected districts initially.

The work started with selecting an organization and formation of a core committee at the district with select line department representatives as its members and the District Collector as its Chairperson. At first, the committee had an initial round of discussions on how to collect information and sensitize the stakeholders about what human development is and how it is different from economic growth and human resource development.

Scope

The Human Development Reports prepared at State and National levels were indicative of the standard of life of the people at the respective level. But the district level Human Development Report is a first step towards analyzing the situation which helps to plan the needs from the grassroots level.

Further, till now the preparation of Human Development Reports was carried out by a few experts at the top level. This kept the lower officials ignorant of the concepts used in the report. These officials were interested in achieving the targets of various development programmes without understanding the impact or outcome of such programmes. On the contrary, now these officials are also involved in preparing and consolidating necessary data in an appropriate manner for the preparation of Human Development Report. This also helps them to understand the outcome of the plans they have executed and to overcome the shortfalls or drawbacks in both planning and executing.

District Human Development Report (DHDR) of Nagapattinam District

This is one of the first five DHDRs prepared in Tamil Nadu in the year 2005-06. It was not planned only to calculate the HDI at the district and sub-

district level as suggested by the guidelines. It definitely goes beyond the HDI in order to investigate, in greater detail, the overall human development situation in the district and the sub-district level.

The indicators of Human Development and the implications specific to Nagapattinam District human development achievements are presented in this report. In addition to summarizing the human development scenario in the district, it tries to explain why certain areas of the district are doing well and others are not. Factors contributing to human development are disaggregated and analyzed at the district level and the sub-district level with a view to understanding the sub-district variations and disparities and the reasons behind them. Intervention strategies are suggested to overcome the imbalances and move forward. It is hoped that DHDR will become an important tool in planning growth, social justice and equity in the district planning.

The report was presented against the backdrop of Tsunami. Tsunami has not only brought devastation but also an opportunity to look at the issues of alternate livelihood, healthcare in times of natural disasters and access to resources, from the human development perspective of sustainability, equity and participation. The relief and rehabilitation measures have been operated in a different way. It means community has been mobilized for development and all the sections of the community were included in the process to bring equity and justice. The analysis is made in all the chapters keeping in the context of Tsunami.

Methodology

The process of preparing the District Human Development Report was started with a detailed training programme to the officials and academics involved in this task. The various dimensions of Human Development were discussed in the training programme held in Chennai.

The District Human Development Report was prepared with a participatory approach wherein the various departments of the government participated. The necessary data for the report were collected through a format and the departments of the government supplied the data during the course of preparation.

Intensive discussion was held with officials to obtain primary data from them. Case studies were conducted with some successful Panchayat leaders.

The secondary data were collected through Census, Reports, and records of various government departments, State Human Development Reports, Government websites and Development Agencies.

The collected data were processed, verified and validated. Most of the data were tabulated (wherever necessary) and presented in the form of analysis and discussion, using simple statistical tools like average and percentage.

During the course of the preparation of this report, the cooperation and support of the District Collector and other officials was commendable. But as this is a new type of task, a few departments could not provide us the data at the grassroots level in time. So, we had to collect and analyse the available data in conformity with geographical boundaries through a process of aggregation and disegregation.

In the whole process, the District Collector played a key role in collecting data. He insisted that the data provided by the officials should be real, which should reflect the reality, and not a "progress report".

Limitation of Data

1. Block level data were not available for all the sectors. The various departments had compiled the data only on their requirements like taluk level or regional level. So, it took a long time to compile the data blockwise.
2. The frequent transfer of officials posed a problem. The officials who were oriented initially about the DHDR were sometimes transferred and the newcomers had to be oriented about the same and this resulted in delay in getting the necessary data.
3. As the concept is new to the middle level officials (and in some cases, the district level officials also), it became rather difficult to make them understand the concept and its importance.

Chapterization

The report has eight chapters. The first chapter gives an introduction about the Human Development Perspective and the Methodology adopted for the preparation of the District Human Development Report. The second chapter presents a Profile of Nagapattinam District. The third chapter deals with the Demography and Health of Nagapattinam District. In the fourth chapter, the attainment in Literacy and Education is analysed. The fifth chapter presents the Income and Livelihood aspects. The sixth chapter deals with the questions relating to Gender. The seventh chapter presents the Infrastructure facilities available in Nagapattinam District. The eighth chapter presents the Millennium Development goals. The ninth chapter presents a Summary and the Way Forward.

CHAPTER 2

Profile of Nagapattinam District

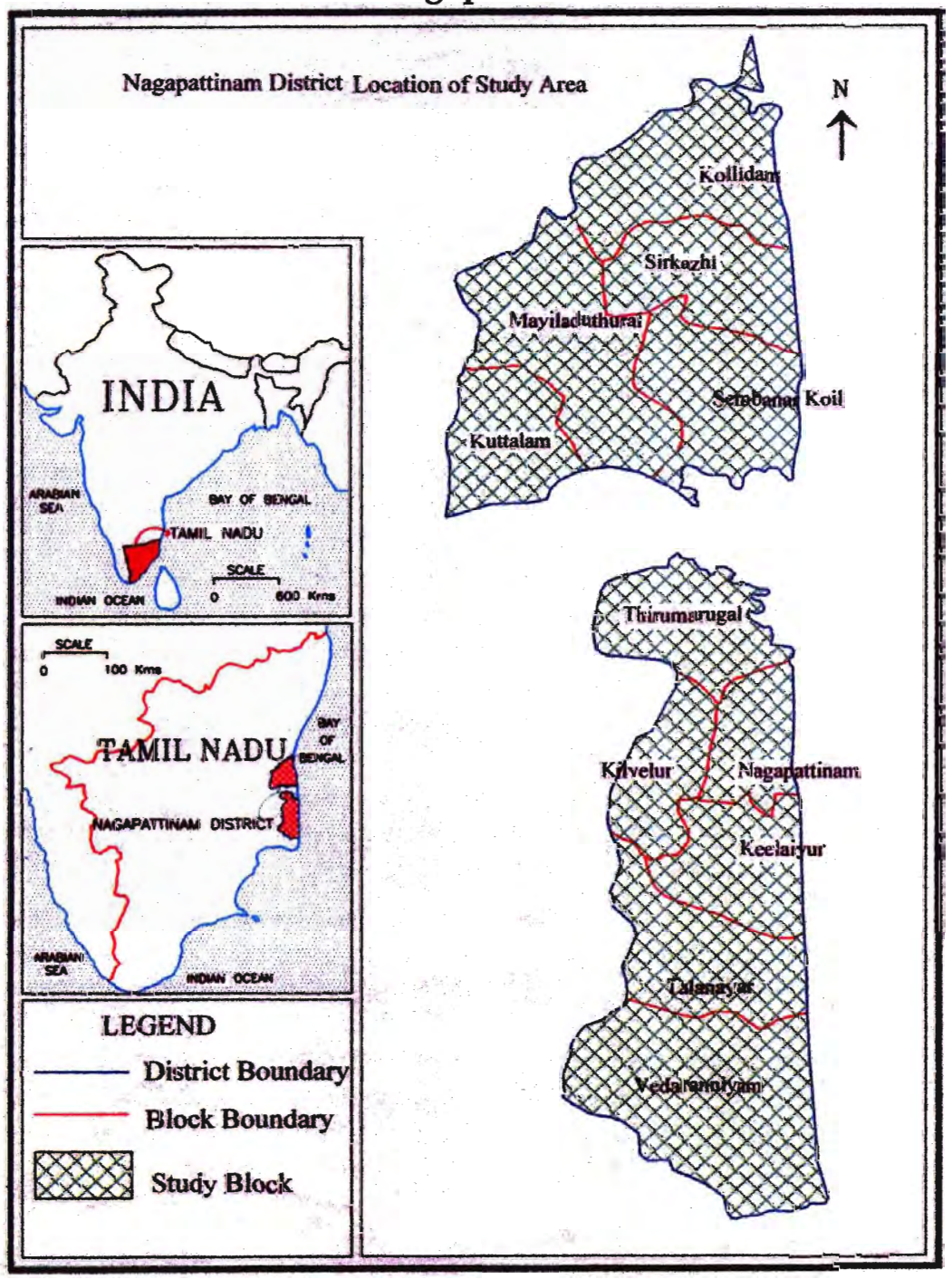

Figure – 2. 1 Nagapattinam District (Development Blocks)

Nagapattinam is one of the coastal districts in Tamil Nadu and is a part of the Cauvery river basin and Delta. The Cauvery Delta begins from the Grand Anicut near Thiruchirappalli constructed more than 1800 years ago by King Karikala Cholan. The main direction of the flow of the river Cauvery is east and the delta spreads northwards and southwards from the Grand Anicut. The distributaries originating from the Cauvery finally discharge their water into the Bay of Bengal.

Being at the tail end of the Cauvery Delta, Nagapattinam is at the mercy of the water flow from the Mettur dam. Located on the Bay of Bengal coast, it is also frequently hit by cyclones that bring in large quantity of rain in short spells. Alternative periods of water scarcity and flooding have resulted in frequent crop losses and a steady decline of cropping area under paddy, the main crop of this region. The 2004 tsunami was therefore only another disaster to contend with for the farmers of Nagapattinam.

Location

Nagapattinam is one of the coastal districts in Tamil Nadu. Nagapattinam district was carved out bifurcating the erstwhile composite Thanjavur district on 18.10.1991. Located between 10° 15′ to 11°13′ north and 79° 30′ to 79° 55′ east, Nagapattinam district is bounded by Cuddalore district in the north, Tiruvarur district in the west, the Palk Straits in the south and Bay of Bengal in the east. The district is geographically not continuous, with Karaikal (UTP) located between Mayiladuthurai division in the north and Nagapattinam division in the south. For administrative purposes the district is divided in 7 taluks namely, Sirkali, Mayiladuthurai, Tarangampadi, Nagapattinam, Kilvelur, Thirukuvalai and Vedaranyam. It is divided into 11 blocks, namely, Mayiladuthurai, Kuttralam, Sembanarkoil, Sirkali, Kollidam, Vedaranyam, Thalainayar, Nagapattinam, Keelaiyur, Kilvelur and Thirumarugal. The district has a coastline stretching to 190 km.

The district accounts for 2.08% of the geographical area with a population comprising of 2.39% of the state. The rural population comprises 77.8% as against 55.9% for the state. Nagapattinam is a predominantly agricultural district with the net sown area constituting nearly 54.6% of the total geographical area as against only 39% for the state as a whole. The major area is irrigated by a well developed canal irrigation system with net irrigated area constituting 84.1% of net sown area as against 52% for the state. However, water supply is dependent upon the availability of water in the river Cauvery which drains into Bay of Bengal through a vast network of canals traversing the district.

Economy

Fisheries is next only to agriculture in terms of its contribution to the economy and livelihood of the people in the district. With a long coastal line of 188 km, the district offers a very good scope for the development of fisheries. The district contributes 12.4% of marine fish produced in the state. Almost 40% of the potential of the state for coastal shrimp farming is located in the district.

Mineral resources in the form of crude oil and natural gas are available in the district. The important/ major minerals available in the district are crude oil, natural gas, silica sand, lime shell, heavy mineral sand (garnet, iluminite, rutile zircon, monozite). ONGC, GAIL, and CPCL have their establishments in the district. Silica sand available in the Vedaranyam coast is best suited for manufacturing sodium silicate. Annually 20,000 tonnes of silica sand is exploited mainly by 10 sodium silicate units located in the Karaikal region. Salt is one of main mineral resources in the district and salt production is carried on in the coastal area of Vedaranyam.

The district has had an age-old maritime relationship with the countries of South East Asia especially Singapore and Malaysia. The port which was damaged during the tsunami, is being renovated. The district has an extensive network of commercial banks and cooperative institutions. It has vast scope for development of allied sectors, especially inland and coastal aquaculture, dairy and goat rearing. The district is known for pilgrim centres like Velankani and Nagore, Navagraha temples besides a large number of temples built during the Chola regime. There is a scope for developing tourism related investments in the district, as there are places of historic importance like Tarangambadi, Poompuhar, Vedaranyam and Kodiakarai.

Table 2.1

District Profile at a Glance

		Classification	Nagapattinam	
1		**Geographical Area**	**271583 sq.km**	
	a.	No. of Blocks and Taluks	11 and 7	
	b.	No. of Towns	9	
	c.	No. of Village Panchayats	434	
	d.	Number of habitations	2508	
	e.	No. of villages electrified	434	
	f.	No. of villages connected by all weather roads	434	
	g.	No. of villages having supply of potable water	434	
2		**Rainfall (mm.)**		
		Normal :	1228.55	
		Actual :	**2005**	**2006**
			1553.37	1237.13
3		**Agro-Climatic Region and Zone**	Coastal Plains & Zone XI	
4		**Population**		
	a.	Male	7,39,074	
	b.	Female	7,49,765	
	c.	Total	14,88,839	

	d.	Population Density	548
	e.	Population Below Poverty Line	4,39,789
5		**Classification of workers**	
	a.	Cultivators	196945
	b.	Of (a) small & marginal farmers	146357
	c.	Agricultural labourers	313174
	d.	Artisans	512
	e.	Household cottage industries	9032
	f.	Other workers	193032
6		**Land Utilisation (in ha)**	
	a.	Geographical area	271583
	b.	Gross sown area	270007
	c.	Net sown area	152557
	d.	Cropping Intensity	1.62
	e.	Fallow land	18304
	f.	Land not available for cultivation	32666
	g.	Area under High Yielding Variety of seeds	121420
7		**Size of holdings** Numbers	
	a.	Less than 1 ha	132404
	b.	Between 1 ha & 2 ha	57456
	c.	Above 2 ha	15932
		Total	**205792**
8		**Irrigation (Area in ha)**	
	a.	Gross Irrigated area	150102
	a.	Net Irrigated Area	123373
	b.	By Canals	122749
	c.	By Dug Wells	-
	d.	By Others	6040
	e.	Irrigation Intensity	122%
9		**Consumption of Organic and chemical fertilizers and pesticides**	
	a.	Chemical fertilizers	122 Kg/ha.
	b.	Pesticides- Dust	0.36 Kg/ha.
	c.	Pesticide- Liquid	0.04 Kg/ha.

10		**Agriculture Support Services**	
	a.	Seed / Fertilizer / Pesticide depots	317 Private dealers 118 PACS 44 Agriculture Extension Centres
	b.	Rural Godowns	4
	c.	Cold Storages	0
11		**Animal Husbandry (Nos.)**	
	a.	Plough animals	81461
	b.	Dairy animals	
		i) Cows	292335
		ii) Buffaloes	56666
	c.	Sheep	33054
	d.	Goats	429924
	e.	Poultry	402045
	f.	Pigs	3109

Source: NABARD, Nagapattinam, 2008.

Predominant Economic Activities in the District

Agriculture, dairying, fishing, goat rearing and shrimp farming are the principal occupations under the primary sector. Pottery, cane works, mat weaving, palm products, handicrafts, coir rope making, etc. under Cottage and Village Industries Sector and ready-made garments, furniture works etc. under the SSI sector are some of the major activities pursued. Tourism is gaining importance in the district.

Major Food / Commercial and Plantation / Horticulture Crops

Paddy, pulses and sugarcane are the major food crops in the district. Cotton, groundnut, gingelly, coconut, vegetables are some of the other principal crops cultivated in this region. The area under food crops constituted 93.37 per cent of the total area under cultivation. Paddy alone constituted 68.75 per cent of the total area sown followed by pulses (21.58%) coconut and cotton (1.92% each), groundnut (1.42%) and gingelly (0.88%). Coconut is the only major plantation crop accounting for 1.92 per cent of the area under cultivation. Cashew, mango, tobacco are also grown in and around Vedaranyam. Cultivation of horticulture and medicinal crops has made a beginning in the district.

Physical Description of the Delta

Climate

The climate is sub-tropical humid, the average maximum temperature is about 32.5°C and minimum is 24.75°C.

Rainfall

The annual average rainfall in the delta ranges from 950 mm (Thanjavur) to 1500mm (Nagapattinam). Most of the rainfall is received between October and December under the influence of northeast monsoon. Rainfall is higher in the coastal areas and progressively decreases inland.

Geology and Soils

Clay, clay loamy, silty clay, sandy clay, loamy sandy, loam and sandy are the predominant soil textures in the Cauvery delta. Clay and clay loam are found in the middle of the delta, sand fraction associate clay is more towards the sea coast, loamy clay is found in the new delta area and sandy loam is found of the western parts of the delta. These are the most prevalent textures (http//www.tnau.ac.in/dr/zonepdf.) Broadly, the soils in the delta area are charecterised by very high clay content, low nitrogen phospherus and high potassium and lime content.

Geomorphology

The major land forms that occur are natural leavees near Mayiladuthurai coastal plain covering almost the entire district with beaches, beach ridges, mud flats, swamps, and backwater along the costal stretch. The deltaic plains are found near the confluence of river Coleroon with sea in the east and also in the south.

Hydrogeology

The sedimentary formations in the district are represented by Miocene Pliocene and quaternary formations. Ground water occurs in this formation and is extracted through filter points, wells, tube wells, shallow bore wells and infiltration wells, especially from the sandy aquifers.

Agriculture

Agriculture is the major means of livelihood for the people of this district. Located in the delta of the Cauvery river and crisscrossed by the rivers and canals, the area is known for paddy cultivation though a number of others crops are also grown here. The traditional copping pattern of cultivation in the three districts of the Cauvery delta is Kuruvai as the first crop of paddy (June to September), followed by Thaladi as the second crop of paddy in the double crop lands (October to January, February). In the single crop land area samba paddy is grown from September to January. The farmers raise a pulse crop after samba or thalady paddy using the residual moisture in the paddy field. In addition, wherever ground water is available, especially in the

Cauvery sub-basin, farmers grow sugarcane, banana, cotton, vegetables and some dry crops.

Table 2.2

Important crops grown with area of cultivation and yield

Name of the Crop	Area in Hectare	Yield in ton per ha.	State average yield in ton per ha.
Paddy	138945	3-3.25*	4.25
Sugarcane	3000	92	100
Cotton	1000	0.33	0.375
Groundnut	3000	1.4	1.5
Fruits and Vegetables	3000	-	-
Pulses	7000	-	-

Source: Economic Appraisal of Tamil Nadu, Govt. of Tamil Nadu, 2003–04 and 04–05

* As per study carried out by NCRC, April, 2007

Table 2.3

Sown and irrigated area in Nagapattinam District

Year	Net area sown (in ha)	Gross area sown (in ha)	Cropping Intensity	Net area irrigated (in ha)	Gross area irrigated (in ha)	Irrigation Intensity
1998 – 99	149706	252462	169%	128749	157270	122%
2003 – 2004	131890	197890	150%	104594	126428	121%

Source: Economic Appraisal of Tamil Nadu, Govt. of Tamil Nadu, 2003-04

The intensity of cultivation is 169% compared to the intensity of 117% in the entire state of Tamil Nadu and the intensity of irrigation is about 122 % compared to the state average of 120%. The area under kuruvai and thaladi are around 30,000 ha whereas the area under Samba cultivation varies from 75,000 ha to 1.00 lakh ha.

In the last few years, due to poor rainfall and non – availability of water from Mettur reservoir, the area under paddy in the Cauvery delta has been coming down. Among the three districts that are located in the Cauvery delta zone, Nagapattinam is the most affected by the level of storage of water. This is due to the fact that the water position in Mettur reservoir is frequently insufficient to allow enough outflow of water to reach the tail end of the delta. However, when there is higher rainfall in the coastal areas due to cyclone / depression in the Bay of Bengal, many areas of Nagapattinam district get flooded and water logging takes place. In both situations, agriculture is affected.

Irrigation

Irrigation is done mostly from canals and to some extent, by wells. There are not many irrigation tanks in the district. The irrigation water is drawn from Cauvery, Vennar and Vettar rivers. The total length of canals is about 550 km and there are about 6368 open wells.

In normal years, the water is released from Mettur dam on 12th June and flows till the end of January of the following year. During rainy days in the delta, the gates are closed at Mettur dam. The dam is situated about 200 km away from the Grand Anicut. It takes three days for water from the Mettur dam to reach the Grand Anicut and another three days to reach the tail end, especially to the areas in Nagapattinam district.

Table 2.4

Area under irrigation

S. No.	Details	2001– 02 (Area in ha)	2002–03 (Area in ha)	2003–04 (Area in ha)
1.	Net area irrigated	125602	110113	104594
2.	Gross area irrigated	160522	131322	126428
3.	Food crops	157668	128476	121917
4.	Non-food crops	2854	2846	4511

Source: Mapping and Study of Coastal Water Bodies in Nagapattinam District, NCRC, April, 2007

We find from Table 2.4, net area as well as gross area irrigated and the area under food crops have decreased whereas the area under non-food crops increased during the years 2001-02, 2002-03 2003-04.

Drainage

The delta slopes very gently (1 in 2000) towards east and south. The hydraulic head available for gravity flow into the fields from the irrigation channels that takes off from the rivers is often negligible and in many cases, it is negative. Therefore irrigation is done under such situations by blocking the channel flow and building up a "head". Under these conditions, the same channels play a dual role serving for irrigation as well as drainage.

Floods and droughts

The Cauvery delta is known for floods and droughts in the same year. For example, in 1983 – 84, the South West monsoon was very weak and consequently the rainfall was low. The inflow into Mettur reservoir was minimal, with no outflow and consequently there were drought conditions from July to October 1983 in the delta when the farmers were unable to raise any crop. With the onset of the North East monsoon in October – November 1983, paddy was planted. In December 1983 – January

1984, there was heavy rain in the delta leading to unprecedented floods in low lying areas, especially in Nagapattinam. Many villages were marooned for weeks.

Table 2.5

Floods and Droughts

Year	Flood / Drought
1966 – 67	Drought
1971 – 72	Floods
1978 – 79	Floods
1980 – 81	Drought
1983 – 84	Floods
1995 – 96	Drought
2001 – 02	Drought
2002 – 03	Drought
2004 – 05	Floods / Tsunami
2005	Floods

Source: Mapping and Study of Coastal Water Bodies in Nagapattinam District, NCRC, April, 2007

Thrusts in Agricultural Development

More than 80% of the water available is used for agriculture in Tamil Nadu. Hence it is essential that the available water be used efficiently and economically. The main thrusts in agricultural development are as follows:

1. To increase the availability of surface and ground water;
2. To increase the water use efficiency, in canal, tank irrigation and in well irrigations;
3. To increase the yield per unit of water, land and time
4. To introduce advanced method of irrigation in paddy cultivation (SRI method) and drip and sprinkler methods in well irrigation
5. To bridge the yield gap in various crops grown in the district

6. To change crop and cropping pattern based on the availability of water, and to introduce more areas under horticulture crops like growing fruit trees and vegetables in areas irrigated by ground water
7. To increase the fertility of soils and reduce the soil salinity
8. It will also be worthwhile to make an attempt by pumping saline water from nearby canals on both sides into the canals and recharging them through flood / rain water, which will result in reducing salinity in aquifers in the long run.

Other Features of the District

The district lies at the tail end region of the Cauvery delta. The coastal areas of the district are prone to cyclone. The main area of concern will therefore be the strategies for development of the coastal areas which are affected by drainage problems. The brackish water shrimp culture units have to be properly regularised for development in this region to take advantage of the long coastline. Suitability of sea-bass has also been tested at the Rajiv Gandhi Centre for Aqua-culture, Thirumullaivasal and efforts are on to commercialize sea bass culture in coastal areas. The district is one of the leading districts in terms of marine fish production and large numbers of shrimp farms are located along its long coastline. Post-harvest techniques in fisheries sector are being propagated by the Department of Fisheries and other agencies. The use of ice boxes is being propagated in a big way in the coastal villages of the district.

Desilting of canals was taken up in a big way during the last few years by the State Government which would improve the efficiency of the irrigation systems in the district. Recently, farm ponds have been constructed which will help in rain water harvesting for recycling as well as for irrigation. Being a delta district, the entire rainwater is lost as runoff into the sea. Rain water harvesting structures like farm ponds are advocated in the district for recharging ground water and for reducing the salinity of groundwater due to ingression of sea water.

Concerted efforts are needed for developing entrepreneurship for taking up industrial ventures in the district. There are difficulties in attracting private sector investments to this district in coastal areas. The district headquarters is well connected by broad gauge rail network (Broad gauge conversion work is under progress).

Rashtriya Sam Vikas Yojana and Backward Regions Grant Fund

The basic infrastructure available in a district and social factors are important issues which determine the ability of the district to derive benefit from various schemes. In order to improve the shortcomings in infrastructure, the Union Planning Commission has come out with a new initiative in the 10th Five Year Plan termed the "Development and Reform Facility" (Rashtriya Sam Vikas Yojana). Nagapattinam is one of the districts selected by the Planning Commission in Tamil Nadu. The main

objectives of the scheme are to address the problems of low agricultural productivity and unemployment and to fill critical gaps in physical and social infrastructure. An amount of Rs. 15 crore was provided annually to the State Government for three years from 2004-05.

The various types of projects covered under the scheme include Irrigation, Micro watersheds, Agriculture, Forestry, Horticulture, Animal husbandry, Fisheries, Rural connectivity, Public health, Education, Non-conventional energy, Eco-tourism and Handicrafts which was a precursor to the BRGF programme.

Of the total number of 1952 activities sanctioned during the three year period, 1208 activities were completed (61.9%) as on 30 June 2007. Of the total sanctioned budget of Rs.45 crore (Rs.15 crore for each year), the utilisation as on 30 June 2007 stood at Rs.29.81 crore (66.2%).

Five districts have been selected for the implementation of RSVY schemes in Tamil Nadu. The preparation of DHDR is also undertaken in the same districts.

Tsunami Rehabilitation

Nagappattinam district was the worst affected by the tsunami tidal waves of 26 December 2004 with maximum loss of life and property. The entire fishery infrastructure was devastated and the coastal fishermen were affected. After the relief phase, the process of rehabilitation has commenced with major thrust on rebuilding the livelihood of the coastal communities and construction of permanent shelters on public-private partnership basis in addition to voluntary action. The fishing harbours at Nagapattinam, Pazhayar and Kodiakarai will be rebuilt along with other major fish landing centres with support from agencies like Asian Development Bank (ADB). The Rajiv Gandhi Rehabilitation Programme for Tsunami affected areas is being implemented for repairs and replacement of damaged boats. Steel boats are being introduced in the place of damaged wooden fishing vessels. The Agriculture / Horticulture lands affected by the salinity of the tidal waves are being reclaimed with assistance from the Government and NGOs.

ADB assisted **Tsunami Emergency Assistance Project (TEAP)** implemented in the district includes livelihood component covering all the seven coastal blocks.

Rural Business Hub

The concept of Rural Business Hub (RBH) has been launched in the district. The Rural Business Hub is a unique concept of Public-Private-Panchayat Partnership to address the lacuna in the market structure. RBH is an initiative of the Ministry of Panchayati Raj and the Confederation of Indian Industry to establish direct linkages between rural economy and industry. The key objective of the RBH is to involve industry to improve / refine the locally available resources and produce goods of quality and standards that are nationally and internationally acceptable.

Though one of the key features of RBH is to provide a mechanism for industry to procure agricultural produce directly from the farmers, it has been conceptualized as a model for overall development of the rural sector. The industry provides interventions in terms of technology and know-how, good farming practices, agriculture inputs, standardisation and quality enhancement measures, value addition, branding and marketing, training and skill development and elimination of non-value adding activities. Farmers gain tremendous mileage in terms of higher incomes through increased yields, improved quality, transfer of know-how, entrepreneurship development and reduced transaction costs. On the other hand, industry saves procurement costs and most importantly obtains standardized and quality produce.

Vedaranyam Salt Swamp

The Vedaranyam Salt Swamp is the longest swamp in Tamil Nadu, running 48 kms along the coast from Point Calimere and 7 to 8 km wide. This swamp is filled by two periodical high tides during the full moon months of May and June, retaining sea water to a depth of two feet over a considerable area enclosed by low earthen banks, which, when closed, prevent water from flowing back into the sea after the tide recedes. It is through this procedure that the well-known Vedaranyam spontaneous salt is formed.

Ports

The coastline has no less than eleven ports, of which eight are open to foreign traders with a number of harbours such as Nagapattinam, Pazhaiyar, Nagore and Point Calimere and also with significant small ports like Thirumullaivasal, Vellankani, Thopputhurai and Muttupet.

Industry

The district is devoid of any major industry but has a flourishing centre for handicrafts and cottage industry. It is well known for its pith articles consisting of beautiful models of Hindu idols, temples, mosques, flower garlands, bouquets, parrots and peacocks. Many musical instruments like the Veena, the Tambura, the Violin, the Mirudangam, the Tabla, and the Kanjara are made of jack wood, which gives a special quality for producing musical sounds.

Temples

Nagapattinam has a large number of temples which are under the management of the Hindu Religious and Charitable Endowment Board. Temples in Mayuram, Vedaranyam and Sirkali are famous. Apart from these famous temples, there are many other temples in and around the district. The Velankanni Church is a famous one in Tamil Nadu.

Tourist Places

Poompuhar in Sirkali, Tranquebar known as Tarangambadi in Sembanarkoil, Sillapathigaram Art Gallery in Poombugar, 'Our Lady of Health' Church in

Vellankanni, Dargha of Hazrat in Nagore, Point Calimere in Kodiakkarai, bird sanctuary in Coromandel coast, and Vedaranyam Bird Sanctuary in Thalainayar village are important tourist places.

Status of Nagapattinam District in relation to Tamil Nadu in Human Development Attainments – Some Facts

Table 2.6

Indicators	Nagapattinam	Tamil Nadu
Human Development Indicators		
Life expectancy at Birth		
Total	74.7	72.8
Male	72.7	70.4
Female	77.0	75.7
Literacy Rate		
Total	82.25	79.16
Male	91.5	88.0
Female	74.6	70.4
Gross Enrolment Ratio		
Total	87.19	88.82
Male	88.8	89.3
Female	85.6	88.3
Per capita Income (in PPP US $)		
Total	2576.49	3363.11
Male	3931.59	5062.96
Female	1241.94	1643.16
Human Development Index	0.738	0.736
Rank	9	
Gender Development Index	0.723	0.722
Rank	11	
Sex Ratio		
1981	992	977
1991	993	974
2001	1014	987
Crude Birth Rate (2006)	15.2	15.9
Crude Death Rate (2006)	5.8	6.1
Infant Mortality Rate (2006)	18.5	23.8
Still Birth Rate (2006)	15.9	13.6
Maternal Mortality Rate (2006)	1.39	0.95

Table 2.7

Socioeconomic Characteristics

Socioeconomic Characteristics	District Name-Nagapattinam	Tamil Nadu
	2001	**2001**
Geographical Area	2715.83sq.km (2.17%)	130058 sq km.
Demographic Characteristics		
Population	1488839	62,405,679
Male	739074	31400909 (50.31)
Female	749765	31004770 (49.68)
Growth (1991-2001)	**8.07**	**11.72**
Rural	1158557	34921681 (55.95)
Urban	330282	27483998 (44.04)
SC	441231	11857504 (19.00)
ST	3420	651321 (1.04)
Sex ratio (Females per 1000 Males)-All	1014	987
Sex ratio 0-6 age group	963	939
Literacy and Education		
Person	996580 (66.93)	40524545 (64.93)
Males	548142 (74.17)	22809662 (72.64)
Females	448438 (59.81)	17714883 (57.13)
Workers		
Total workers	5,86,734	27878282 (44.67)
Male	4,10,135	18100397 (57.64)
Female	1,76,599	9777885 (31.53)

Source: Census of India, 2001

The profile of the Nagapattinam district shows that there are plenty of opportunities already available for sectoral growth. Further, the devastation created by the Tsunami has provided new opportunities for the holistic development of the district. Resources have been pumped in and much attention has been paid to the development of the district. These activities have to be dovetailed with the human development paradigm.

CHAPTER 3

Demography and Health

Introduction

The population of Nagapattinam district has increased from 4,25,127 in 1951 to 15,11,891 in 2001. The growth rate indicates that there has been a significant increase in population during the decade 1951-61 with an average growth rate of 3.48 per annum. The growth rate was stabilized over the past three decades with 1.65 percent per annum. Blockwise, according to the 1991 Census, Mayiladuthurai block was highly populated and Kilvellore block was least populated in the district. There was a decrease in population in Nagapattinam block between 1971-91 due to its bifurcation from Thanjavur district. The same decrease in population was also seen in Sirkali block due to its bifurcation from Tarangambadi block.

This chapter focuses on demographic, health and nutritional aspects of different blocks in Nagapattinam district.

Demography

Table 3.1

Trend of District Level Population from 1991-2001

Sl. No.	Category	Population 1991	Population 2001	Decadal Growth Rate
1.	Total	1377601	1488839	8.07
2.	Rural	1092837	1158557	6.01
3.	Urban	284764	330282	15.98

Source: Census of India 1991, 2001.

The trend of district level population of Nagapattinam district as depicted in Table 3.1 shows that the total population of Nagapattinam district increased from 1377601 in 1991 to 1488839 in 2001. The decadal growth rate of Nagapattinam district shows that it has grown at the rate of 8.07% against the state average rate of 11.72%. In the rural- urban category, rural population grew at the rate of 6.01% while urban population grew at the rate of 15.98%. This is due to the reclassification of rural, urban areas by the Census and also because of migration from rural areas to urban areas.

The sex-wise population details show that of the total 1488839, 739074 are males and the remaining 749765 are females. The rural population was 1158557 accounting for 77.81 percent and the urban population was 330282 which accounted for 22.18

percent. The percentage of SC population to total population was only 29.63 percent and there was only 0.22 percent of the ST population in the district. The district population density is 557 per sq.km as against the Tamil Nadu's average of 478 per sq.km.

Table 3.2

Block wise Area, Population and Density - 2001

Sl. No.	Blocks	Area in Sq.Km	% to the Total Area	Population	% to Total Population	Population Density
1.	Nagapattinam•	128.43	4.73	169522	11.21	1319
2.	Keelaiyur	182.04	6.70	78872	5.34	520
3.	Kilvelur	160.52	5.91	73598	4.87	458
4.	Thalainayar	257.09	9.47	62552	4.48	350
5.	Vedaranyam•	630.32	23.21	162646	10.76	258
6.	Thirumarugal	183.43	6.76	93892	6.21	469
7.	Sirkali•	210.42	7.75	158273	10.31	645
8.	Kollidam	231.54	8.53	125367	8.29	541
9.	Mayiladuthurai•	259.41	9.55	244474	16.17	942
10.	Kuttalam	198.31	7.30	138831	9.18	700
11.	Sembanarkoil	273.90	10.09	181057	13.18	728
District Total		**2715.83**	**100.00**	**1489084**	**100.00**	**557**
State		130058		62405679		478

Source: Census of India, 2001.

• Municipalities

The blockwise data on area, population and density as shown in Table 3.2 shows that Vedaranyam Municipality is the largest in terms of area with 630.32 sq.km comprising 23.21 percent of the total area of the district, and accounting for 10.76 percent of the total population. But it has the lowest population density of 258 per sq.km as against the district average of 557 per sq.km. The smallest area is the Nagapattinam Municipality with 128.43 sq.km accounting for 4.73 percent of the total area of the district having 11.21 percent of the population. The highest population density is also found in Nagapattinam Municipality with 1319 persons per sq.km and the second thickly populated block is Mayiladuthurai Municipality with a population density of 942 persons per sq.km. It also has the highest population of the district showing 16.17 percent of the total population followed by Sembanarkoil Block having 13.18 percent of the total population.

Table 3.3

Block Wise Urban/Rural Population

Sl. No.	Blocks	Urban			% to Total Population	Rural			% to Total Population
		Male	Female	Total		Male	Female	Total	
1	Nagapattinam	46155	46993	93148	54.95	38021	38353	76374	45.05
2	Keelaiyur	4790	5361	10151	12.87	33820	34901	68721	87.13
3	Kilvelur	3694	3731	7425	10.09	32598	33575	66173	89.91
4	Thalainayar	5681	5950	11631	17.19	27995	28035	56030	82.81
5	Vedaranyam•	15299	16328	31627	19.45	65225	65784	131009	80.55
6	Thirumarugal	4135	4355	8490	9.03	42629	42773	85492	90.97
7	Sirkali	19985	19754	39739	25.49	58187	57968	116155	74.51
8	Kollidam	-		-		62583	62784	125367	100.0
9	Mayiladuthurai	46753	47027	93780	38.36	75320	75374	150699	61.64
10	Kuttalam	6660	6784	13444	9.68	62041	63346	125387	90.32
11	Sembanarkoil	9914	10729	20643	10.36	88018	90660	178678	89.64
District Total		163066	167012	330078	21.86	587323	594490	1180085	78.14
State		13869415	13614583	27483998	44.04	17531494	17390187	34921681	55.95

Source: Assistant Director of Statistics, Nagapattinam district, 2007.

It may be observed from the above table that the majority of population (78.14%) lives in rural areas and the share of urban population is 21.86%. The blockwise urban, rural population of Nagapattinam district shows that Nagapattinam (54.95%) and Mayiladuthurai (38.36%) blocks have the highest percentage of population living in urban areas. Kuttalam (9.68%) and Thirumarugal (9.03%) blocks have the lowest percentage of urban population. The Kollidam block is a fully rural block. Blocks like kuttalam (90.32%), Sembanarkoil (89.64%), Kilvelur (89.91%) have more than 85% of population in rural areas.

Urban Population

Male

It can be observed from Table 3.3 that the highest male population in urban areas is seen in Sirkali Municipality, with 50.29 percent, and the lowest is seen in Keelaiyur block with 47.19 percent.

Female

The highest urban female population is found to be in Keelaiyur block with 52.81 percent, and the lowest is in Sirkali Municipality, with 49.71 percent.

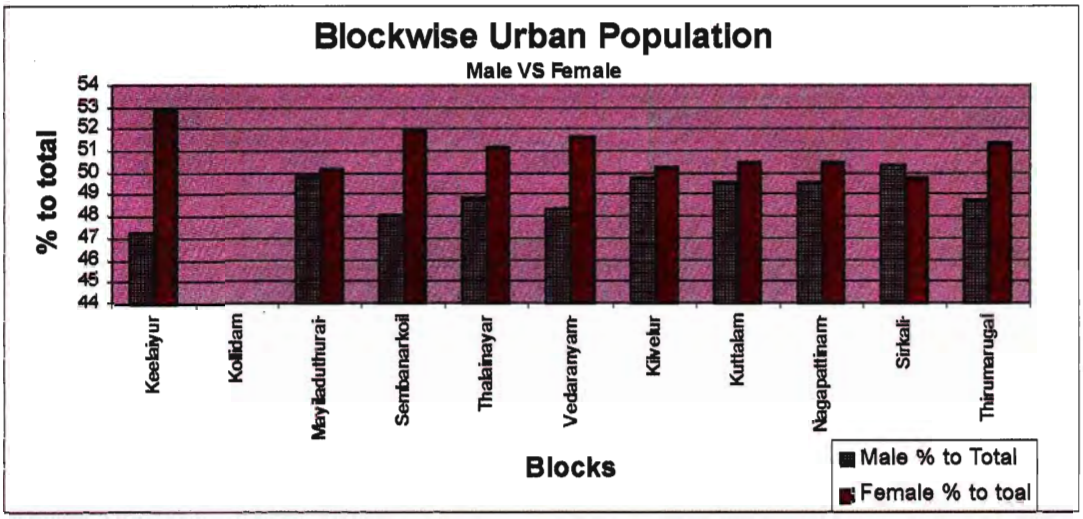

Figure – 3.1

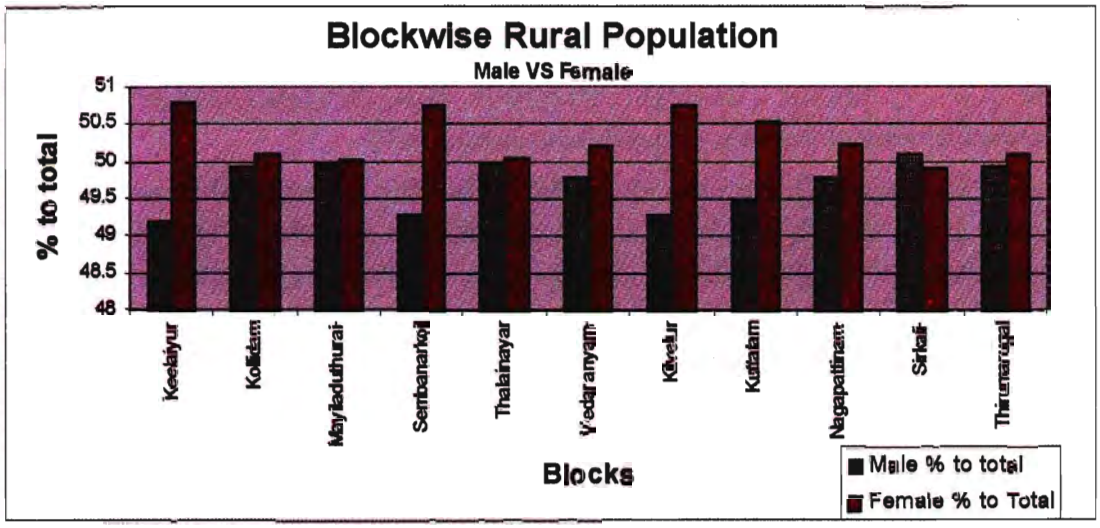

Figure – 3.2

Rural Population

Male

The highest rural male population is seen in Sirkali Municipality with 50.09 percent and the lowest is seen in Keelaiyur block with 49.20 percent.

Female

The highest rural female population is observed in Keelaiyur block with 50.80 percent and the lowest is seen in Kilvelur with 49.91 percent.

Table 3.4

Blockwise SC/ST Population

S.N.	Block	SC			% to District Population	ST			% to District Population
		Male	Female	Total		Male	Female	Total	
1	Nagapattinam	16735	17021	33756	19.91	387	391	778	0.46
2	Keelaiyur	12848	13066	25914	32.86	20	16	36	0.05
3	Kilvelur	18080	18680	36760	49.95	29	32	61	0.08
4	Thalainayar	11715	11704	23419	34.61	20	9	29	0.04
5	Vedaranyam	15410	15520	30930	19.02	77	81	158	0.10
6	Thirumarugal	29498	10106	39604	42.14	67	61	128	0.14
7	Sirkali	25686	25537	51223	32.86	231	206	437	0.28
8	Kollidam	21391	21067	42458	33.87	107	104	211	0.17
9	Mayiladuthurai	30448	29234	59682	24.41	254	213	467	0.19
10	Kuttalam	20985	20992	41977	30.24	43	37	80	0.06
11	Sembanarkoil	28880	28407	57287	28.74	79	72	151	0.08
District Total		231676	211334	443010	29.34	1314	1222	2536	0.17
Tamil Nadu		5932925	5924579	11857504	-	3320	3164	6484	-

Source: Statistical Department, Nagapattinam district, 2007.

It may be observed from the above table that Nagapattinam district has 29.34% of the SC population. But it has only 0.17 ST population. The district accounts for nearly 3.72% of the state's SC population. Heavy concentration of SC population is seen in Thirumarugal (42.14%), Kilvelur (49.95%), Thalainayar (34.61%), Kollidam (33.87%), Keelaiyur (33.86%) and Sirkali (32.86%) blocks. In general, ST population is very low in Nagapattinam district and it is concentrated only in urban areas. Nagapattinam block accounts for 0.46% of ST population. Mayiladuthurai has 0.19% of the ST population in the district.

Table 3.5

Blockwise Sex Ratio

Sl. No.	Block	Sex Ratio -2001
1.	Nagapattinam	962
2.	Keelaiyur	961
3.	Kilvelur	874
4.	Thalainayar	997
5.	Vedaranyam	964
6.	Thirumarugal	900
7.	Sirkali	963
8.	Kollidam	941
9.	Mayiladuthurai	963
10.	Kuttalam	1010
11.	Sembanarkoil	925
	District	1014
	State	987

Source: Census of India, 2001.

The decadal growth of population (8.07%) is less than the state's growth (11.2%). The female population growth rate (9.22) is higher than male (6.94), which is clearly indicated by the favourable sex ratio 1014 (state 987). The child sex ratio 963 is also above the state average of 942. The blockwise analysis of sex ratio shows that Kuttalam block has the highest sex ratio of 1010 females per 1000 males followed by Thalainayar with 997 females per 1000 males. Kilvelur block has the lowest sex ratio of 874 females per 1000 males. But the overall district sex ratio is 1014 against the state average 987.

Table 3.6

Child Sex Ratio (0-6 years)

Sl. No.	Particulars	Sex Ratio
1.	Nagapattinam	963
2.	Tamil Nadu	942
3.	The Nilgris (Highest in the state)	979
4.	Salem (Lowest in the state)	851
5.	All India	927

Source: Census 2001

Sex ratio of 0-6 years age group in the district is 963 which is above the state average and Nagapattinam occupies the sixth place in the state in the matter of child sex ratio. However, child sex ratio of district is lower than the over all sex ratio of the district. Nagapattinam is one of those districts which have higher child sex ratio than the State average. This shows the lower gender discrimination in this district.

Health

The concept of health is broader one. For a person to be considered healthy, his physiological conditions have to be normal. Apart from this function, many other factors determine human health. This includes environmental, social and psychological factors. Also emotion, spiritual and intellectual wellbeing is included in the concept of health. The right to live is the most basic human right. In the context of health, it means that within the limitations of existing technology and resources, efforts must be made to ensure that every one can lead a healthy life. Good health means freedom from illness and disease. To acquire skills, human beings need sound health. Therefore healthcare becomes a prime candidate for attention in a district. Improvement in other domains will happen only if we create a conducive environment where there is a space for improving health conditions.

Birth Rate

The state fertility trend is reflected in Nagapattinam district also with a slight variation. The Nilgris has the lowest birth rate (15.2). Dharmapuri and Krishnagiri had the highest birth rate (19.6) in the year 2003. Nagapattinam district displayed a birth

rate lower than the state average. The state average in 2003 was 17.8 whereas for Nagapattinam district it was 17.3.

Table 3.7
Birth Rate in 2003

Nagapattinam	17.3
Tamil Nadu	17.8

Source: News Bulletin, Department of Health, GoTN, 2008.

Thalainayar block in the district recorded the highest birth rate of 19.39 in the year 2003 and it declined to 16.04 in 2007 and Vedaranyam block recorded 13.95 in 2007. The data shows fluctuations in birth rate. There is no constant increase or decrease in the birth rate. Birth rate in most of the blocks declined during 2003 to 2007.

Table 3.8

Blockwise Birth Rate

Sl. No.	Block	2003	2004	2005	2006	2007	Average
1.	Nagappattinam	19.07	17.41	16.35	18.17	17.1	17.62
2.	Keelaiyur	18.58	17.35	17.32	17.48	17.89	17.72
3.	Kilvelur	15.6	16.71	17.1	16.96	17.9	16.85
4.	Thalainayar	19.39	18.48	19.65	17.27	16.04	18.16
5.	Vedaranyam	16.37	15.39	14.7	15.13	13.95	15.10
6.	Thirumarugal	18.61	18.12	17.06	17.18	16.75	17.54
7.	Sirkali	18.49	17.68	16.12	17.02	16.41	17.14
8.	Kollidam	18.47	18.21	18.29	17.42	17.17	17.91
9.	Mayiladuthurai	16.81	16.84	15.48	15.33	15.41	15.97
10.	Kuttalam	17.39	17.77	16.94	17.24	16.92	17.25
11.	Sembanarkoil	17.09	17.1	15.92	16.5	16.18	16.55
	District total	**17.61**	**17.24**	**16.52**	**16.67**	**16.29**	**16.87**
	State					**16.2**	
	India					**23.5**	

Source : Department of Health, Nagapattinam district, 2008.

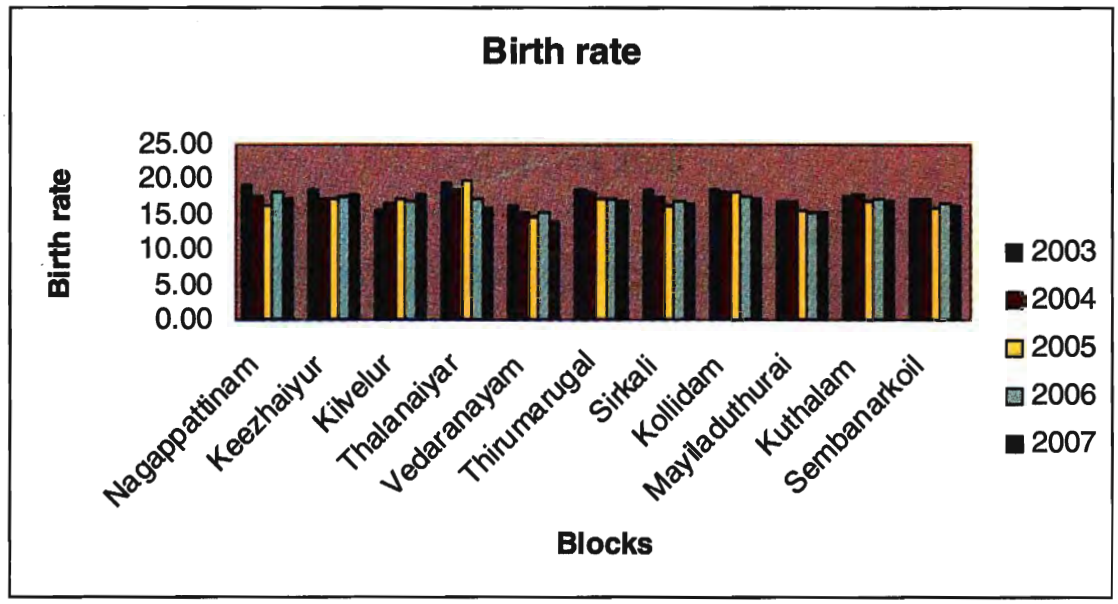

Figure 3.3

Death Rate

The district death rate is the same as the state's average (6.9) in 2003. Perambalur district had the highest death rate (8.5) and Chennai had the lowest death rate (3.6) in the year 2003. The high death rate challenges the health delivery system of the district like the supply of potable water, availability of sanitation facilities. It also raises issues like food security and livelihood.

Table 3.9

Death Rate in 2003

Nagapattinam district	6.9
Tamil Nadu	6.9

Source: News Bulletin, Department of Health, GoTN, 2008.

In Nagapattinam district, the death rate has recorded a fall over the years from 2003 to 2007. In 2004 due to disaster (Tsunami), the death rate increased in the coastal blocks like Nagapattinam (18.30), Keelaiyur (12.51), Sembanarkoil (11.88), and Sirkali (9.75). In the subsequent years, a declining trend is observed.

Table 3.10

Blockwise Death rate

Block	2003	2004	2005	2006	2007	Average
Nagappattinam	6.5	18.3	7.12	6.13	5.97	8.80
Keelaiyur	6.73	12.51	6.85	6.73	6.57	7.88
Kilvelur	6.93	7.49	7.39	7.03	7.39	7.25
Thalainayar	6.62	6.7	6.6	6.7	6.39	6.60
Vedaranyam	7.02	7.3	7.26	7.22	6.9	7.14
Thirumarugal	7.52	6.69	6.86	6.44	6.96	6.89
Sirkali	7.63	9.75	6.68	7.06	6.91	7.61
Kollidam	7.09	5.95	6.1	5.6	5.96	6.14
Mayiladuthurai	6.79	6.49	6.59	6.46	6.15	6.50
Kuttalam	6.46	6.58	6.57	5.91	5.74	6.25
Sembanarkoil	7.21	11.88	8.13	8.02	7.14	8.48
District Total	**6.98**	**8.78**	**6.96**	**6.73**	**6.55**	**7.20**
Tamil Nadu					**7.5**	
All India					**7.5**	

Source : Department of Health, Nagapattinam district, 2008.

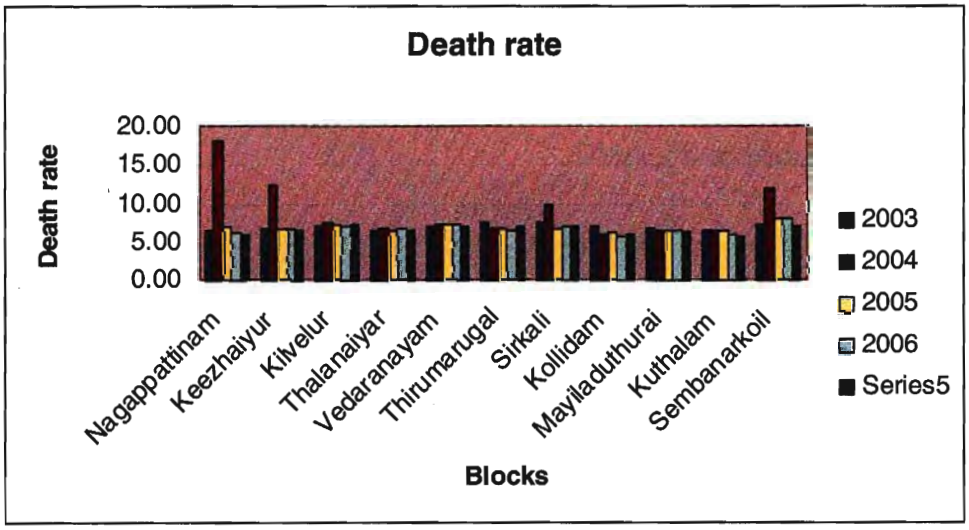

Figure 3.4

Still Birth Rate

Still Birth Rate of Nagapattinam district in the year 2003 was higher than the state average. Still birth rate of a few districts like Perambalur (21.1), Pudukkotai (20.8), Theni (19.9), Trichy (19.4) and Madurai (18.8) are the highest in the state. So Nagapattinam district has to take measures to reduce the still birth rate to a lower level like Chennai (3.0), and Kanniyakumai (6.6).

Table 3.11

Still Birth Rate in 2003

Nagapattinam	16.7
Tamil Nadu	15.5

Source: News Bulletin, Department of Health, GoTN, 2008.

Among the blocks, Kilvelur (28.51) had the highest SBR in 2007. This trend continued from 2003 to 2007. Only in the 2005 and 2006 it had the lowest SBR. Similarly in Thirumarugal and Sembanarkoil, the same trend persists. Instead of declining, the SBR has increased in all the blocks over a period of five years. In Kollidam block SBR was 9.32 in the year 2006. This increased to 15.66 in the year 2007. It may be concluded that high quality of ante-natal care reduction in anaemic women will lower the still birth rate. Blocks like Kilvelur (52.40), Keelaiyur (46.11), Thirumarugal (41.39) and Mayiladuthurai (47.17) account for high incidence of anaemia among pregnant women. Still birth rate and infant mortality are also high in those blocks. Qualitative improvement in ANC and PNC checkup, ensuring 100% institutional delivery, strengthening neo-natal care facility and better access to health care are necessary to reduce the SBR and IMR. After Tsunami struck district administration took a number of measures in the health sector. Lack of awareness and lack of institutional facility had led to poor performance in the ANC.

Table 3.12

Blockwise Still Birth Rate

Name of the block	2003	2004	2005	2006	2007	Average
Nagapattinam	14.23	19.91	17.95	18.16	19.91	18.03
Keelaiyur	27.61	21.51	18.56	21.78	15.7	21.03
Kilvelur	28.35	28.71	22.46	17.08	28.51	25.02
Thalainayar	21.05	21.96	24.93	24.05	15.97	21.59
Vedaranyam	13.34	21.55	19.98	21.65	15.71	18.45
Thirumarugal	23.91	19.05	22.63	17.37	21.51	20.89
Sirkali	16.74	16.51	13.13	14.66	15.58	15.32
Kollidam	19.6	19.33	16.58	9.32	15.66	16.10
Mayiladuthurai	7.71	11.65	12.99	15.01	16.02	12.68
Kuttalam	16.76	13.91	17.82	16.19	18.86	16.71
Sembanarkoil	20.48	14.94	16.29	14.97	20.46	17.43
Total	**17.99**	**17.96**	**17.84**	**16.72**	**18.26**	**17.75**

Source :Department of Health, Nagapattinam district, 2008.

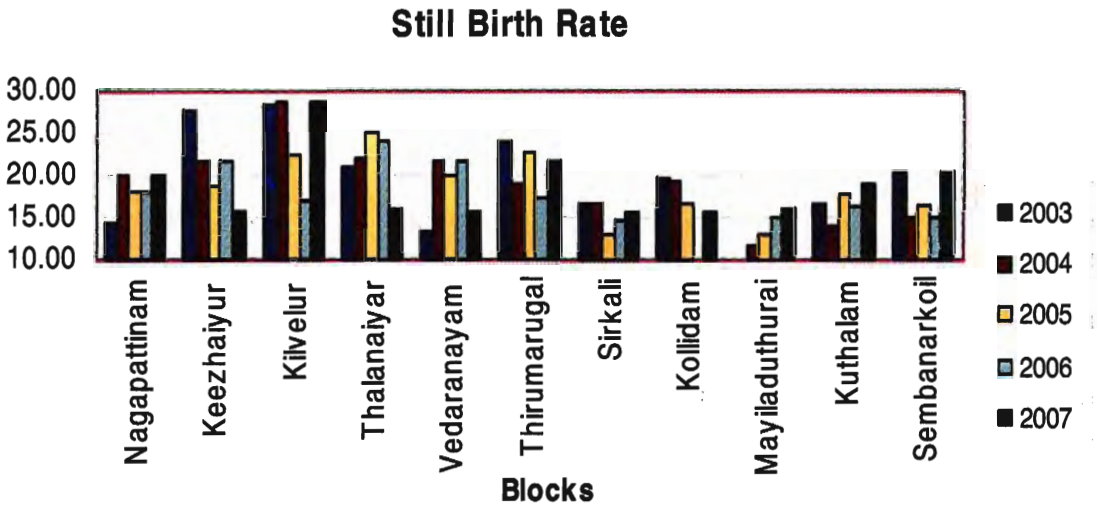

Figure 3.5

Infant Mortality Rate

The convention on the rights of child assures the right of the child to the enjoyment of the highest attainable standard of health and facilities for the treatment of illness and rehabilitation of health. The State strive to ensure that no child is deprived of his/her right of access to such healthcare services. All countries of South Asia have ratified this convention, yet millions of children in the South Asian countries are deprived of good health facilities which lead to Infant Mortality rate. Child survival is still a daunting task in India. In 1999, 2.1 million children died in India out of 10 million children who died in the world. In Tamil Nadu IMR was 30.1 in 2003. Nagapattinam reflects the same trend with slight increase of 0.1. The IMR requires immediate attention in reproductive health, safe delivery practices, ANC and PNC.

Table 3.13
Infant Mortality Rate in 2003

Nagapattinam	30.2
Tamil Nadu	30.1

Source: News Bulletin, Department of Health, GoTN, 2008.

Among the blocks, Mayiladuthurai had the highest (24.22) IMR in the year 2007. It had increased during 2003 to 2007. This shows the poor infant care. Kuttalam block records the lowest IMR in the year 2007 but in the previous year it was only 9.31 and increased to 12.71. Thalainayar, Vedaranyam , Nagapattinam and Keelaiyur blocks require immediate attention to reduce IMR. Heavily urbanized blocks like Mayiladuthurai and Nagapattinam report the highest IMR. Access to more private and public hospitals has not contributed to the reduction in IMR.

Table 3.14

Blockwise Infant Mortality Rate

Block	2003	2004	2005	2006	2007	Average
Nagapattinam	22.36	25.07	23.42	21.65	19.17	22.33
Keelaiyur	30.98	26.52	34.98	18.27	19.11	25.97
Kilvelur	30.93	19.94	20.14	26.4	13.89	22.26
Thalainayar	28.57	25.1	20.53	18.24	20.41	22.57
Vedaranyam	21.5	28.21	24.06	23.23	23.35	24.07
Thirumarugal	36.15	33.33	27.03	20.47	23.4	28.07
Sirkali	26.18	29	26.26	21.99	20.3	24.74
Kollidam	25.99	27.49	19.56	19.52	20.58	22.62
Mayiladuthurai	21.65	24.03	21.25	20.15	24.22	22.26
Kuttalam	22.07	18.28	18.65	9.31	12.71	16.20
Sembanarkoil	25.6	33.38	19.34	17.25	17.49	22.61
District Total	25.74	26.77	22.64	19.26	19.55	22.79

Source :Department of Health, Nagapattinam district, 2008.

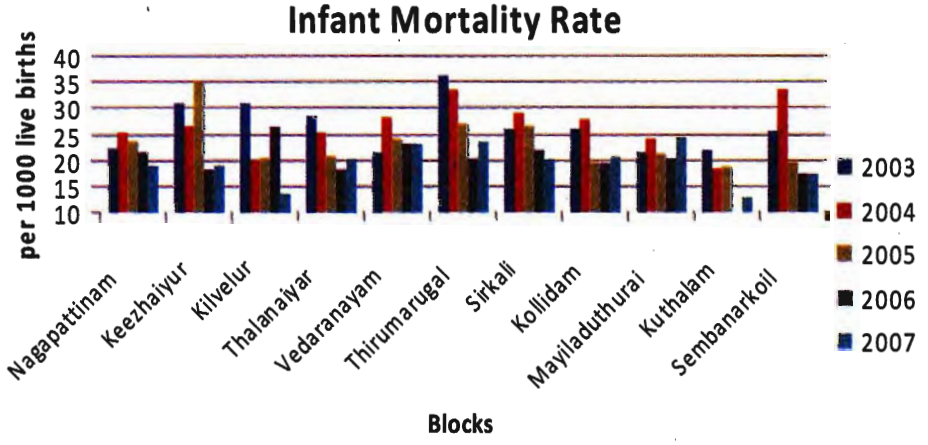

Figure 3.6

Maternal Mortality

The world summit for children in 1990 concluded that the there is a strong correlation between the health of the mother and that of the child. The summit also resolved to reduce the maternal deaths by half by the year 2000. The millennium development declaration has also included the goal of cutting maternal mortality to half. But in India it is still long way to achieve this target. The access to ANC, the presence of skilled birth attendants during delivery can substantially lower the maternal mortality. Only 66 % of women in India receive skilled attendants during their delivery (Government of India Year Book, 2001). In Tamil Nadu, 99 % of women receive skilled attendants during the delivery (Family Welfare Monthly Bulletin, Tamil Nadu, 2006). Recognizing woman's health rights means ensuring better health and educational

rights of their children. But, deeply rooted gender inequality makes women to access poor health facilities.

Overall MMR in Tamil Nadu was 0.9 in 2003 and for Nagapattinam it was 1.23. During the year 2004 MMR in coastal blocks like Nagapattinam (10.32), Kilvelur (3.19), Sembanarkoil (3.18) were high. The tsunami struck in the year 2004 and during that disaster, pregnant women were affected and infected and this might have led to more MMR. In the subsequent years, MMR has declined. There is a strong correlation between disaster and health of the women. The district average shows that there is a fluctuation in MMR. Every alternative year there is a growth and decline in MMR

Table 3.15

Maternal Mortality Rate 2003

Nagapattinam	1.23
Tamil Nadu	0.9

Source: News Bulletin, Department of Health, GoTN, 2008.

Table 3.16

Blockwise Maternal Mortality Rate

Block	2003	2004	2005	2006	2007	Average
Nagapattinam	0.68	10.32	0	3.49	0	2.89
Keelaiyur	0.67	2.15	2.86	1.41	2.05	1.82
Kilvelur	1.72	3.19	0	3.11	0	1.60
Thalainayar	0	0	0	0.83	0	0.16
Vedaranyam	0.74	1.57	2.04	1.18	1.7	1.44
Thirumarugal	2.33	2.38	1.89	1.24	3.16	2.2
Sirkali	2.58	2.68	0.97	0.92	0.94	1.61
Kollidam	0.43	1.29	1.28	0.44	0.45	0.77
Mayiladuthurai	0.73	1.46	1.57	1.58	0.39	1.14
Kuttalam	1.23	1.59	0.41	1.21	0.82	1.05
Sembanarkoil	1.92	3.18	1.36	1.3	1.65	1.88
Total	1.23	2.49	1.2	1.41	1.06	1.478

Source :Department of Health, Nagapattinam district, 2008.

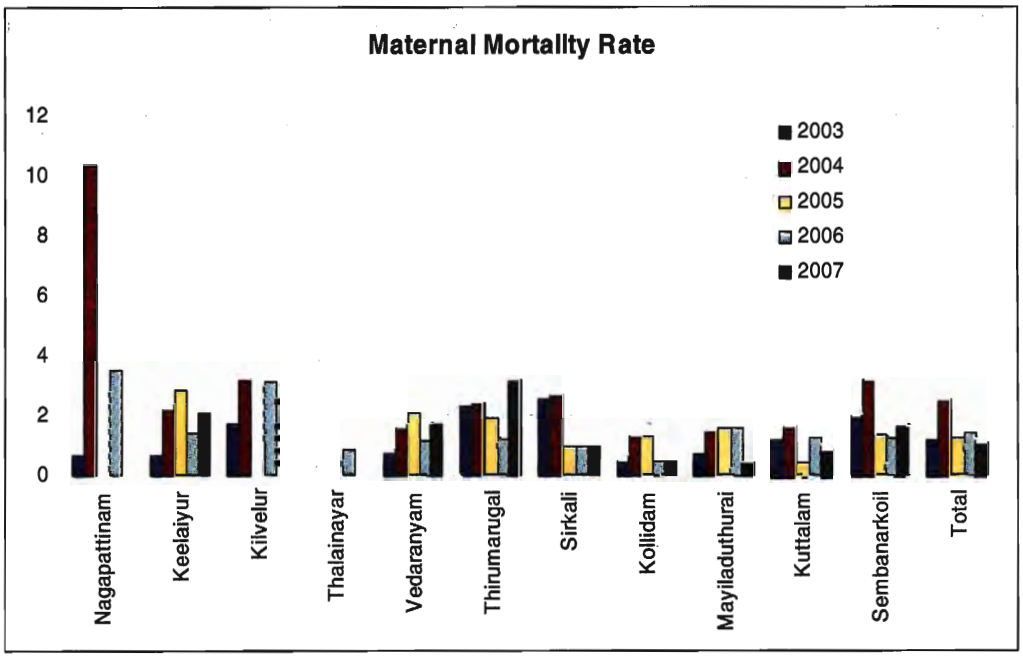

Figure 3.7

Antenatal Anaemia

Antenatal care service received by women during pregnancy is important for reducing possible fatal risk for both mother and child. Antenatal care forms a bridge between women and the health system. Major reasons for maternal mortality include Haemorrhage, Pregnancy induced hypertension and Eclampsia, rupturing of uterus on account of obstructed labour, puberal sepsis and septicemia; important indirect obstetric causes include anaemia, heart ailment, jaundice and malaria. Good antenatal care facilities easily detect the women's health condition and provide proper care. If pregnant women are anaemic, it poses great risk during delivery for both mother and child. This can be completely avoided if pregnant women are aware of the risk. Regular diet with nutritional supplement will help both mother and child. The nutritional content is rich in vegetables, greens, pulses etc. Proper awareness has to be created among the pregnant women. Iron deficiency is the major cause of anaemia. For pregnant women, lack of iron significantly increases the risk of mortality. In children, it impairs their physical and mental growth. Children who are iron deficient tend to have shorter attention span, fall ill more frequently and fail to grow as well as other children.

In the year 2003 in Nagapattinam district, 43.54 % of pregnant women were affected by anaemia. In the year 2004, it increased to 46.68%. In the following years this has been reduced to 37.25%. The Nagapattinam district's average is lower than the state average (56%-NFHS-3). Though prevalence of antenatal anaemia is less than the State average, more than one-third of pregnant women in the district were anaemic. Keelaiyur is one such block where prevalence of antenatal anaemia was high. In 2004, Sirkali block had the highest (70.50) anaemic pregnant women, which had been reduced

in the subsequent years. Significant advance has to be made in creating awareness and some target programme has to be implemented. It may be recalled from the previous section, high incidence of IMR, SBR are recorded in Keelaiyur, Kilvelur and Sembanorkoil blocks. Again these blocks recorded highest number of low birth weight children.

Table 3.17

Blockwise Antenatal Anaemia

Block	2003	2004	2005	2006	2007
Nagapattinam	38.02	46.76	21.48	33.55	33.23
Keelaiyur	44.96	51.43	15.01	45.84	46.11
Kilvelur	42.74	41.97	45.24	42.66	52.40
Thalainayar	48.32	28.47	29.71	32.48	32.68
Vedaranyam	37.75	37.88	36.97	51.60	37.33
Thirumarugal	44.07	43.87	42.90	42.24	41.39
Sirkali	38.12	70.50	35.38	41.61	38.36
Kollidam	49.38	48.94	37.22	29.04	33.44
Mayiladuthurai	44.52	48.17	47.76	47.93	47.17
Kuttalam	38.42	38.05	35.93	38.55	39.88
Sembanarkoil	51.17	50.43	22.26	22.79	19.12
Total	43.54	46.68	34.01	38.44	37.25

Source: Department of Health, Nagapattinam district, 2008.

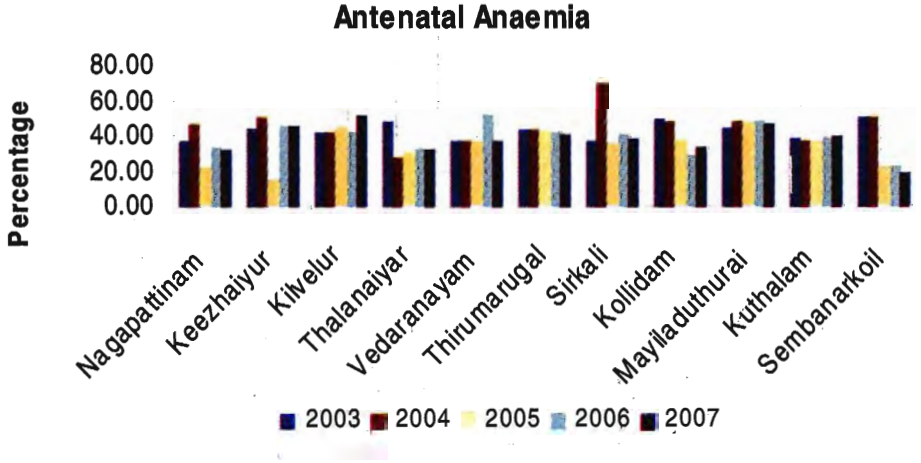

Figure 3.8

Institutional Delivery

Institutional deliveries are safer for mother and child. It will help to reduce MMR and IMR. Available data indicates that 89.20% of deliveries occur in institutions. Kilvelur block has the lowest institutional deliveries. The available data shows that there are no block level differences in institutional delivery.

Table 3.18

Institutional Delivery

Block	2003	2004	2005	2006	2007
Nagapattinam	89.31	94.00	NA	96.09	96.46
Keelaiyur	91.22	93.89	95.59	97.87	98.45
Kilvelur	90.98	89.69	94.77	95.04	98.72
Thalainayar	83.80	89.33	80.76	97.00	99.65
Vedaranyam	96.85	96.47	97.96	95.99	98.12
Thirumarugal	96.87	92.06	94.90	92.20	95.60
Sirkali	93.37	93.99	95.63	97.11	98.88
Kollidam	81.78	86.26	88.54	93.54	100.00
Mayiladuthurai	95.85	95.65	96.93	98.95	97.92
Kuttalam	95.70	96.79	NA	97.37	97.67
Sembanarkoil	94.64	96.46	96.49	98.01	98.71
Total	92.48	93.67	95.32	96.48	98.25
Tamil Nadu					94.1

Source :Department of Health, Nagapattinam district, 2008.

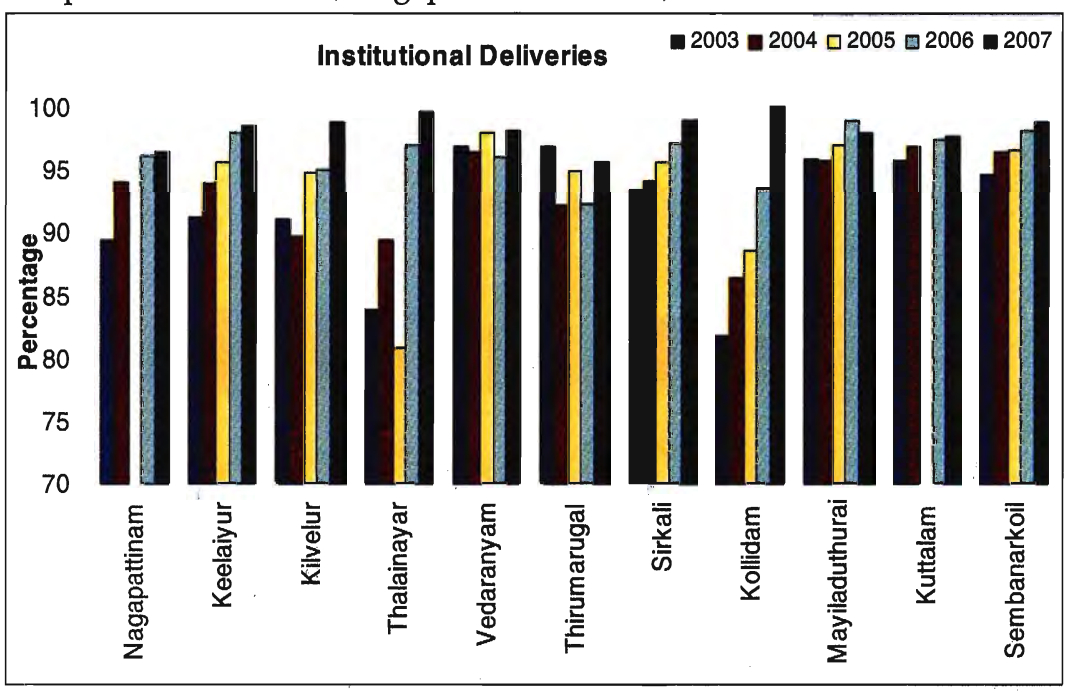

Figure 3.9

Institutional Delivery

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Keelaiyur	91.22	93.89	95.59	97.87	98.45
Kilvelur	90.98	89.69	94.77	95.04	98.72
Thalainayar	83.80	89.33	80.76	97.00	99.65
Vedaranyam	96.85	96.47	97.96	95.99	98.12
Thirumarugal	96.87	92.06	94.90	92.20	95.60
Sirkali	93.37	93.99	95.63	97.11	98.88
Kollidam	81.78	86.26	88.54	93.54	100.00
Mayiladuthurai	95.85	95.65	96.93	98.95	97.92
Kuttalam	95.70	96.79	NA	97.37	97.67
Sembanarkoil	94.64	96.46	96.49	98.01	98.71
Total	92.48	93.67	95.32	96.48	98.25
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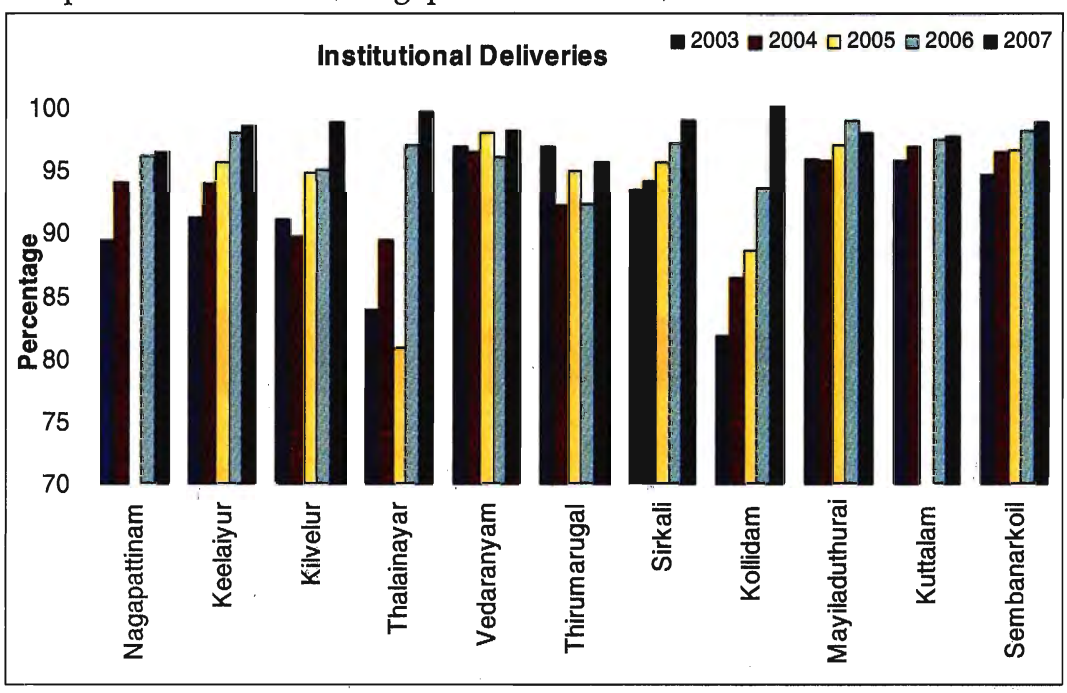

Figure 3.9

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Total	43.54	46.68	34.01	38.44	37.25

Source: Department of Health, Nagapattinam district, 2008.

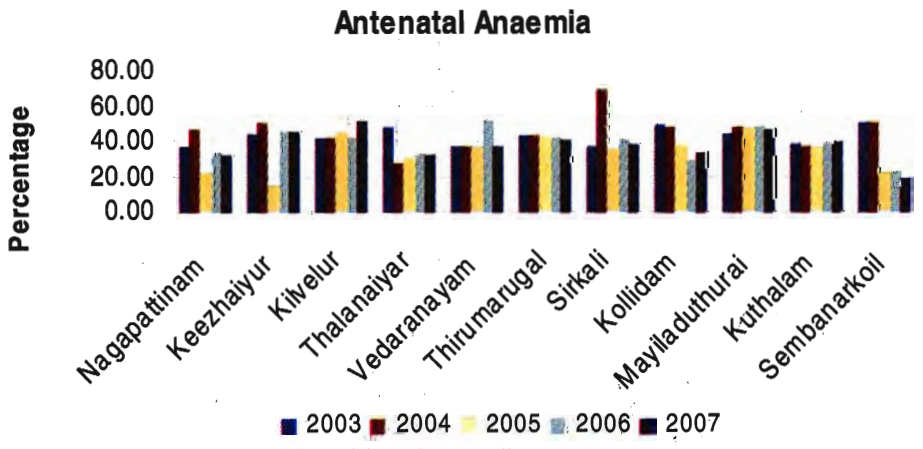


Figure 3.8

ANC Before 12 weeks

ANC service that mother receives in the first 12 weeks of conception is important for tackling anaemia and reducing MMR and IMR. During this period, the child health can be monitored and risk factors could be easily assessed. Based on that, proper medical care can be provided to the pregnant women. During this time, pregnant women can be guided regarding delivery care, post-natal care, nutritional supplements etc. In Nagapattinam district the data shows that only 70.95 women received ANC in this category in the year 2007. This percentage was slightly higher than the percentage in the year 2003. Among the block variations, only 49.90 % pregnant women in Kilvelur block received ANC, which is a very low percentage. All the health indicators like IMR, MMR, and anaemia prevalence are also high in this block. Thalainayar and Sirkali blocks also record the low percentage of women receiving ANC. In general, the ANC is low in this district and this could be the reason for high incidence of anaemia among expected mothers, low birthweight babies, stillbirth and infant mortality.

Table 3.19

ANC Before 12 weeks

Name of the block	2003	2004	2005	2006	2007
Nagapattinam	56.95	55.84	65.10	55.70	60.09
Keelaiyur	89.98	89.97	90.01	89.99	92.96
Kilvelur	57.46	61.58	63.85	53.57	49.90
Thalainayar	48.86	47.71	51.17	54.62	68.02
Vedaranyam	84.73	85.62	86.73	86.38	88.99
Thirumarugal	70.76	71.48	56.01	83.04	77.78
Sirkali	65.57	62.20	69.25	66.98	64.96
Kollidam	60.70	71.85	72.94	71.52	70.87
Mayiladuthurai	59.12	69.95	66.97	71.34	71.27
Kuttalam	58.57	59.32	63.05	49.66	61.84
Sembanarkoil	62.36	67.40	65.73	68.38	70.33
Total	65.21	68.30	68.87	68.90	70.95

Source :Department of Health, Nagapattinam district, 2008.

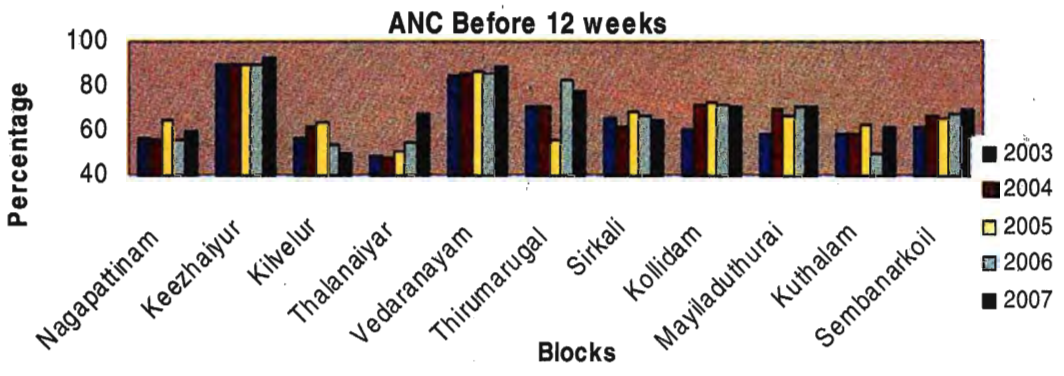


Figure 3.10

Low Birth Weight

Low birth weight child easily succumbs to several diseases like diarrhoea, malaria and acute respiratory infection sometimes this leads to the death of the child. Malnutrition of mother is one of the reasons for the low birth weight of the child. Low birth weight also leads to stunted and wasted growth of the child. The World Summit goal of halving the child malnutrition by 2000 was achieved by very few countries. In India in 1995-2002, 47% of the children were under-weight. 16% were stunted and 16% were wasted. Bihar had the highest level of malnutrition and Kerala had the lowest (Mishra 1999).

Nagapattinam district data shows that overall 11.84% of children were born below low weight in the year 2007. Thalainayar (23.07) and Keelaiyur (30.03) have the highest low birth weight children. Kilvelur block has the lowest number of low birth weight children over the years.

Table 3.20

Low Birth Weight

Name of the block	2003	2004	2005	2006	2007
Nagapattinam	9.08	9.37	10.54	11.03	12.39
Keelaiyur	32.12	33.98	33.48	31.83	30.03
Kilvelur	3.87	5.58	10.77	7.76	4.75
Thalainayar	22.63	21.80	20.31	20.40	23.07
Vedaranyam	12.16	13.99	14.31	12.76	14.69
Thirumarugal	6.94	7.20	8.93	9.93	10.12
Sirkali	18.41	12.14	12.35	10.81	9.07
Kollidam	17.13	14.43	14.50	14.82	13.87
Mayiladuthurai	10.20	10.88	8.38	6.36	5.16
Kuttalam	8.54	7.55	10.86	10.32	7.34
Sembanarkoil	14.98	15.16	14.93	12.79	10.20
Total	13.97	13.34	13.94	12.81	11.84

Source: Department of Health, Nagapattinam district, 2008.

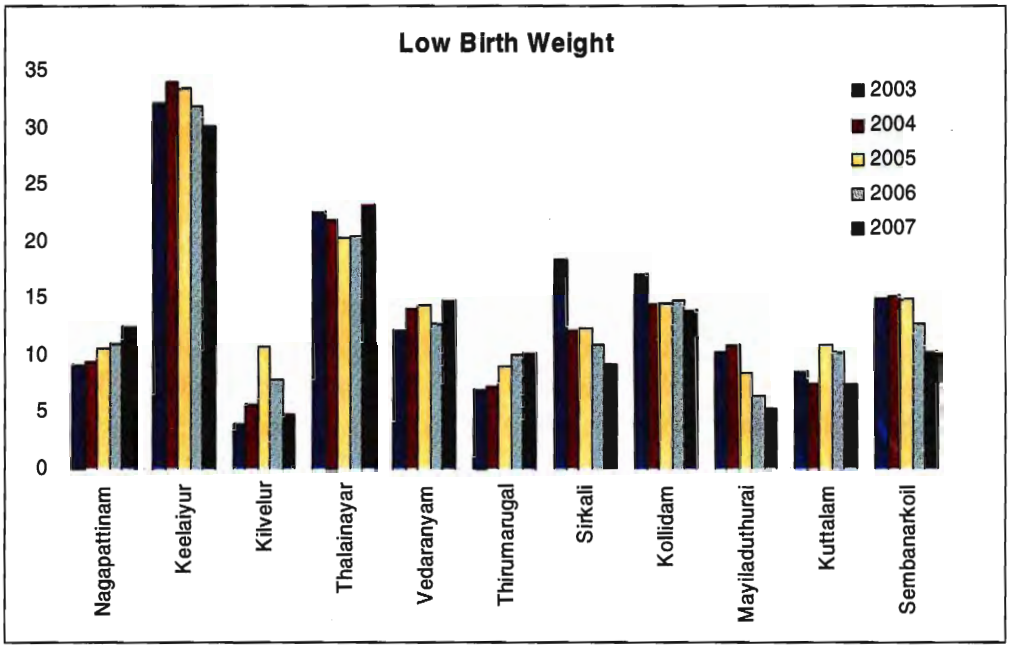


Figure 3.11

Population, Beds and Doctors

Table 3.21

Blockwise Population, Beds and Doctors Ratio

Sl. No.	Block	Population	Total Beds	Population per bed ratio	Total No. of Doctors	Population per Doctors
1.	Nagapattinam	78383	12	6532	2	39192
2.	Keelaiyur	82710	34	2433	6	13785*
3.	Kilvelur	76842	12	6404	1	76842
4.	Thalainayar	72440	42	1725*	3	24147
5.	Vedaranyam	166206	24	6925	2	83103
6.	Thirumarugal	95682	42	2278	5	19136
7.	Sirkali	139587	24	5441	4	32647
8.	Kollidam	139990	48	2916	6	23332
9.	Mayiladuthurai	169512	36	4709	5	33902
10.	Kuttalam	145667	36	4046	7	20810
11.	Sembanarkoil	193220	36	5367	6	32203
District Total		**1351239**	**346**	**3905**	**47**	**28749**
State*		**58062034**	**20862**	**2783**	**2665**	**21787**

Source: Department of Health, Nagapattinam district, 2008.
*Statistical Handbook 2007

It is observed from Table 3.21 that the population per bed was found to be the highest in Vedaranyam block with 6925 followed by Nagapattinam Municipality with 6532. **Despite such a high ratio, Nagapattinam and Vedaranyam perform poorly in many of the health related indicators. This shows that the improvement in quality care and sensitization of the health department officials are the immediate need.** The lowest population per bed is seen in Thalainayar block with 1725 against Nagapattinam district average of 3905 persons per bed.

Similarly, with regard to the size of population per doctor, it is observed from the table 3.21 that Vedaranyam block had the highest population size of 83103 per doctor, followed by Kilvelur block with 76842 persons per doctor. This shows that these blocks have to be provided with more number of doctors.

On the other hand, in Keelaiyur block, there is one doctor for every 13785 population. On the whole, the population per doctor in this district is 28749.

Box 3.1 Two women conceive after recanalisation surgery

- Ramya Kannan

In the hustle and bustle of a town resurrecting itself from death and destruction caused during the tsunami, there is much energy -- the fishing business is brisk, construction is on in full swing – at Akkaraipettai in Nagapattinam district.

But the most potent energy probably comes from two wombs, bursting with life. Two women who had borne children, decided they needed no more and underwent family planning operation. Now, through the process of recanalisation, these women have conceived.

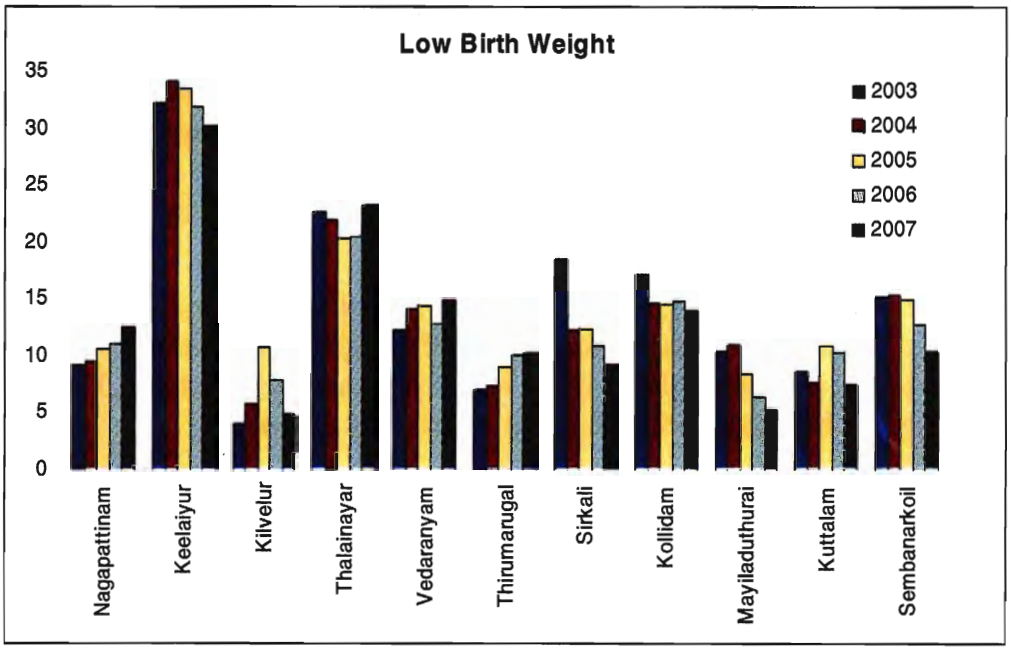
The first one to do so, Geetha, and her husband Bhaskar, lost their girls, Jyothika and Shosika, in the tsunami. In the midst of intense grief, the couple also anguished that they had hurried to have family planning operation done, for that meant they could not have another baby. Stuck in the same predicament, Vairam Sekar went to the Collector to ask if the government could not facilitate surgical reparation. Soon, the state announced that women who had lost their children during the tsunami after having undergone family planning operation could go in for 'recanalisation' surgery, either in public or private hospitals, with the government bearing the cost.

On May 6, Geetha underwent surgery at a private hospital in Nagapattinam and three months later, doctors confirmed her pregnancy. Geetha and Bhaskar's joy turned out to be other grieving mothers' hope. When Kumari Sivakumar, who had lost two of her three children in the tsunami, conceived after successful recanalisation, it seemed like a better idea than before.

240 women eligible

"About 240 women were eligible for recanalisation. Of these, only 120 were willing to be operated on and 50 operations have been completed so far. The cheques for reimbursement will reach them soon. The news of the two women conceiving has given the community hope," says J.Radhakrishnan, Collector, Nagapattinam. "More women now want to undergo recanalisation," attests S.Ranjani, Village Health Nurse at the health sub-centre in Akkaraipettai.

(Courtesy: The Hindu)



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(Courtesy: The Hindu)

Tsunami and its effect

The tsunami has affected the physical and mental health of the survivors. A large number of people were killed, injured people were displaced and there was disruption of safe and adequate supply of drinking water, food, sanitation, infrastructure and hygienic conditions. Various agencies took swift action to prevent a health disaster.

Role of Civil Organizations

The role of civil organizations in this process was significant. The standard issues like provision of necessary medical care to injured survivors, access to adequate safe water supply, strengthening sanitation infrastructure and basic hygienic conditions and strengthening of disease surveillance network were carried out under emergency conditions.

A number of organizations rendered a lot of services like clinical service to women, counselling, community health mobile services, medical camps, awareness creation, medical assistance, surgeries, nutrition to children, forming health committees, day care centre, health awareness on personal hygiene, immunization, capacity building, etc.

Households having Toilet Facilities

Under the total sanitation campaign, household latrines have been constructed keeping a target every year. From the inception of the programme from 2003 to 2008, a total of 66104 toilets have been constructed which account for 22.7 percent of the total families available in the district. Blockwise, Sirkali Block has households with toilet facilities to the extent of 21.7 percent of the total families followed by Keelaiyur block with 20.6 percent and Thalainayar Block with 20.5 percent. The lowest percentage of 11.4 percent has been reported in Mayiladuthurai Block. According to the 2001 census, only 32.04 rural houses had access to safe drinking water through tap and the situation was worse while calculating the access in the case of sanitation facilities (25.59 %) in 2001. Water and sanitation conditions have to be improved because they are closely related to the health and wellbeing of the people.

Table 3.22

Details of Household Toilets

Sl. No.	Name of the Block	Total No. of families	Households having toilet facility	% of total Households having toilet facility
1	Nagapattinam	19230	4036	20.99
2	Keelaiyur	20363	4940	24.26
3	Kilvelur	18623	6024	32.35
4	Thalainayar	18883	4577	24.24
5	Vedaranyam	35555	7191	20.23
6	Thirumarugal	19841	5139	25.90
7	Sirkali	24925	6038	24.22
8	Kollidam	31326	10331	32.98
9	Mayiladuthurai	34710	4744	13.67
10	Kuttalam	28852	6641	23.02
11	Sembanarkoil	37711	6434	17.06
	Total	290019	66104	22.79

Source: DRDA, Nagapattinam district, 2008.

Schools with Toilets

In Nagapattinam district, a total of 1174 schools are reported to be functioning. Of these 1174 schools, only 896 schools (76.32 percent) are reported to be provided with toilet facilities. In the blocks namely Keelaiyur, Kollidam, Thalainayar, Kilvelur and Thiruumarugal, all the schools have toilet facilities. On the other hand, the percentage of schools with toilet facilities is the lowest (41.74 percent) in Mayiladuthurai Block.

Table 3.23

Schools with Toilets

Sl. No.	Name of the Block	Total No. of Schools	Schools having toilet facility	% of schools having toilet facility
1.	Nagapattinam	76	41	53.95
2.	Keelaiyur	66	66	100.00
3.	Kilvelur	106	106	100.00
4.	Thalainayar	98	98	100.00
5.	Vedaranyam	123	67	54.47
6.	Thirumarugal	134	134	100.00
7.	Sirkali	102	63	61.76
8.	Kollidam	106	106	100.00
9.	Mayiladuthurai	140	57	40.71
10.	Kuttalam	95	91	95.79
11.	Sembanarkoil	128	67	52.34
	Total	**1174**	**896**	**76.32**

Source: DRDA, Nagapattinam district, 2007.

Conclusion

The demography and health profile of Nagapattinam district show that there exists a sharp variation in time and space. The tsunami and aftermath of the tsunami had its impact in the coastal blocks. After the tsunami, much attention is paid to Nagapattinam district in general and coastal blocks in particular like Nagapattinam, Keelaiyur, Thalainayar and Vedaranyam. Health indicators like death rate, still birth rate, infant mortality rate, and maternal mortality rate have declined during the period from 2003 to 2007 in Nagapattinam district. However, blocks like Kilvelur, Thirumarugal, Sembanarkoil had the highest incidence of still birth rate even in 2007. Similarly there is not a significant decline in infant mortality rate in the blocks like Mayiladurai, Vedaranyam and Thirumarugal. Other blocks than Thirumarugal and Keelaiyur have performed well in reducing the maternal mortality rate. There is not much of wider block level difference in institutional delivery. But low birth weight children are more prevalent in Keelaiyur and Thalainayar Blocks. On the whole, it is understood that the district is showing a positive trend in attaining good health in spite of differences among the blocks.

CHAPTER 4

Education and Literacy

"The State shall endeavour to provide within a period of 10 years from the commencement of this Constitution, free and compulsory education for all children until they complete the age of 14 years"

- Constitution of India, Directive Principles of State Policy, Article 45.

Introduction

Education plays a pivotal role in laying a proper foundation for the overall social and economic development of any region. Education is an investment that contributes to individual and social development. Primary education is one of the most significant aspects as it contributes to improving the productive capacity of the society as well as its various institutions whether political, economic or scientific. The significance of primary education is twofold: first it makes people literate and secondly it serves as the very foundation necessary for an individual to acquire higher education. It is because of this paramount role of primary education that it is accepted world over that every child must have accesses to primary education. It is necessary that every child in school going age should have access to a school, and these schools must impart proper education if an effective base for human capital development is to be achieved. Many developing countries have achieved universal primary enrolment as a result of their efforts over the past decades. However, many countries are still far from achieving this goal.

As per the Millennium Development Goals, the following targets in education are proposed to be achieved by 2015.

→ All children to complete the full course of five years of primary school.

→ Elimination of gender disparity in primary and secondary education by 2005 and in all education by 2015.

Tamil Nadu has been one of the best performing states in India by each of the four yardsticks given below. The NER for primary education in 2006 reached 98% with all districts in the state registering above 95%. In terms of gender parity, Tamil Nadu's performance has been second only to Kerala among major states. In 2002 the overall enrollment ratios for girls and boys in primary and upper primary levels were 92.9 and 92.3 respectively. Education is synonymous with formal education which involves teaching in schools with formal state guided syllabus imparted by trained teachers but Tamil Nadu has broadened this concept and introduced Activity Based Learning (ABL). Apart from this, the centrally assisted scheme SSA's thrust is on quality education. This includes pedagogical aspects, teacher training particularly in-service training, institutions' capacity building, adequate attention to education of girls and those belonging to special groups with thrust on quality in all aspects of education including curriculum, child centred activities and effective

teaching learning strategies. It aims to provide useful and relevant elementary education to all children in the age group 6-14 by 2010.

The following are the objectives of SSA:

- Universal access
- Universal Enrolment
- Universal Retention
- Achievement

The Government of Tamil Nadu objectives on elementary education are:

- To achieve universal enrollment and retention
- To ensure education of desirable quality
- To concentrate on the child's overall emotional, social and physical development along with cognitive skills
- To reach the unreached and to ensure social inclusion
- To improve the basic amenities in all schools; and
- To bridge all gender and social gaps in elementary education.

The Human Development Reports of UNDP have very clearly identified the relation between education and poverty. Education is the determining factor of many other social and economic indicators. It leads to many social benefits such as improvements in standards of hygiene, reduction in infant mortality rate, reduction in maternal mortality rate and improve the individual consciousness of health and hygiene. It also provides opportunities and choices for sustained improvement in wellbeing. Another important objective of improving the educational status is to promote social inclusion and to bring the weaker sections into the main stream of the society.

Literacy

The total literacy rate of Tamil Nadu according to the 2001 Census, is 73.5. The Nagapattinam literacy rate is higher than the state average. But there is a vast gender gap in the literacy rate of urban and rural areas. Nagapattinam scores low on female literacy rate in both urban and rural areas. The urban male literacy rate is 90.47 whereas the urban female literacy rate is 77.53. The total urban literacy rate in Nagapattinam is 83.77. As far as rural areas are concerned, male literacy rate is 83.29 whereas female literacy rate is 65.18. The total gender gap is 16.94. The district's total literacy rate is 76.33. Nagapattinam block has the highest literacy rate at 81.28. The next is Mayiladuthurai block which has 79.30; Kollidam block of Nagapattinam district has the lowest literacy rate which is 70.16. The following blocks have to improve their literacy rate: Kollidam, Thalainayar, Sirkali, Keelaiyur, Kilvelur, Sembanarkoil and Vedaranyam. Thalainayar block has highest gender gap in literacy rate 21.12. Mayiladuthurai block performed well in reducing gender gap in literacy to 15.47.

Table No 4.1

Sexwise and Blocwise Literacy Rates (2005-2006)

Sl. No.	Block	Urban			Rural			All			Gender Literacy Gap
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
1.	Nagapattinam	90.45	77.31	83.77	87.25	68.87	78.01	89.01	73.54	81.19	15.47
2.	Keelaiyur	85.12	71.77	78.02	83.16	63.76	73.27	85.24	66.42	75.35	18.56
3.	Kilvelur	89.08	74.34	81.34	84.01	65.19	74.43	85.42	68.85	77.14	18.42
4.	Thalainayar	85.0	65.62	75.04	84.07	62.58	73.29	84.25	65.52	75.12	21.12
5.	Vedaranyam	88.27	70.34	78.34	85.57	64.73	75.06	86.08	68.15	77.02	20.24
6.	Thirumarugal	91.61	78.61	84.9	86.17	69.15	77.54	86.67	70.05	78.36	16.62
7.	Sirkali	84.32	90.69	77.95	79.37	61.61	70.44	82.15	65.56	73.24	16.59
8.	Kollidam	NA	NA	-	78.91*	61.47*	70.1	78.91*	61.47*	70.16*	17.44
9.	Mayiladuthurai	87.67	92.78	82.61	82.99	65.43	74.2	86.48	72.12	79.30	14.66*
10.	Kuttalam	85.1	92.23	78.17	84.42	67.62	75.89	85.18	68.64	76.35	16.54
11.	Sembanarkoil	81.07	86.92	75.84	83.22	66.57	74.79	83.53	67.69	75.86	15.94
District Total		**90.47**	**77.53**	**83.89**	**83.29**	**65.18**	**74.16**	**84.9**	**68.00**	**78.33**	**16.94**
State		**89.0**	**76.0**	**82.5**	**77.1**	**55.3**	**66.2**	**82.4**	**64.4**	**73.5**	**18.00**
India		**86.2**	**72.8**	**79.8**	**70.5**	**45.8**	**58.5**	**75.85**	**54.16**	**64.84**	**21.69**

Source: Education Department, SSA, Nagapattinam District, 2007

NA – Not Available

_ Highest

* Lowest

Total Literacy Rate for Male and Female

The blockwise data on total literacy for male and female, urban male and female literacy, rural male and female literacy and gender gaps in literacy are presented in Table 4.1.

Regarding the total literacy rate for male and female, Nagapattinam block has the highest literacy rate with 81.19 percent, of which 89.01 percent is male literacy and 73.54 percent is female literacy. The lowest literacy rate is found in Kollidam block with 70.16 percent (male literacy 78.91 percent and female literacy 61.47 percent).

Urban Male and Female Literacy

The urban male and female literacy rates show that Thirumarugal block has the highest male literacy with 91.61 percent and Mayiladuthurai Municipality has the highest female literacy with 92.78 percent. The district average for males is 90.47 percent and females 77.53 percent respectively.

Rural Male and Female Literacy

The rural male and female literacy rates among the blocks show that Nagapattinam block has the highest male literacy with 87.25 percent and the lowest male literacy is seen in Kollidam block with 78.91 percent. In case of female literacy, in rural areas, Thirumarugal block has the highest rate with 69.15 per cent as against the district average of 65.18 percent. And Sirkali block has recorded the lowest female literacy with 61.61 percent.

Gender literacy gap

The overall gender literacy gap for the entire district is 16.94 percent, but it varies among the blocks. The highest gender literacy gap is found in Thalainayar block with 21.12 percent followed by Vedaranyam Municipality with 20.24. The gender literacy gap is found to be less in Mayiladuthurai Municipality with 14.66 percent.

Table No 4.2
Total literacy

State/District	Region	Literates (Number and percentage		
		Person	Male	Female
Tamil Nadu	Total	40524545 (73.45)	22809662 (82.42)	17714883 (64.43)
	Rural	20319498 (66.21)	11835689 (77.15)	8483809 (55.28)
	Urban	20205047 (82.53)	10973973 (88.97)	9231074 (75.99)
Nagapattinam	Total	996580 (76.34)	548142 (84.89)	448438 (67.96)
	Rural	751618 (65.37)	418324 (77.73)	333294 (52.85)
	Urban	244962 (83.89)	129818 (90.47)	115144 (77.53)

Source: Census of India, 2001

Table No 4.3
Total Literacy of SC

State/District	Region	Literates (Number and percentage		
		Person	Male	Female
Tamil Nadu	Total	11857504 (54.90)	5932925 (63.58)	5924579 (46.20)
	Rural	8308890 (54.53)	4159182 (63.49)	4149708 (45.59)
	Urban	3548614 (70.15)	1773743 (77.26)	1774871 (62.89)
Nagapattinam	Total	441231 (56.20)	219933 (64.39)	221298 (48.05)
	Rural	399441 (55.62)	199346 (63.42)	200095 (42.36)
	Urban	41790 (61.65)	20587 (68.97)	21203 (54.54)

Source: Census of India, 2001

Table No 4.4
Total Literacy of ST

State/District	Region	Literates (Number and percentage		
		Person	Male	Female
Tamil Nadu	Total	651321 (35.45)	328917 (42.68)	322404 (28.07)
	Rural	551143 (31.28)	278746 (38.12)	272397 (24.43)
	Urban	100178 (50.22)	50171 (56.82)	50007 (43.60)
Nagapattinam	Total	3420 (47.46)	1734 (53.40)	1686 (41.34)
	Rural	1618 (41.41)	824 (46.48)	794 (36.15)
	Urban	1802 (52.89)	910 (59.67)	892 (45.96)

Source: Census of India, 2001

Blockwise literacy ranking

Nagapattinam block tops the overall ranking of the literacy rate. Kollidam block is the poorest among eleven blocks in terms of literacy.

Table No 4.5

Blockwise literacy ranking

Sl. No.	Block	Rank
1.	Nagapattinam	1
2.	Keelaiyur	8
3.	Kilvelur	4
4.	Thalainayar	9
5.	Vedaranyam	5
6.	Thirumarugal	3
7.	Sirkali	10
8.	Kollidam	11
9.	Mayiladuthurai	2
10.	Kuttalam	6
11.	Sembanarkoil	7

Rankings were done based on total literacy rate.

Schools

The Government of Tamil Nadu with a view to providing education to all and access to school to all children opened 210 primary schools and 338 middle schools in the year 2007-2008. The state report cards on education reveal that Tamil Nadu has 24201 Government primary schools in 21950 villages. This does not include 9715 private primary schools which together make 33916 schools in 21950 villages. In Nagapattinam district there were 1374 schools in 2007. Among them, the number of government schools were 863, aided schools 320 and the number of private unaided schools was 183.

Table No 4.6

No. of Government / Local Body Schools - Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	60	60	61	63	66	66	67
Keelaiyur	48	48	51	49	49	50	51
Kilvelur	56	60	60	64	64	70	66
Thalainayar	58	58	58	60	60	59	60
Vedaranyam	77	77	76	77	77	77	78
Thirumarugal	75	78	78	79	79	80	80
Sirkali	76	76	75	78	81	83	81
Kollidam	80	80	81	82	86	88	87
Mayiladuthurai	110	110	111	110	112	109	117
Kuttalam	86	86	86	86	86	86	86
Sembanarkoil	82	82	83	83	83	89	90
Total	**808**	**815**	**820**	**831**	**843**	**849**	**863**

Source: Education Department, Nagapattinam, 2008.

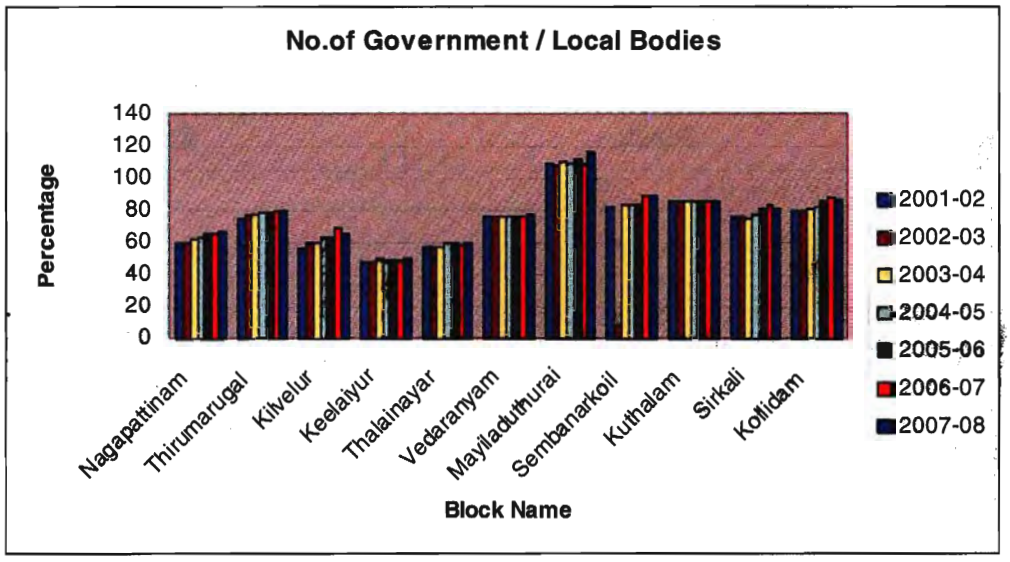

Figure 4.1

Table No 4.7

Private Aided Schools

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	28	30	29	29	30	30	29
Keelaiyur	16	18	16	17	17	19	18
Kilvelur	8	9	9	9	9	10	10
Thalainayar	11	13	11	13	12	13	12
Vedaranyam	65	64	65	65	65	64	65
Thirumarugal	9	10	10	10	10	12	10
Sirkali	38	37	38	37	37	37	37
Kollidam	20	20	20	20	20	19	20
Mayiladuthurai	41	41	41	41	42	42	42
Kuttalam	19	19	19	20	20	21	20
Sembanarkoil	58	63	63	63	63	60	57
Total	**313**	**324**	**321**	**324**	**325**	**327**	**320**

Source: Education Department, Nagapattinam, 2008.

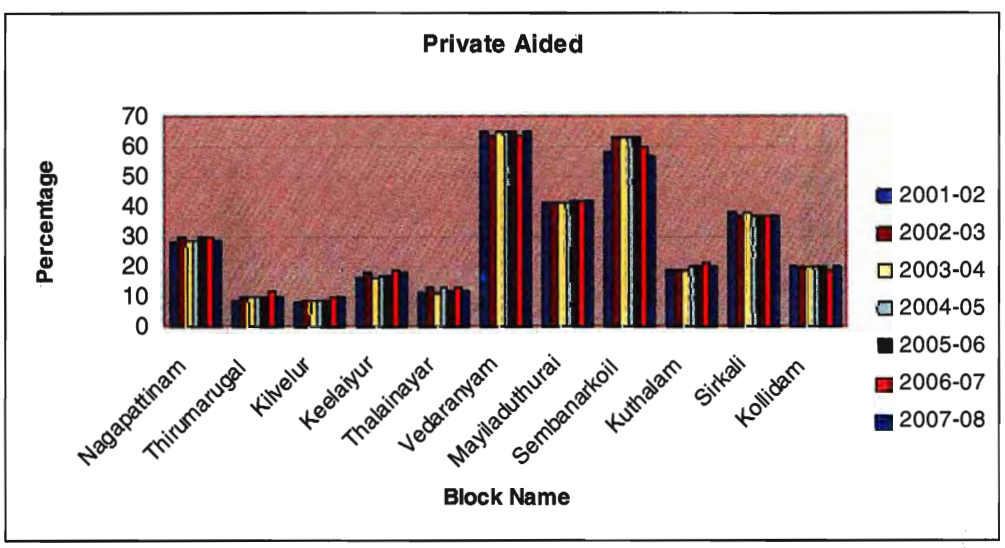

Figure 4.2

Table No 4.8

Private Unaided Schools

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	26	26	30	36	44	41	37
Keelaiyur	4	4	4	5	6	5	
Kilvelur	8	7	7	7	12	8	10
Thalainayar	2	3	3	1	4	4	4
Vedaranyam	4	4	4	6	11	12	11
Thirumarugal	2	2	3	7	13	11	12
Sirkali	16	18	8	9	21	19	20
Kollidam	4	4	3	6	8	12	12
Mayiladuthurai	14	16	14	27	34	40	34
Kuttalam	9	9	9	14	19	18	19
Sembanarkoil	13	13	13	17	22	23	24
Total	**102**	**106**	**98**	**135**	**194**	**193**	**183**

Source: Education Department, Nagapattinam, 2008.

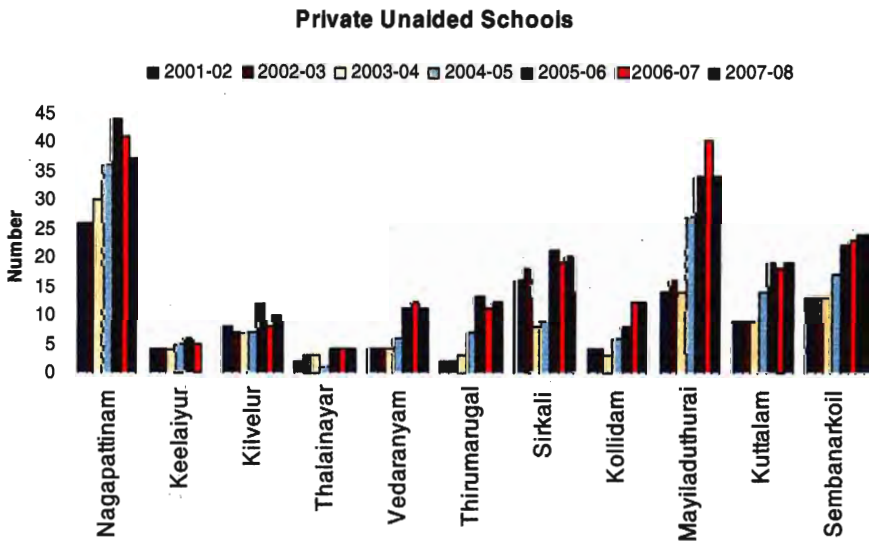

Figure. 4.3

Table No 4.9

Total No. of Schools

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	114	116	120	128	140	137	133
Keelaiyur	68	70	71	71	72	74	75
Kilvelur	72	76	76	80	85	88	86
Thalainayar	71	74	72	74	76	76	76
Vedaranyam	146	145	145	148	153	153	154
Thirumarugal	86	90	91	96	102	103	102
Sirkali	130	131	121	124	139	139	138
Kollidam	104	104	104	108	114	119	120
Mayiladuthurai	165	167	166	178	188	191	193
Kuttalam	114	114	114	120	125	125	125
Sembanarkoil	153	158	159	163	168	172	172
Total	**1223**	**1245**	**1239**	**1290**	**1362**	**1369**	**1374**

Source: Education Department, Nagapattinam, 2008.

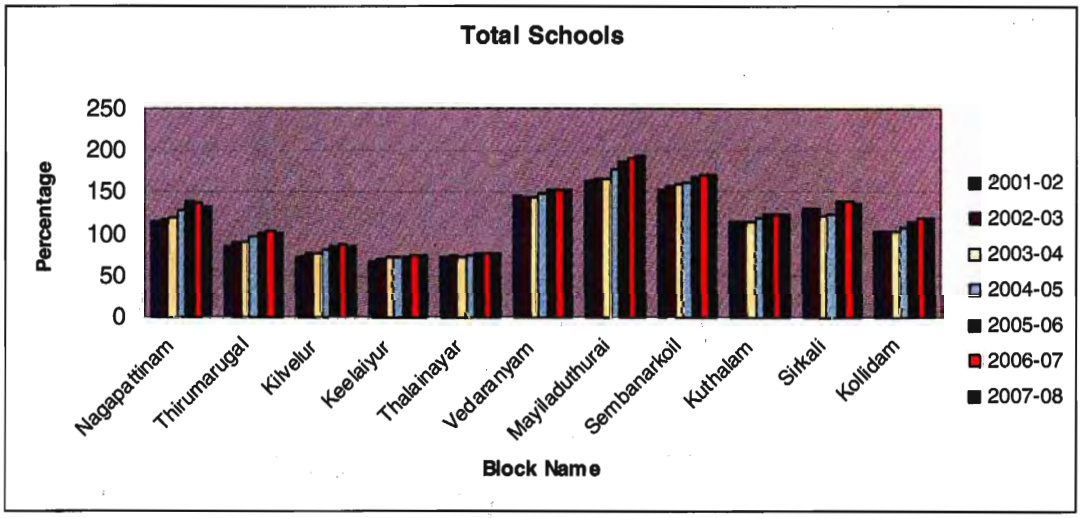

Figure 4.4

Gross Access Rate – Primary (GAR)

Gross Access rate at the primary level indicates the level of accessibility among the residents of Nagapattinam district. The following table shows the Gross Access Rate at primary level in the Nagapattinam district. The series of data over a period of time (2001-2007) shows there is 100 % access to schools. Only in the year 2001, a few blocks namely Nagapattinam, Thirumarugal, Thalainayar and Kollidam had 99.5 access rate.

Table No 4.10

Gross Access Rate – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	99.0	100	100	100	100	100
Keelaiyur	100	100	100	100	100	100
Kilvelur	100	100	100	100	100	100
Thalainayar	99.0	100	100	100	100	100
Vedaranyam	100	100	100	100	100	100
Thirumarugal	99.0	100	100	100	100	100
Sirkali	100	100	100	100	100	100
Kollidam	99.0	100	100	100	100	100
Mayiladuthurai	100	100	100	100	100	100
Kuttalam	100	100	100	100	100	100
Sembanarkoil	100	100	100	100	100	100
Total	**99.64**	**100**	**100**	**100**	**100**	**100**

Source: Education Department, Nagapattinam, 2008.

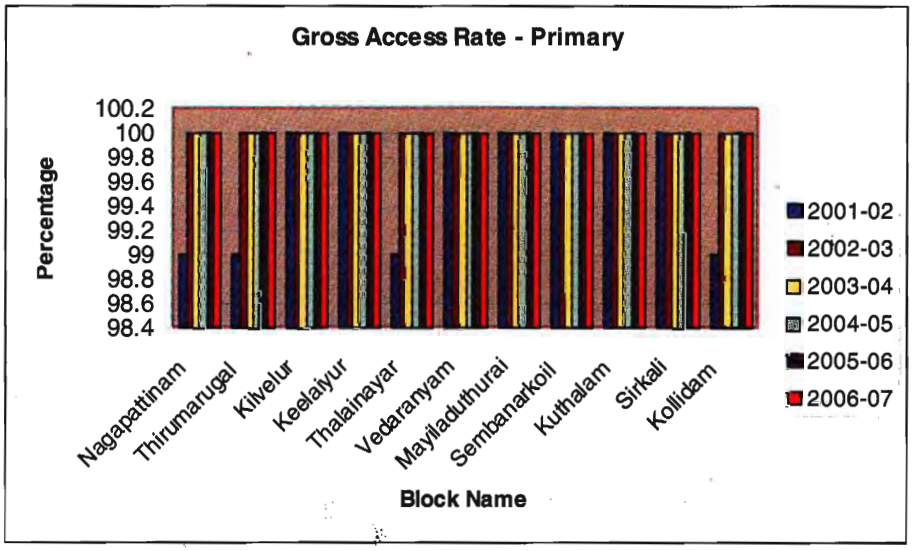

Figure 4.5

Gross Enrolment Ratio (GER)- Primary

GER refers to enrolment at a specified level of schooling, irrespective of the age of students enrolled, to the population of the children in the age group expected to be at that level of schooling as per prevalent norms on school enrollment. For instance GER at primary level i.e., for classes 1-5 would be to the percentage of children in the classes 1-5 to the total number of children in the age group 7-11 years. In Nagapattinam district, the data shows that there is a slight improvement over a period of time. Sembanarkoil, Mayiladuthurai and Kilvelur are performing well.

Table No 4.11

Gross Enrolment Ratio – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	96.0	100	99.2	98.95	99.97	99.94
Keelaiyur	97.5	99.5	99.2	99.89	99.93	100
Kilvelur	97.5	101.5	99.2	99.82	100	100.2
Thalainayar	97.0	99.0	98.7	99.12	99.46	100
Vedaranyam	96.0	99.0	98.9	99.91	99.83	99.99
Thirumarugal	96.1	98.5	99.2	99.89	99.91	99.92
Sirkali	96.5	99.5	99.2	99.99	100	99.92
Kollidam	97.0	97.5	98.8	99.56	100	100
Mayiladuthurai	97.6	100	99.2	99.65	100	100.3
Kuttalam	97.5	98.5	99.2	99.98	100	100
Sembanarkoil	98.0	98.0	98.8	99.97	99.93	100.65
Total	**96.97**	**99.18**	**90.05**	**99.70**	**99.91**	**100.08**

Source: Education Department, Nagapattinam, 2008.

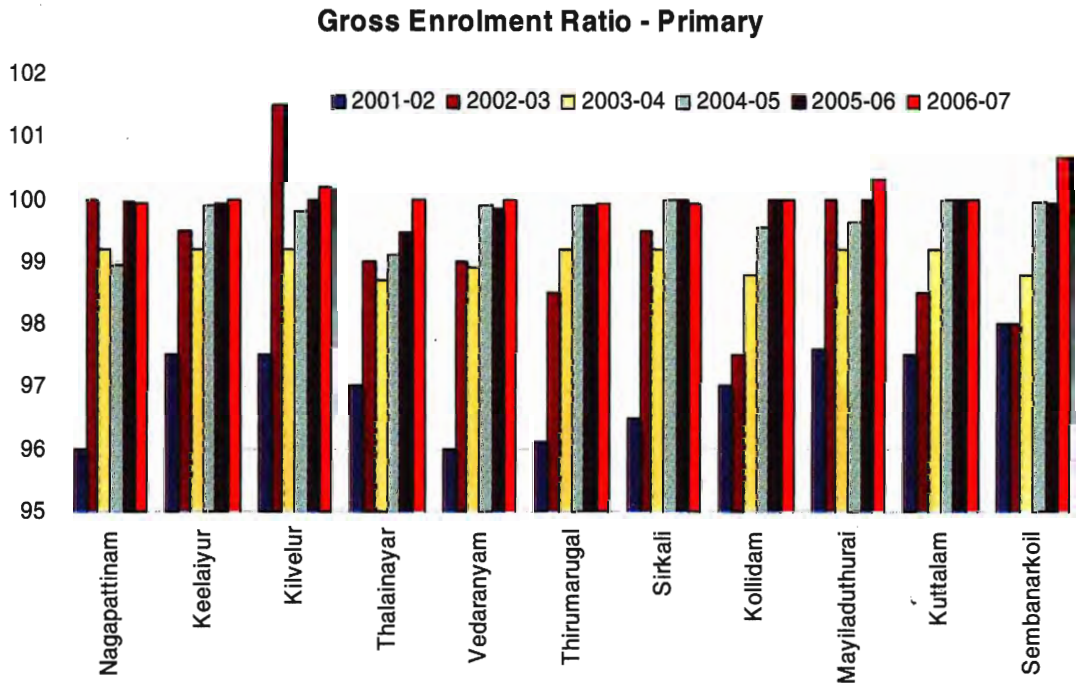

Figure 4.6

Net Enrolment Ratio (NER) – Primary

NER refers to proportion of the population of a particular age group enrolled at a specific level of schooling to the total population in that age group. The NER in primary education in Nagapattinam district increased from 2001 – 2007. The overall NER of the district in the year 2001 was 91. It increased to 99.48 in the year 2007.

Mayiladuthuari block had the lowest NER in the year 2001-2002. Over a period of time, it performed well and it reached 99.52 in the year 2006-2007. There is not much variation among the blocks and there is consistency in performance.

Table No 4.12

Net Enrolment Ratio – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	94.0	95.5	98.5	99.0	99.1	99.68
Keelaiyur	91.5	92.0	98.5	98.8	99.0	99.68
Kilvelur	92.0	97.0	98.5	98.7	98.9	99.50
Thalainayar	91.0	92.0	97.0	98.0	98.9	99.36
Vedaranyam	90.0	91.0	97.5	97.9	98.5	99.72
Thirumarugal	91.5	93.5	98.5	99.0	99.2	98.53
Sirkali	90.5	92.0	98.5	98.9	99.0	99.82
Kollidam	90.0	94.0	97.3	98.2	98.9	99.44
Mayiladuthurai	89.5	96.0	98.0	98.6	98.9	99.52
Kuttalam	91.0	95.5	98.5	99.0	99.1	99.66
Sembanarkoil	90.5	96.0	97.5	98.0	98.0	99.64
Total	**91.0**	**94.0**	**98.0**	**98.0**	**99.30**	**99.48**
State					**98.48**	

Source: Education Department, Nagapattinam, 2008.

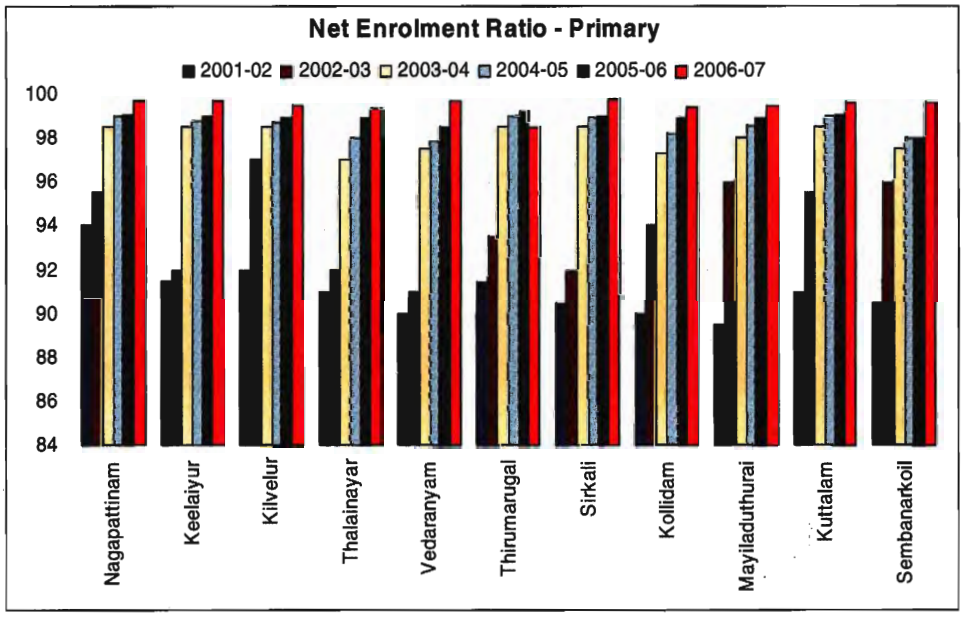

Figure 4.7

Repetition Rate (RR) - Primary

In the year 2007, the RR got reduced considerably in all blocks. Even though Sirkali performed low in literacy, the RR was also low. The highest repetition rate was in Keelaiyur, Thalainayar and Vedaranyam. RR was very high in the year 2001. District administration's sustained efforts gave good result. It took efforts in all the

blocks to minimize the RR. From the year 2005 district officials sensitized more on social development issues. They made constant efforts and this gave drastic reduction in RR. 100% access has been ensured in primary education in this district. That is well reflected high rates of GER and NER. But a few blocks like Keelaiyur, Thalainayar, Mayiladuthurai, Vedaranyam had shown high repetition rate. This is the major reason for the low completion rates in the above blocks. Thirumarugal block has high dropout rate. It is quite surprising that despite high literacy rates in the blocks, high repetition and high dropout rates in primary education are also observed in some blocks. This needs a closer examination and necessary measures are needed to remedy this problem.

Table No 4.13

Repetition Rate - Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	34	32	32	30.26	24.58	9.46
Keelaiyur	44	38.5	34	32.75	29.34	12.55
Kilvelur	38	30	34.5	30.15	21.49	6.74
Thalainayar	39	36.5	40	34.15	27.57	12.09
Vedaranyam	48	32	31.5	30.25	30.19	12.19
Thirumarugal	40	36.5	31.2	28.99	22.82	7.94
Sirkali	38	30	28	26.57	19.16	4.36
Kollidam	36	30	29.5	29.12	17.54	5.50
Mayiladuthurai	36	32.5	30.5	27.85	26.22	11.15
Kuttalam	35	33	34.1	27.62	20.71	5.24
Sembanarkoil	30	32	30.3	29.14	21.27	6.09
Total	**38**	**33**	**32**	**30**	**23.52**	**8.48**

Source: Education Department, Nagapattinam, 2008.

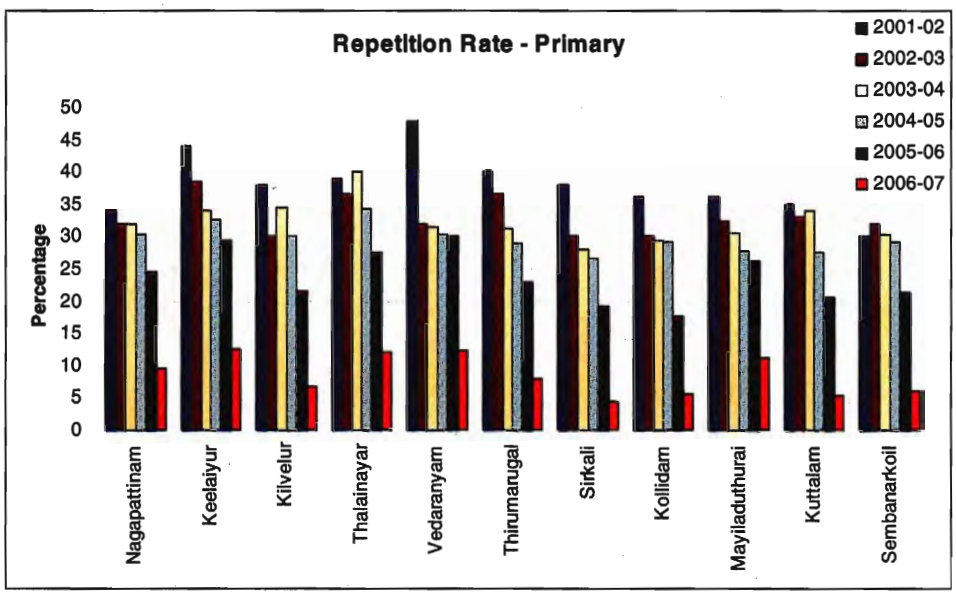

Figure 4.8

Dropout Rate – Primary

Along with students repeating a class, the dropout rate gives an indication about the wastage of school education and tends to undermine benefits of increased enrollment. So dropout rate and attendance rate qualitatively supplement the use of enrollment rate. Nagapattinam block reduced the rate of dropout by more than half from the year 2002-2003 to 2003-2004. But it has increased in Keelaiyur block from 5.5 to 7.9 in the same year. Tsunami struck in the year 2004 and the dropout rates declined drastically in the consequent years. After the Tsunami struck, a number of NGOs and INGOs working in Nagapattinam district increased. The Government of Tamil Nadu concentrated on Nagapattinam district to bring back normalcy. NGOs constantly interact with officials and they are sensitizing the people on social development issues. This might be the reason for the drastic reduction in dropout rate.

Table No 4.14

Dropout Rate – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	13.5	13	4.9	2.38	1.14	1.18
Keelaiyur	6	5.5	7.29	3.06	0.77	0.50
Kilvelur	13.5	13	6.1	2.59	0.91	0.61
Thalainayar	9	8	5.8	1.81	0.57	0.98
Vedaranyam	7	6.5	3.4	1.02	0.65	0.64
Thirumarugal	7.5	7.4	8.2	4.19	2.74	2.18
Sirkali	7.5	7	8.08	2.88	1.54	1.28
Kollidam	7.5	7	6.12	3.11	0.25	0.23
Mayiladuthurai	9.5	9.5	6.69	1.12	0.81	0.85
Kuttalam	6	5	3.5	4.39	0.18	0.20
Sembanarkoil	6	6	5.52	2.29	0.16	0.28
Total	**8**	**8**	**6**	**3**	**0.82**	**0.81**

Source: Education Department, Nagapattinam, 2008.

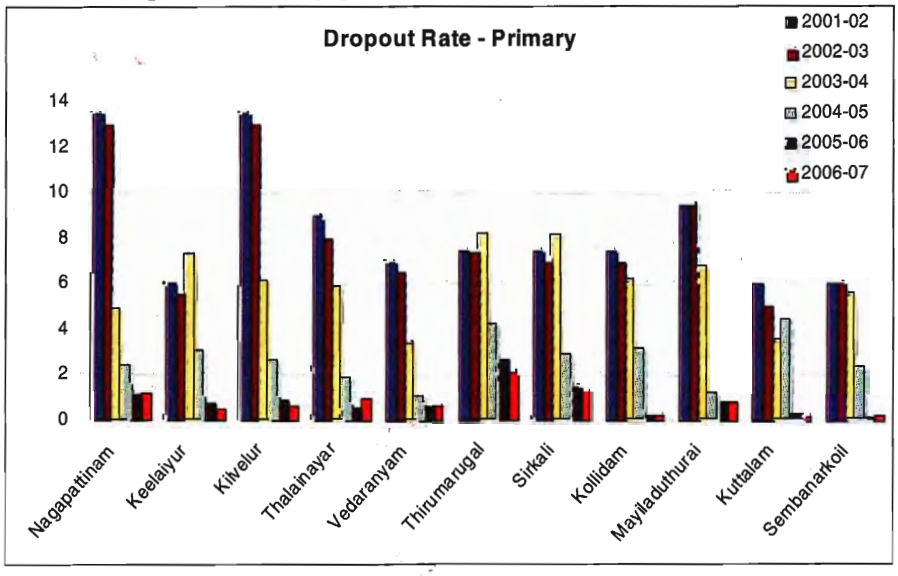

Figure 4.9

Attendance Rate – Primary

The attendance rate of primary education in Nagapattinam district in the year 2007 was 97.20. From 88 it has increased more than 10 percentage points over a period of five years. Mayiladuthurai has performed very well over a period of time. In the year 2005-2006, all the blocks reached more or less 99 percent but this effort decreased in the following year and showed slight regression.

Table No 4.15
Attendance Rate – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	87	93.5	94	99.65	99.7	97.25
Keelaiyur	80	92.5	93	99.2	99.2	97.24
Kilvelur	88	94	95	99.65	99.8	97.15
Thalainayar	92	94.5	96	98	99	97.86
Vedaranyam	88	94.5	95	99	98.9	97.16
Thirumarugal	88	90	91	99.78	99.8	97.33
Sirkali	84	96.5	97	98.9	96.45	97.25
Kollidam	90	93.5	95	98.74	99.65	97.35
Mayiladuthurai	80	92.5	94	99.65	98.56	96.25
Kuttalam	85	94	95	99.6	99.54	98.25
Sembanarkoil	92	94	96	99.5	99.6	97.15
Total	**88**	**93**	**95**	**99**	**97.1**	**97.20**

Source: Education Department, Nagapattinam, 2008.

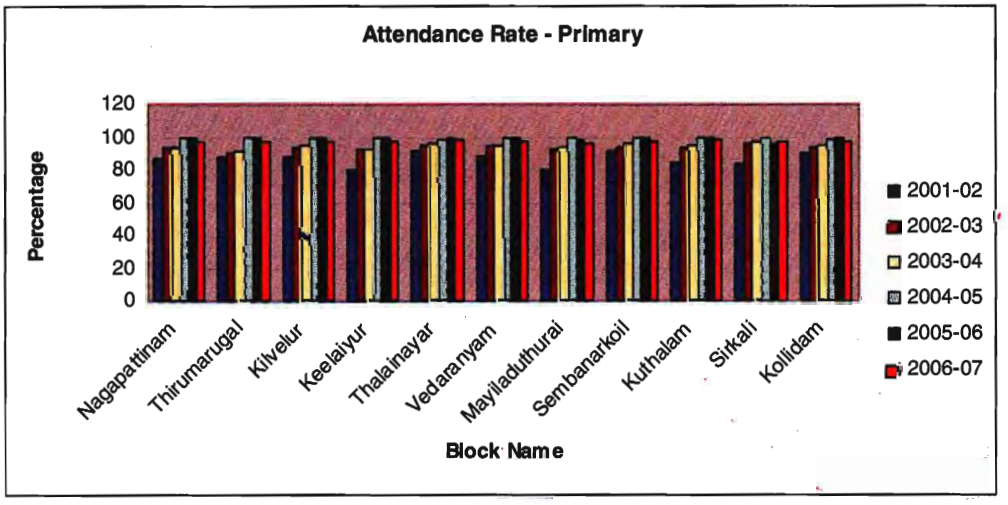

Figure 4.10

Completion Rate – Primary

The completion rate of Nagapattinam in the year 2001-2002 was only 52. But this rate improved to 90 in 2006-07. Kuttalam, Sirkali and Kollidam blocks reached 94 percent in the year 2006-2007. Thalainayar block had the lowest completion rate in

the year 2006-2007. When compared to the year 2005-2006, the completion rate of primary education in 2006-2007 improved by more than 15 percent in all blocks.

Table No 4.16

Completion Rate – Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	52.0	55.0	63.1	67.5	74.28	89.36
Keelaiyur	49.5	56.0	58.71	69.5	70.89	86.97
Kilvelur	55.0	57.0	59.4	59.9	77.59	92.67
Thalainayar	51.7	53.5	54.2	64.86	71.87	86.95
Vedaranyam	51.5	61.5	65.1	69.89	70.11	87.19
Thirumarugal	51.0	54.0	60.06	62.79	74.78	89.86
Sirkali	54.8	63.2	63.92	62.56	79.3	94.38
Mayiladuthurai	58.5	60.5	62.81	76.56	72.94	88.02
Kollidam	56.0	61.0	64.38	69.61	82.21	94.29
Kuttalam	58.0	62.0	62.4	65.79	79.5	94.58
Sembanarkoil	56.0	62.0	64.18	75.56	78.57	93.65
Total	**54.0**	**59.0**	**60.0**	**68.0**	**75.64**	**90.72**

Source: Education Department, Nagapattinam, 2008.

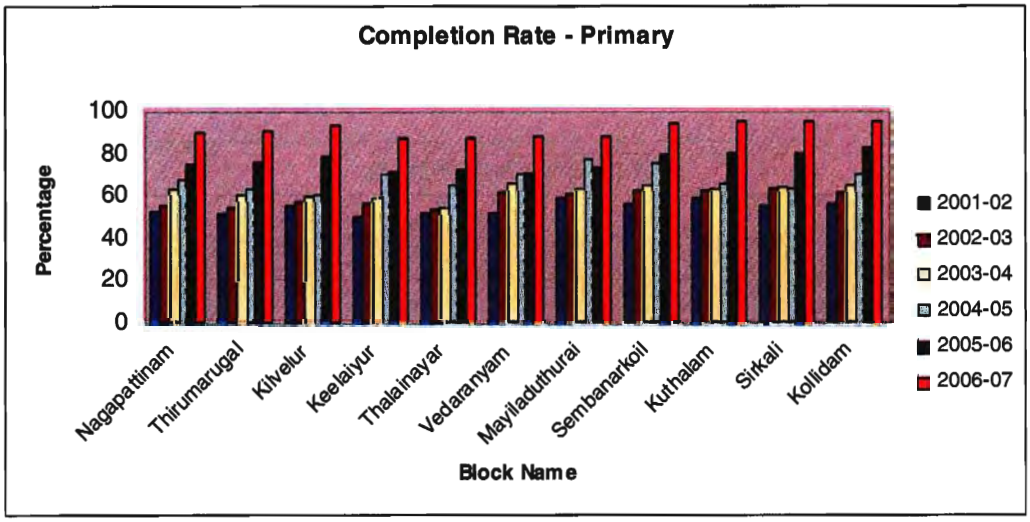

Figure 4.11

Pupil-Teacher Ratio – Primary

The official norm of the pupil-teacher ratio in the primary education is 1:40. This trend was reflected in the year 2006-2007 and it was even below 30. Only Kollidam block had a highest pupil- teacher ratio during 2003-04 and 2004-2005 at 1:47. But this came down to 1:28 in the year 2006-07. Even though pupil-teacher ratio is good, learning level of children is low. This was reflected in the ASER report 2007. The capacity of the teachers has to be increased and in-service training has to be given.

Table No 4.17

Pupil-Teacher Ratio : Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	41	41	42	40	41	30
Keelaiyur	38	39	32	32	38	26
Kilvelur	41	42	39	39	41	30
Thalainayar	41	42	32	32	41	29
Vedaranyam	38	39	29	29	38	26
Thirumarugal	39	39	35	30	39	27
Sirkali	40	39	36	36	40	28
Kollidam	40	40	47	47	40	28
Mayiladuthurai	40	41	43	43	40	28
Kuttalam	38	43	38	38	38	26
Sembanarkoil	43	41	43	43	43	30
Total	**40**	**40**	**38**	**41**	**31**	**28**
Tamil Nadu						**36**
India						**43**

Source: Education Department, Nagapattinam, 2008.

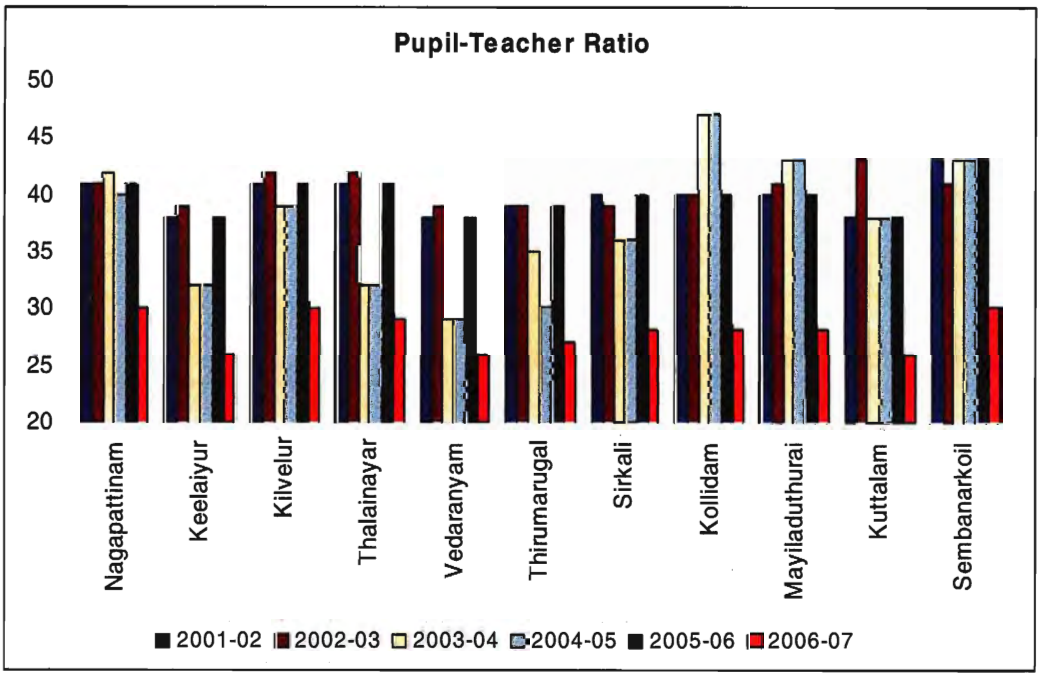

Figure 4.12

Upper Primary

Gross Access Rate – Upper Primary

Access to education is very important for universalisation of education. Nagapattinam district is predominantly a rural area and a few blocks like Sirkali, Kollidam, Thirumaruagl are cut off from the main land. Students go to schools by boats. Remotely located and sparsely populated villages face challenges regarding the access to schools. Even though Government ensures primary schools in all habitations, upper primary education is a distant dream for many children. With regard to GAR in upper primary, all the blocks in Nagapattinam district achieved 100 % in the year 2006-2007. The district administration achieved 100% GAR from the year 2003 onwards.

Table No 4.18

Gross Access Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	93.0	98.62	100	100	100	100
Keelaiyur	97.0	97.39	100	100	100	100
Kilvelur	98.0	93.91	100	100	100	100
Thalainayar	99.0	96.52	100	100	100	100
Vedaranyam	100	99.38	100	100	100	100
Thirumarugal	93.0	94.64	100	100	100	100
Sirkali	100	98.24	100	100	100	100
Kollidam	95.0	100	100	100	100	100
Mayiladuthurai	99.0	100	100	100	100	100
Kuttalam	100	98.63	100	100	100	100
Sembanarkoil	98.0	100	100	100	100	100
Total	**97.45**	**97.94**	**100**	**100**	**100**	**100**

Source: Education Department, Nagapattinam, 2008.

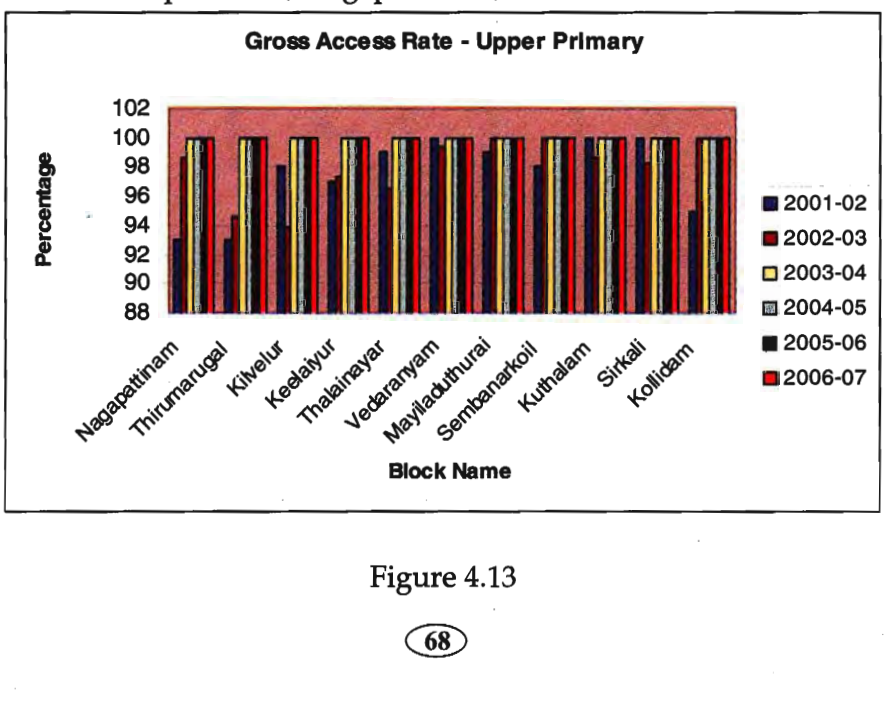

Figure 4.13

Gross Enrolment Rate – Upper Primary

The gross enrolment in upper primary education in the Nagapattinam district is 102.38. In the year 2001-2001 it was only 80.69. Sirkali block had lowest GER in 2001-2001 i.e, 78.1. It reached 102.51 in the year 2006-2007. There is continuous improvement with regard to GER in all blocks.

Table No 4.19

Gross Enrolment Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	79.5	90.0	98.2	99.43	100	102.81
Keelaiyur	78.2	84.0	99.72	99.82	99.93	102.56
Kilvelur	81.5	98.0	98.52	99.98	101.33	102.14
Thalainayar	81.0	95.0	93.72	94.82	95.22	102.23
Vedaranyam	83.7	98.0	99.0	100.23	101.4	102.3
Thirumarugal	82.2	94.0	99.43	100	100.97	102.69
Sirkali	78.1	92.0	99.65	98.92	99.47	102.51
Kollidam	81.2	90.0	98.0	98.84	99.7	102.23
Mayiladuthurai	82.1	94.0	98.52	100.92	100.28	102.37
Kuttalam	78.1	90.5	98.72	99.9	100.67	102.08
Sembanarkoil	82.0	94.0	99.6	100.54	101.8	102.21
Total	**80.69**	**92.68**	**98.46**	**99.4**	**91.89**	**102.38**

Source: Education Department, Nagapattinam, 2008.

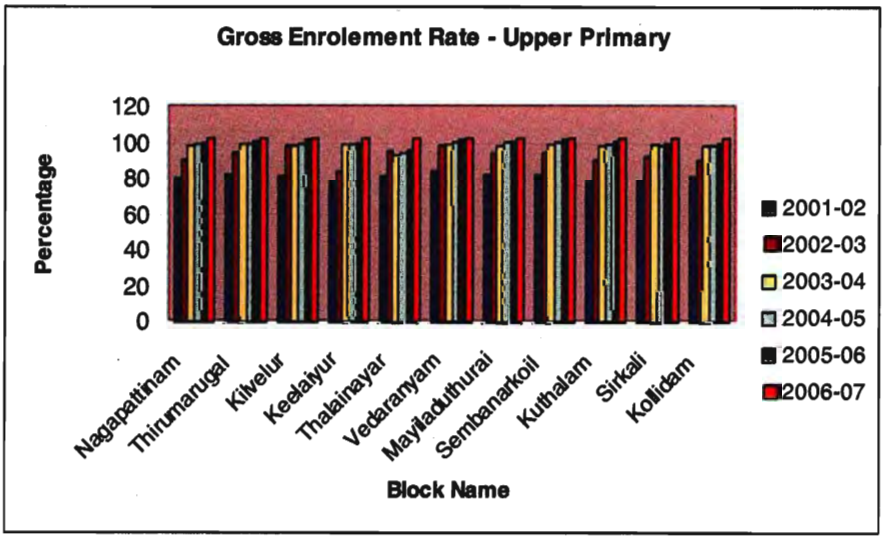

Figure 4.14

Net Enrolment Rate – Upper Primary

NER of primary and upper primary are the same in Nagapattinam district. There is no variation among the blocks. The NER of upper primary in all blocks reached more than 99% in the year 2006-2007 from 87 % in the year 2001-2002. The same trend prevails in all blocks. The district adminstration's sustained efforts have produced desirable results in all blocks. There was a big jump from the year 2002-2003 to 2003-2004 - It increased from 87% to 97%.

Table No 4.20
Net Enrolment Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	86.2	88.0	97.0	98.17	98.5	99.08
Keelaiyur	88.9	82.0	98.5	98.39	98.7	99.43
Kilvelur	86.4	87.5	96.5	97.03	97.0	99.03
Thalainayar	88.1	93.0	98.5	98.56	98.7	99.58
Vedaranyam	86.0	98.0	98.0	99.01	99.3	99.68
Thirumarugal	87.4	87.0	98.0	98.86	98.6	99.50
Sirkali	86.7	84.0	98.5	99.25	98.8	99.07
Kollidam	86.6	85.0	97.0	97.73	98.1	99.87
Mayiladuthurai	87.2	85.5	96.5	97.4	97.9	99.68
Kuttalam	87.0	86.5	96.5	97.27	98.0	99.43
Sembanarkoil	86.4	84.5	97.5	97.88	98.2	99.28
Total	**87.0**	**87.0**	**97.0**	**98.0**	**98.31**	**99.33**

Source: Education Department, Nagapattinam, 2008.

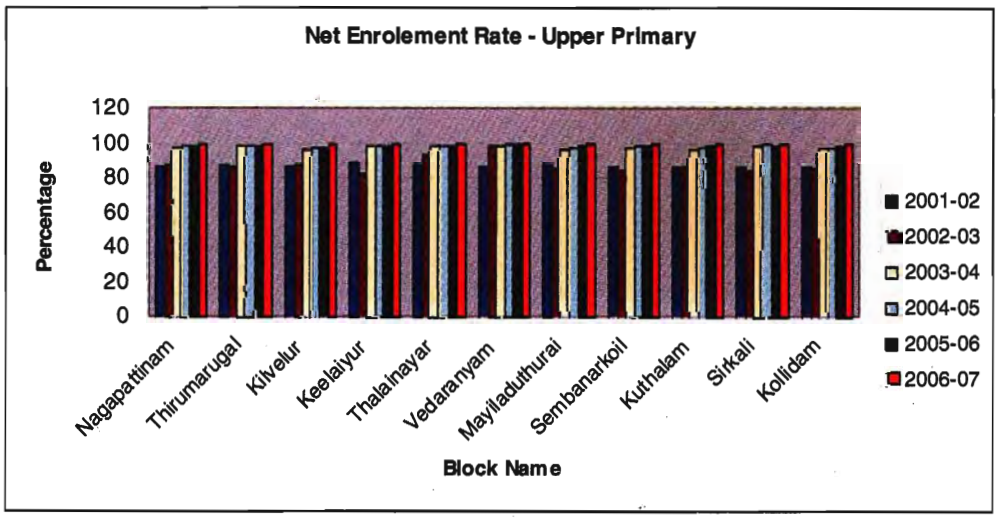

Figure 4.15

Repetition Rate – Upper Primary

In the Repetition Rate of Upper primary, RR of Primary trend continues. The RR was higher in the year 2004-2005. Tsunami struck in the year 2004. This disaster may be one of the reasons for the higher repetition rate in the subsequent year. Thirumaruagal, Sembanarkoil, Kuttalam had the highest RR in the year 2004-2005

and 2005-2006. These blocks are highly inaccessible areas. In Kuttalam block the repetition rate during 2005-2006 was 22.25. It had been drastically reduced to 11.21 in the next year.

Table No 4.21

Repetition Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	11.5	10	8.5	12.7	7.9	6.9
Keelaiyur	13	12	9.2	13.7	11.85	6.28
Kilvelur	13	12	12.1	18.1	18.86	10.15
Thalainayar	14	14	12.7	19	10.94	8.21
Vedaranyam	13	10	8.1	12.1	8.52	6.35
Thirumarugal	15	14	13.8	20.6	13.21	9.15
Sirkali	15	10	8	11.9	18.32	7.21
Kollidam	15	14	13	19.4	14.01	8.14
Mayiladuthurai	12	10	9.8	14.6	14.75	6.25
Kuttalam	15	15	14.5	21.6	22.25	11.21
Sembanarkoil	17	15	13.5	20.1	14.3	7.31
Total	**14**	**12**	**11**	**17**	**13.67**	**7.91**

Source: Education Department, Nagapattinam, 2008.

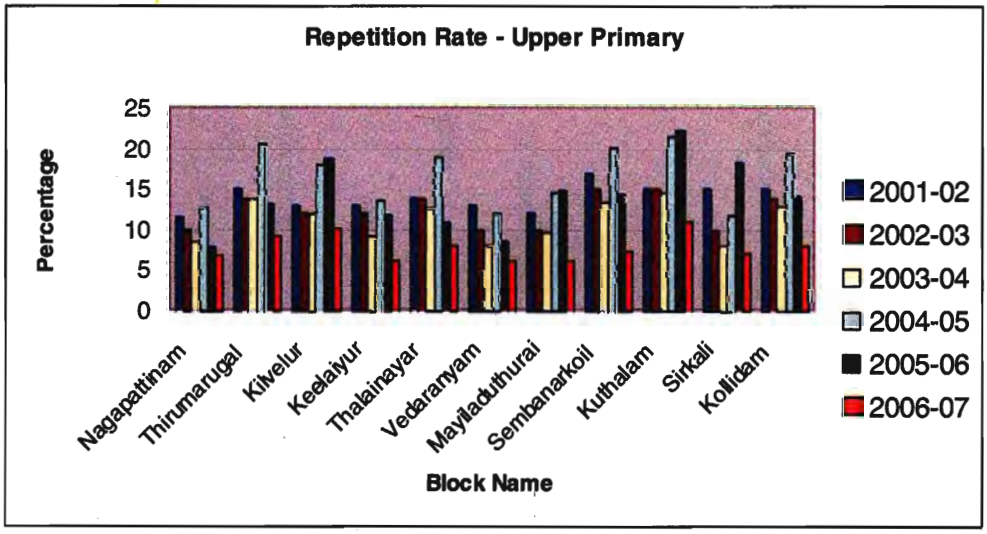

Figure 4.16

Dropout Rate – Upper Primary

Dropout rate is the proportion of school-aged children who do not complete a particular school cycle. Besides the RR, the dropout rate also gives an indication of the nonperformance of school education. Indicators like dropout rate and enrolment rate will supplement the attendance rate. As per the data given by the district administration, the dropout rate of upper primary of Nagapattinam district is 1.88. Administration has reduced dropout rate from 4 to 1.88. But in the year 2004 – 2005,

dropout increased in the upper primary and it was 7. Kuttalam, Thirumarugal and Sirkali blocks have performed well over the years.

Table No 4.22
Dropout Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	4	3	3	8.04	3.7	1.06
Keelaiyur	5	4	2.6	7.26	2.3	1.41
Kilvelur	4	3	2.8	5.71	2.72	2.44
Thalainayar	5	4.5	5.2	7.51	4.68	0.75
Vedaranyam	3	3	2.6	7.92	1.81	1.33
Thirumarugal	4	4	3.9	5.69	4.09	1.97
Sirkali	3	2.5	3.4	8.7	2.04	2.48
Kollidam	5	4	3.4	5.72	3.65	2.81
Mayiladuthurai	3	2	2.7	7	2.19	1.91
Kuttalam	4	3.5	2.7	4.19	5.12	2.26
Sembanarkoil	2	2	1.8	3.85	1.81	2.23
Total	**4**	**3**	**3**	**7**	**2.87**	**1.88**

Source: Education Department, Nagapattinam, 2008.

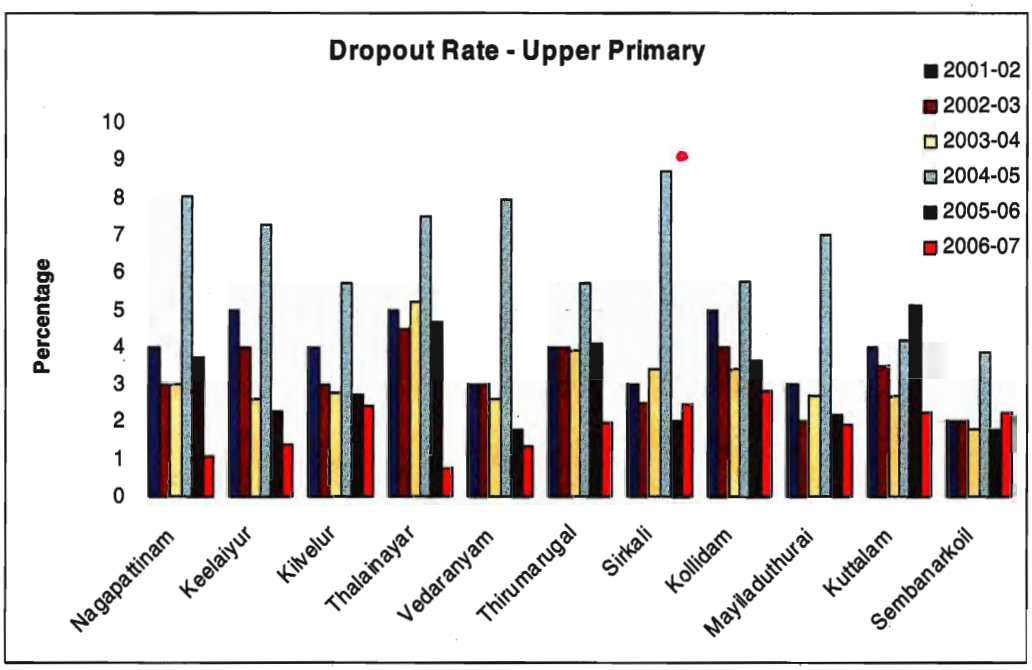

Figure 4.17

Attendance Rate – Upper Primary

The attendance rate of upper primary in Nagapattinam district was 97.65 in the year 2006-2007. It improved its attendance rate from 72 in the year 2001-2002 to 97.65 in the year 2006-2007.Thalainayar block fared better than other blocks in the year 2003-2004. The performance with regard to attendance rate is more or less the

same in all the blocks. Only Vedaranyam block had the attendance rate of 96.25 in 2006-07. Three blocks in Nagapattinam district achieved 98 and all other blocks except Vedaranyam reached 97. But no block reached 100.

Table No 4.23

Attendance Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	71	78.5	83	86	84	97.23
Keelaiyur	75	78.5	82	85	83	97.25
Kilvelur	74	77.5	81	84	86	98.56
Thalainayar	76	79.5	95	96	95	97.53
Vedaranyam	74	77	82	87	89	96.25
Thirumarugal	72	81.5	82	84	86	97.63
Sirkali	72	75.5	78	83	81	97.25
Kollidam	72	80.5	82	84	85	97.42
Mayiladuthurai	73	79.5	80	88	87	98.75
Kuttalam	70	77.5	85	87	86	97.56
Sembanarkoil	71	83.5	85	86	83	98.75
Total	**72**	**79**	**83**	**85**	**87.2**	**97.65**

Source: Education Department, Nagapattinam, 2008.

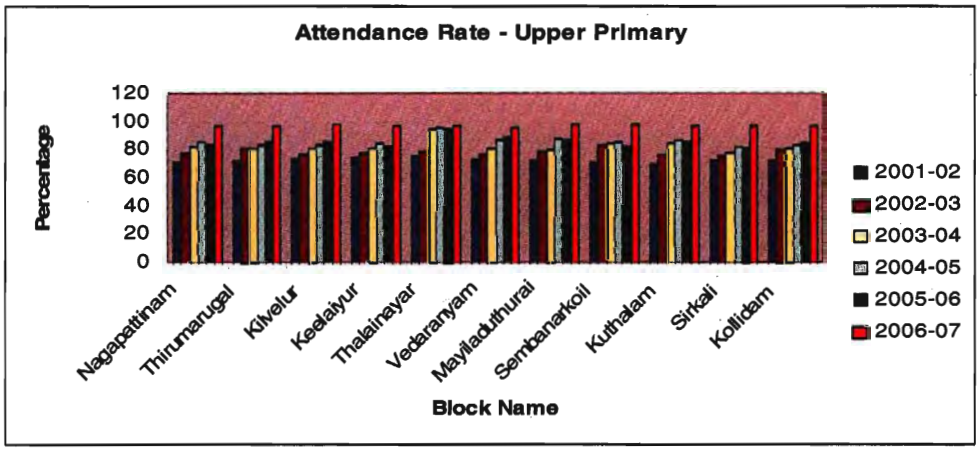

Figure 4.18

Completion Rate – Upper Primary

In Nagapattinam district, completion rate was 90.21 in 2006-2007. In the year 2004-2005, the completion rate was only 77. Disaster happened in December 2004. This might be the reason for the low completion rate. There is not much difference among blocks with regard to completion rate at the upper primary level. Nagapattinam block fared better in completion rate in all the years except 2004-2005. During that year, Vedaranyam topped the list among all blocks. Kuttalam block has low completion rate in upper primary. Based on the data given by district administration, we find that inter-block variations are not considerable.

In upper primary education, even though the district has performed well in terms of access and enrolment, a few blocks like Thirumarugal, Kilvelur, Thalainayar, Kuttalam and Kollidam performed poorly in terms of RR, DR, and CR. These blocks are highly rural in character which may be one of the reasons for poor performance.

Table No 4.24

Completion Rate – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	85.0	87	88.5	81.73	90.21	92.04
Keelaiyur	82.0	84	88.2	73.62	85.64	92.31
Kilvelur	83.0	85	85.1	77.64	80.66	87.41
Thalainayar	81.0	81.5	82.1	75.64	84.29	91.04
Vedaranyam	84.0	87	89.3	85.96	89.57	92.32
Thirumarugal	81.0	82	82.3	76.44	82.13	88.88
Sirkali	82.0	88	88.6	74.68	79.56	90.31
Kollidam	80.0	82	83.6	71.65	82.3	89.05
Mayiladuthurai	85.0	88	87.5	78.15	85.09	91.84
Kuttalam	81.0	82	82.8	76.15	74.78	86.53
Sembanarkoil	81.0	83	84.7	72.85	83.81	90.56
Total	**82.0**	**85**	**86**	**77**	**83.5**	**90.21**

Source: Education Department, Nagapattinam, 2008.

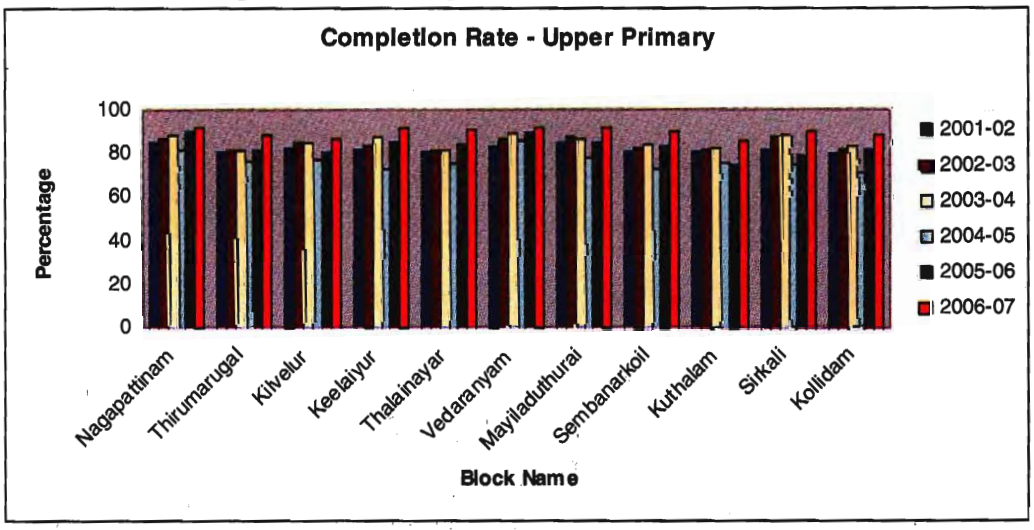

Figure 4.19

Table No 4.25

Pupil-Teacher Ratio : Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Nagapattinam	56	56	32	48	46	30
Keelaiyur	69	69	43	78	74	26
Kilvelur	65	65	29	58	55	28
Thalainayar	59	60	61	68	65	29
Vedaranyam	54	55	58	65	68	26
Thirumarugal	60	60	37	45	39	29
Sirkali	61	61	60	66	65	28
Kollidam	56	56	51	68	67	28
Mayiladuthurai	58	58	43	58	55	28
Kuttalam	65	65	61	68	66	27
Sembanarkoil	57	57	30	48	47	29
Total	**60**	**60**	**49**	**60**	**58**	**28**
State						**54**

Source: Education Department, Nagapattinam, 2008.

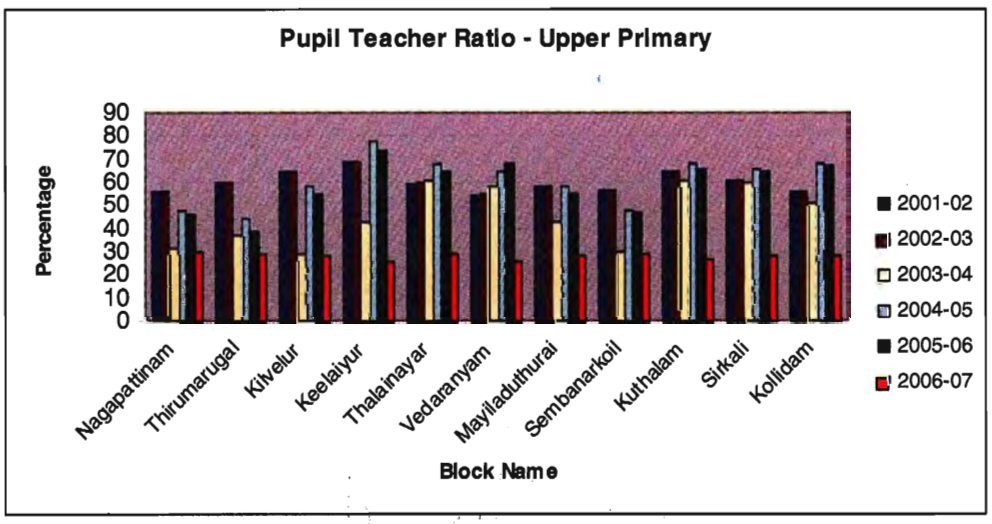

Figure 4.20

Educational Indicator- Nagapattinam District- 2007

Performance at Primary level – All

In Nagapattinam district GER of the girls is high. For boys, GER level is 100.07 and for girls it is 100.09. In NER and CR also, girls fare better than boys. RR and DR are low in girls and slightly high in boys. In Keelvelur and Vedaranyam blocks, GER and NER of boys are higher than those of girls. In a few blocks like Mayiladuthurai,

Thirumarugal and Nagapattinam, the CR of boys is slightly higher than that of girls. In Thalainayar, Kilvelur and Thirumarugal blocks RR is higher among boys. Nagapattinam is a predominantly agricultural district. Agricultural activities are labour-intensive. This might be one of the reasons for higher RR and DR among boys. As far as gender issues are concerned, girls fare better in all educational indicators.

Table No 4.26

Overall Performance at Primary level – All

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	99.89	99.98	99.94	99.39	9.98	99.68	89.62	89.10	89.36	9.36	9.56	9.46	1.02	1.34	1.18
Keelaiyur	100.00	100.00	100.00	99.56	99.8	99.68	86.80	87.10	86.97	12.35	12.75	12.55	0.85	0.15	0.50
Kilvelur	100.45	99.95	100.20	99.3	99.7	99.5	92.07	93.23	92.67	7.12	6.36	6.74	0.81	0.41	0.61
Thalainayar	100.00	100.00	100.00	99.4	99.32	99.36	86.62	87.24	86.95	12.45	11.73	12.09	0.93	1.03	0.98
Vedaranyam	100.00	99.98	99.99	99.87	99.58	99.72	86.88	87.46	87.19	12.2	12.18	12.19	0.92	0.36	0.64
Thirumarugal	99.89	99.95	99.92	97.26	99.8	98.53	90.03	89.73	89.86	8.12	7.76	7.94	1.85	2.51	2.18
Sirkali	99.98	99.85	99.92	99.95	99.7	99.82	93.80	94.92	94.38	5.35	3.37	4.36	0.85	1.71	1.28
Kollidam	100.00	100.00	100.00	99.3	99.58	99.44	94.32	94.22	94.29	5.44	5.56	5.5	0.24	0.22	0.23
Mayiladuthurai	99.75	100.85	100.30	99.5	99.54	99.52	88.18	87.82	88.02	11.06	11.24	11.15	0.76	0.94	0.85
Kuttalam	100.00	100.00	100.00	99.97	99.36	99.66	94.12	95.00	94.58	5.42	5.06	5.24	0.46	-0.06	0.20
Sembanarkoil	100.86	100.43	100.65	99.7	99.58	99.64	93.50	93.70	93.65	6.12	6.12	6.09	0.38	0.18	0.28
Total	**100.07**	**100.09**	**100.08**	**99.39**	**99.57**	**99.48**	**90.54**	**90.87**	**90.72**	**8.64**	**8.34**	**8.48**	**0.82**	**0.79**	**0.81**

Source: Education Department, Nagapattinam, 2008.

Educational Indicators- Nagapattinam District- 2007

Upper Primary – All

Like primary level, in upper primary also girls perform better than boys in all educational indicators. For boys, GER is 102.21 and for girls it is 102.53. It shows less gender difference. This trend is reflected in more or less in all the blocks in the district. Even though NER for girls(99.18) is higher in Nagapattinam block than boys(99) , the completion rate of boys(93.09) is higher than that of girls (90.99). But the trend is vice-versa in Thirumarugal block.

Table No 4.27

Upper Primary – All

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	102.69	102.92	102.81	99	99.18	99.08	93.09	90.99	92.04	5.85	7.95	6.9	1.06	1.06	1.06
Keelaiyur	102.65	102.46	102.56	99.35	99.53	99.43	91.47	93.15	92.31	7.12	5.44	6.28	1.41	1.41	1.41
Kilvelur	101.96	102.32	102.14	98.69	99.13	99.03	87.32	87.50	87.41	10.24	10.06	10.15	2.44	2.44	2.44
Thalainayar	101.86	102.60	102.23	99.5	99.68	99.58	90.83	91.25	91.04	8.42	8.00	8.21	0.75	0.75	0.75
Vedaranyam	101.91	102.68	102.30	99.7	99.78	99.68	92.55	92.09	92.32	6.12	6.58	6.35	1.33	1.33	1.33
Thirumarugal	102.65	102.73	102.69	99.86	99.6	99.5	88.89	88.97	88.88	9.14	9.16	9.15	1.97	1.87	1.97
Sirkali	102.69	102.33	102.51	99	99.17	99.07	89.31	91.31	90.31	8.21	6.21	7.21	2.48	2.48	2.48
Kollidam	101.89	102.57	102.23	98.6	98.97	99.87	89.07	89.03	89.05	8.12	8.16	8.14	2.81	2.81	2.81
Mayiladuthurai	102.21	102.53	102.37	99.5	99.78	99.68	91.59	92.09	91.84	6.5	6.00	6.25	1.91	1.91	1.91
Kuttalam	101.97	102.19	102.08	99.35	99.53	99.43	86.51	86.55	86.53	11.23	11.19	11.21	2.26	2.26	2.26
Sembanarkoil	101.83	102.59	102.21	99.2	99.38	99.28	90.65	90.27	90.56	7.12	7.50	7.31	2.23	2.23	2.23
Total	**102.21**	**102.53**	**102.37**	**99.25**	**99.43**	**99.33**	**90.11**	**90.29**	**90.21**	**8.01**	**7.84**	**7.92**	**1.88**	**1.87**	**1.88**

Source: Education Department, Nagapattinam, 2008.

Educational Indicators- Nagapattinam District- 2007

Primary- SC

Girls perform better than boys in most of the educational indicators. In Thirumarugal DR among SC girls (2.12) is much higher than boys (0.88). But in GER and NER, girls fare better than boys. In Sirkali and Kollidam blocks, boys DR is higher than that of girls. In Nagapattinam district, the difference between boys and girls in educational attainment is low.

Table No 4.28

Primary- SC

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	99.89	99.90	99.90	99.6	99.4	99.5	88.17	88.33	88.25	11.25	11.17	11.21	0.58	0.50	0.54
Keelaiyur	101.65	101.63	101.64	99.2	99.4	99.3	87.90	88.04	87.97	11.65	11.61	11.63	0.45	0.35	0.40
Kilvelur	100.95	101.75	101.35	99.6	99.4	99.7	92.87	94.37	93.62	6.42	4.72	5.57	0.71	0.91	0.81
Vedaranyam	101.00	101.02	101.01	99.8	99.4	99.6	88.16	87.10	87.63	11.42	12.48	11.95	0.42	0.42	0.42
Thalainayar	100.65	101.45	101.05	98.8	99.2	99	87.87	87.25	87.56	11.42	11.9	11.66	0.71	0.85	0.78
Sirkali	100.00	101.75	100.88	99	99.6	99.7	92.24	92.62	92.46	7.42	7.32	7.37	0.34	0.06	0.20
Kollidam	100.98	100.00	100.49	99.5	99.7	99.6	92.04	92.54	92.29	7.54	7.38	7.46	0.42	0.08	0.25
Thirumarugal	99.98	101.65	100.82	99	99.4	99.2	90.69	89.93	90.31	8.43	7.95	8.19	0.88	2.12	1.50
Mayiladuthurai	100.76	101.68	101.22	99.5	99.5	99.5	90.93	89.95	90.44	8.42	9.2	8.81	0.65	0.85	0.75
Kuttalam	101.35	101.46	101.41	99.8	99.2	99.1	91.37	91.79	91.58	8.42	8.18	8.3	0.21	0.03	0.12
Sembanarkoil	100.42	101.50	100.96	99.8	99.6	99.7	92.75	93.15	92.95	6.8	6.58	6.69	0.45	0.27	0.36
Total	**100.69**	**101.25**	**100.97**	**99.41**	**99.43**	**99.42**	**90.45**	**90.44**	**90.46**	**9.02**	**8.95**	**8.99**	**0.53**	**0.58**	**0.56**

Source: Education Department, Nagapattinam, 2008.

Educational Indicators- Nagapattinam District- 2007

Upper Primary- SC

As in the case of primary education among SC boys and girls, upper primary educational attainment indicators also show the same trend. In GER gender difference is only 0.34. In NER also the difference is 0.16. But boys (89.98) excel in CR than the girls (88.36). In Kuttalam block, CR is much higher for boys (83.08) than girls (77.06). In blocks like Kollidam, Sembanarkoil, Mayiladuthurai, Keelaiyur, Thalainayar and Nagapattinam the same trend prevails. The RR is higher among girls (8.86) than for boys which is only (7.98). In Keelaiyur, Thalainayar, Mayiladuthurai, Vedaranyam RR is higher for boys than girls but in Kuttalam block RR is much higher for girls (16.8) than boys (14.06). DR is higher among girls (2.75) and for boys the rate is low (2.04). DR is higher for girls in Nagapatttinam, Thirumarugal, Kilvelur, Keelaiyur, Vedaranyam and Mayiladuthurai than for boys . There is gender gap with regard to DR in Kuttalam block. The DR for girls is 6.14 but it is only 2.86 for boys. **Dropout rate among SC girls is higher than the dropout rate of all the girls in the district.**

Table No 4.29

Upper Primary- SC

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	103.69	103.69	103.69	98.88	99	98.95	91.51	90.15	90.83	6.45	7.09	6.77	2.04	2.76	2.4
Keelaiyur	102.46	103.62	103.04	98.31	98.47	98.38	91	89.20	90.1	7.25	8.25	7.75	1.75	2.55	2.15
Kilvelur	102.89	102.86	102.88	98.53	98.83	98.74	89.59	89.35	89.47	8.25	8.41	8.33	2.16	2.24	2.2
Thalainayar	102.66	102.68	102.67	99.23	99.39	99.3	91	90.20	90.6	7.25	8.05	7.65	1.75	1.75	1.75
Vedaranyam	102.84	102.74	102.79	99.5	99.66	99.59	90.9	89.84	90.37	7.25	7.91	7.58	1.85	2.25	2.05
Thirumarugal	102.74	103.62	103.18	99.7	99.72	99.63	89.13	87.59	88.36	9.02	9.14	9.08	1.85	3.27	2.56
Sirkali	102.54	102.61	102.58	99.53	99.69	99.6	89.63	89.13	89.08	8.24	8.48	8.36	2.13	2.39	2.26
Kollidam	102.63	103.32	102.98	99.13	99.29	99.2	92.66	91.82	92.24	5.46	5.82	5.64	1.88	2.36	2.12
Mayiladuthurai	102.63	103.26	102.95	99.2	99.42	99.33	90.65	88.63	89.94	7.25	8.63	7.94	2.1	2.74	2.42
Kuttalam	102.43	102.49	102.46	98.76	98.92	98.83	83.08	77.06	80.07	14.06	16.8	15.43	2.86	6.14	4.5
Sembanarkoil	102.89	103.25	103.07	99.16	99.32	99.23	90.53	89.29	89.91	7.35	8.89	8.12	2.12	1.82	1.97
Total	**102.76**	**103.10**	**102.93**	**99.09**	**99.25**	**99.16**	**89.98**	**88.36**	**89.18**	**7.98**	**8.86**	**8.42**	**2.04**	**2.75**	**2.40**

Source: Education Department, Nagapattinam, 2008.

Primary- ST

In respect to Primary education of ST, all educational indicators show there is some gender difference. GER for boys in Nagapattinam district for ST is 101.35 but for girls it is little less than that (101.22). NER for girls and boys is the same (96.04). CR for boys is higher (86.33) than girls (84.15). RR shows boys performing well than girls. DR shows little gender difference. There is gender difference in RR in Thirumarugal and Kilvelur blocks. In Kuttalam, Sirkali and Kollidam blocks boys perform well with respect to RR. DR for boys is higher in Nagapattinam, Keelaiyur, Kuttalam, Sirkali and Kollidam blocks.

Table No 4.30

Primary- ST

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	101.23	101.29	101.26	95.34	95.34	95.51	88.20	89.44	86.81	8.95	8.87	8.91	2.85	1.69	2.27
Keelaiyur	101.59	101.29	101.44	96.84	96.84	97.16	85.97	85.29	85.63	11.28	12.82	12.05	2.75	1.89	2.32
Kilvelur	101.73	101.47	101.60	95	95	96.15	85.69	82.59	84.14	11.45	14.83	13.14	2.86	2.58	2.72
Thalainayar	101.45	101.23	101.34	96.54	96.54	96.51	100.00	100.00	100.00	0	0	0	0	0	0
Vedaranyam	101.22	101.05	101.14	97.08	97.08	96.97	100.00	100.00	100.00	0	0	0	0	0	0
Thirumarugal	101.60	101.46	101.53	96.68	96.68	96.84	86.61	85.03	85.85	10.45	12.17	11.31	2.94	2.80	2.87
Sirkali	101.02	101.25	101.14	96.34	96.34	96	86.66	83.94	85.3	11.42	15.02	13.22	1.92	1.04	1.48
Kollidam	100.00	100.26	100.13	96.94	96.94	95.6	85.54	83.56	84.55	11.14	13.9	12.52	3.32	2.54	2.93
Mayiladuthurai	101.64	101.46	101.55	96	96	96.55	86.03	85.19	85.5	11.12	12.3	11.71	2.85	2.51	2.68
Kuttalam	101.62	101.22	101.42	95.58	95.58	96.23	86.13	82.67	84.4	12.12	16.64	14.38	1.75	0.69	1.22
Sembanarkoil	101.78	101.49	101.64	96	96	96.14	85.34	85.12	85.23	11.25	11.25	11.25	3.41	3.63	3.52
Total	**101.35**	**101.22**	**101.29**	**96.04**	**96.04**	**96.26**	**86.33**	**84.15**	**85.25**	**11.02**	**13.1**	**12.06**	**2.65**	**2.74**	**2.70**

Source: Education Department, Nagapattinam, 2008.

Upper Primary- ST

The performance of ST boys in upper primary in GER and NER is lower than that of ST girls. But CR for boys is higher (86.18) than girls (81.02). RR is also higher for girls (16.48) than boys (11.49). DR shows little difference between boys and girls. In Thirumarugal, Kilvelur, Thalainayar and Sirkali blocks, CR for boys is much higher than girls. The difference is more than 7. In all the blocks in Nagapattinam district, for ST boys, CR is higher. The performance of girls in RR is poor in a few blocks like Nagapattinam (boys-11.56; girls-17.36), Thirumarugal (boys-12.24; girls-18.02), Kilvelur (boys-11.43; girls-23.17), Thalainayar (boys-11.75; girls -24.05). At the upper primary level, boys perform better than girls in all educational indicators. DR shows there is not much of gender difference.

Table No 4.31

Upper Primary- ST

Block Name	GER			NER			CR			RR			DR		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Nagapattinam	105.49	105.22	105.36	94.24	97.29	95.77	86.09	80.15	83.12	11.56	17.36	14.46	2.35	2.49	2.42
Keelaiyur	104.85	105.21	105.03	95.24	95.05	95.15	85.32	83.18	84.25	12.56	14.1	13.33	2.12	2.72	2.42
Kilvelur	105.36	105.17	105.27	95.64	96.49	96.07	86.05	74.45	80.25	11.43	23.17	17.3	2.52	2.38	2.45
Thalainayar	104.86	105.19	105.03	95.74	97.72	96.73	86.11	73.39	79.75	11.75	24.05	17.9	2.14	2.56	2.35
Vedaranyam	105.02	105.23	105.13	94.24	97.83	96.04	85.34	85.16	85.25	12.41	12.27	12.34	2.25	2.57	2.41
Thirumarugal	105.23	105.26	105.25	95.44	97.59	96.52	85.28	79.62	82.45	12.24	18.02	15.13	2.48	2.36	2.42
Sirkali	105.26	105.20	105.23	96.04	96.79	96.42	86.13	80.57	83.35	11.45	17.17	14.31	2.42	2.26	2.34
Kollidam	104.89	105.27	105.08	97.16	98.19	97.68	85.39	83.43	84.41	12.36	13.92	13.14	2.25	2.65	2.45
Mayiladuthurai	105.26	105.22	105.24	95.37	97.24	96.31	86.58	84.72	85.65	11.25	12.75	12	2.17	2.53	2.35
Kuttalam	104.65	105.24	104.95	96.11	97.39	96.75	87.96	83.54	85.75	9.52	13.7	11.61	2.52	2.76	2.64
Sembanarkoil	105.25	105.25	105.25	96.04	97.29	96.67	87.69	83.01	85.5	9.85	14.75	12.3	2.46	2.24	2.35
Total	**105.10**	**105.22**	**105.16**	**95.54**	**97.17**	**96.35**	**86.18**	**81.02**	**83.61**	**11.49**	**16.48**	**13.98**	**2.33**	**2.50**	**2.42**

Source: Education Department, Nagapattinam, 2008.

Note: GER- Gross Enrolment Rate
NER- Net Enrolment Rate= GER-RR
RR- Repetition Rate
DR- Dropout Rate

Literacy performance of Nagapattinam district

Table 4.32 shows the literacy performance of Nagapattinam district in comparison with the state of Tamil Nadu. In Nagapattinam district, more number of children in the age group of 6-14 are studying in private schools. The percentage is 31.3 where as it is only 15.5 percentage in the state of Tamil Nadu. But it has performed very low in few indicators like percentage of children in the standard 1 -2 who can read letters, words or more in own language. It is only 38.4 but state average is 60.3 percent. This shows the vast gap and the teachers have to concentrate on children's reading ability. In standards 3-5 the children's learning level (who can read level 1 text or more in own language) is only 20 percent. The state average is 49.2 percent. In the same standard, the percentage of children who can substract or do more is 21.6 percent only whereas, the state average is 43 percent. The district administration should sensitise the teachers on these learning disabilities.

Table No 4.32

Literacy Performance

	Particulars	Nagapattinam	Tamil Nadu
Pre-School	% of Children(Age 3-4) Anganwadi or other Public School	-	86.1
Out of School	% of Children (Age 6-14) out of school	1.3	1.2
Private School	% of Children (Age 6-14) in Private school	31.3	15.5
Standard 1-2 learning levels	% of Children (Standard 1-2) who can read letters, words,or more in own languages	38.4	60.3
	% of Children (std1-2) who can recognize numbers (1-9) or more	53.5	66.6
	% of Children std 1-2 who can read letters or more in English	38.4	53.4
Standard 3-5 learning levels	% of Children (std 3-5) who can read level 1 (std 1) text or more in own languages	20.0	49.2
	% 0f Children std 3-5 who can substract or do more	21.6	43.0
	% of Children (std 3-5) who can read sentences in English	7.9	10.8

Source: ASER, 2007.

Table No 4.33

Nagapattinam District 10th Result Particulars

Year	No. Appeared	No. Passed	Percentage
2008	20295	16369	81%
2007	17980	14642	81.4%
2006	18454	14328	77.64%
2005	16408	13491	82%
2004	16710	13460	80.55%

Source: Education Department, Nagapattinam District, 2008.

Table No 4.34

Nagapattinam District 12th Result Particulars

Year	No. Appeared	No. Passed	Percentage
2008	12899	10901	84.5%
2007	11832	8955	76%
2006	11586	7694	66.4%
2005	11032	8211	74.4%
2004	10168	7689	76%

Source: Education Department, Nagapattinam District, 2008.

The Effect of Tsunami on Education

The Tsunami had made many children parentless and their life into a question mark. Their mind had been disturbed by fear of the tsunami. Physically the facilities in the schools were also damaged.

Rehabilitation work

The importance of resuming education and providing an enabling environment for the children's optimal development was recognized by many NGOs. The background that fisherfolk communities did not perceive the value of education for their children, especially boys, proved to be a major challenge. The government as well as the NGOs opened balwadi near the temporary shelters and with time resolved/reconstructed the anganwadis, which emphasized the value of these centres in protecting and promoting children's wellbeing.

The immediate response after the Tsunami was to provide students with books and education kits. The state government, along with various civil society organizations, gave textbooks, uniforms, etc. to many children. Many child care/tuition centres had a component of education which dealt with supplementary education/ non-formal education. NGOs also helped to pay school fees for children wherever the parents could not afford/government's scheme could not reach. The various activities taken up by them included not only basic infrastructure in rebuilding schools and classrooms and restoring the lost infrastructure, but adding value to it by including toilets, science equipment, computers, furniture, etc.

Summary

In India, the responsibility of educational development lies with the government. It is enshrined in the Constitution of India that primary education is compulsory. The Government of India is implementing a number of schemes and programmes to improve the literacy and educational level. These schemes and programmes are implemented through district administration. It is the district administration's responsibility to attain the educational goals. The data of Nagapattinam district shows that district administration's sustained effort has yielded results. It improved all educational indicators throughout the district over a period of five years. The following suggestions can be considered for improving the quantity and quality of education further.

1. Advocacy for girls' education among ST population.
2. Opening of New University in Nagapattinam District.
3. Opening of Technical institutes for higher education.
4. Opening of more vocational education institutes.
5. Promotion of adult literacy for women.
6. Opening up of special schools for the disabled.

CHAPTER 5

Income and Livelihood

Introduction

Economic attainment of the individuals and their wellbeing is conventionally measured by the indicators like per capita income or per capita GDP of the economy. Pioneers who developed Human Development Index viewed there should be a broader set of indicators which include social sector. In this context, Human Development indicators not only included health attainment and educational indicators, economic indicator like per capita income had been included along with social development indicators. In this chapter, income and livelihood of people of Nagapattinam district is analysed. Livelihood is one of the central aspects of Human Development. Secure, stable and sustainable livelihood that provided employment and helps people to grow and live with dignity is imperative for Human development. People can access health and educational facilities only if they have secure livelihood. Secure livelihood reduces the dependency and gives economic independence. The first section of this chapter deals with income and poverty and second section deals with livelihood pattern of Nagapattinam district.

Table No 5.1

Sectoral Contribution

	Sectoral Share (in percentage)					
	Nagappattinam			Tamil Nadu		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1993-94	44.05	13.21	42.74	26.24	32.16	41.60
1994-95	48.40	12.28	39.32	26.10	32.73	41.17
1995-96	41.21	13.97	44.82	21.90	34.85	43.25
1996-97	35.11	14.20	50.69	20.81	33.24	45.95
1997-98	39.40	12.26	48.34	20.82	31.14	48.04
1998-99	34.24	12.76	53.00	21.89	29.19	48.92
1999-2000	35.26	12.93	51.82	19.52	30.69	49.79
2000-01	37.42	11.78	50.80	18.96	30.83	50.21
2001-02	34.26	11.58	54.15	19.57	27.68	52.75
2002-03	27.93	12.71	59.36	14.75	29.81	55.44

Source: Department of Economics and Statistics, 2005

Traditionally Nagappattinam district depends upon the primary sector. Table 5.1 illustrates the sectorwise contribution to the district income over the years. It further reveals the decline in the primary sector contribution during the period 1993-94 to 2002-03. It declined from 45.02 to 27.93. With regard to

secondary sector, there is a marginal decline. This reveals that Nagapattinam district lacks industrialization. Even those 65% of workers of Nagapattinam district depend primarily upon agriculture but their contribution to the district income has been declining. It reflects, in a way, the low per capita productivity in agriculture. It is ironical that the cropping intensity of the district (160%) which is higher than the state average (117%) has not added significantly to the total income. This has serious implication to the population depending on agriculture. Nearly 74% of the landholdings are small and marginal.

Table No 5.2
Per Capita income - Tamil Nadu and Nagapattinam
at Constant (93 - 94) Prices

Year	Nagappatinam	Annual Increment	Tamil Nadu	Annual Increment	Difference (Col 4- Col 2)
(1)	(2)	(3)	(4)	(5)	(6)
1993-94	8772	15.83	8955	9.84	183
1994-95	10422	-6.28	9932	2.12	-490
1995-96	9805	-3.10	10147	2.91	342
1996-97	9511	15.87	10451	7.18	941
1997-98	11305	-4.81	11260	2.87	-46
1998-99	10787	8.32	11592	4.73	806
1999-2000	11765	7.80	12167	6.36	402
2000-01	12761	-6.94	12994	-4.09	233
2001-02	11933	-19.28	12484	1.67	551
2002-03	10004	0.82	12696	3.73	2691

Source: Dept. of Economics and Statistics, Govt. of Tamil Nadu

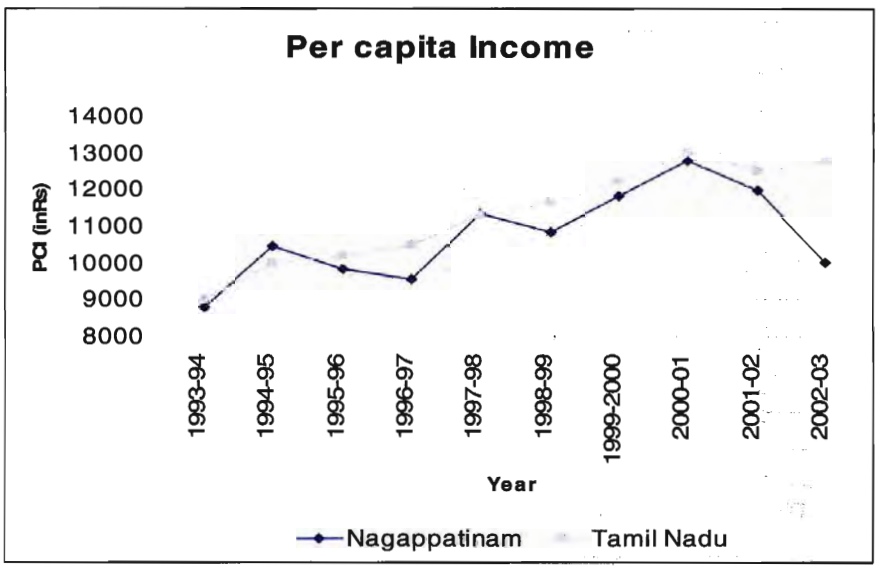

Figure 5.1

Table No 5.3

Per Capita Income- Nagapattinam District (1999-2000 prices)

Year	Current Price (in Rs)	CAGR	Constant (1999-2000) Price (in Rs)	CAGR
1999-00	18905		18905	
2000-01	20645	9.20	19859	5.04
2001-02	19764	-4.26	18458	-7.05
2002-03	20086	1.62	17800	-3.56
2003-04	22155	10.30	19331	8.60
2004-05	23567	6.37	19235	-0.49
2005-06	26493	12.41	20783	8.04

Source: Dept. of Economics and Statistics, Govt. of Tamil Nadu

The per capita income at current prices (1996-97) stood at Rs. 12960 as against the state average of Rs 13985. The graph illuestrates that there is not much gap in the percapita income of Nagapattinam district and the state average. In fact, in the years 1994-95 and 1997-98 the per capita income of the district was slightly higher than the state avearge.

Net Domestic Product at Constant (1993-94) Prices (Rs in Lakh)

The Annual Growth Rate of Net Domestic Product at constant prices of Nagapattinam and Tamil Nadu has been fluctuating over the years. According to the data, in the state of Tamil Nadu, in the year 1994-95 it was 12.19; in the same year AGR of Nagapattinam was 20.18; in the subsequent two years AGR of Nagapattinam and Tamil Nadu declined. After two years there was a sudden growth both at the state and at the district level. In the year 1998-99, the district AGR of Net Domestic Product at constant prices showed negative growth. It increased in the following two years but again declined both at the state and at the district level. Since agriculture is the main livelihood option for Nagapattinam district, monsoon failure and disasters like flood, heavy rain severely affect the production in agriculture. The district administration can concentrate on agriculture and allied activities and it has to give importance to secondary and tertiary sectors.

Table No 5.4

Net Domestic Product at Constant (1993-94) prices (Rs in Lakh)

Year	Nagapattinam	AGR	Tamil Nadu	AGR
1993-94	103786		5164329	
1994-95	124736	20.18	5794317	12.19
1995-96	118672	-4.86	5986121	3.31
1996-97	116342	-1.96	6231570	4.10
1997-98	139707	20.08	6782227	8.83
1998-99	134597	-3.65	7050517	3.95
1999-00	148160	10.07	7468504	5.92
2000-01	162093	9.40	8045255	7.72
2001-02	152808	-5.72	7791956	1.20

Soruce: DOES, Govt. of Tamil Nadu

Note: AGR→ Annual Growth rate

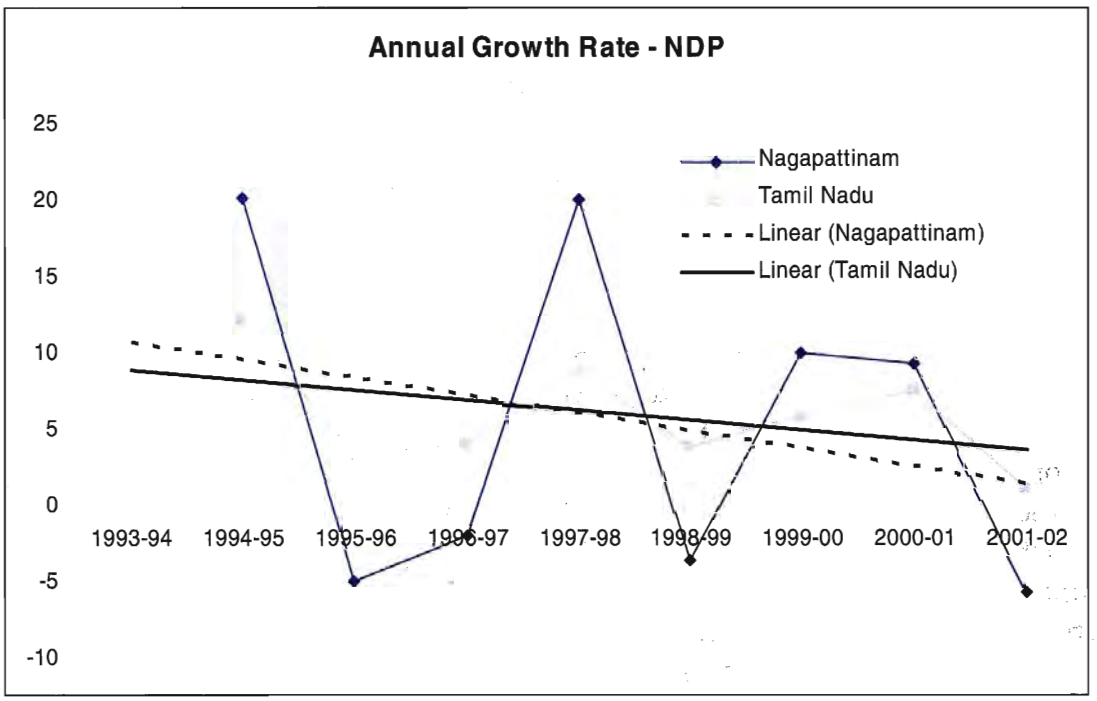

Figure 5.2

Poverty Estimation

Poverty is a state of deprivation. Poverty reflects the individual's inability to attain certain basic needs to survive because of lack of income. Conceptually, poverty takes into account the level and pattern of personal consumption expenditure of people as well as their access to social transfers and public provision. The following table gives the poverty estimates of Nagapattinam

district in comparison with Tamil Nadu. Districtwise poverty estimate shows that the percentage of population living below poverty line during the year 2004 as 6.8% against the state average of 21.6%. Nagapattinam was part of the composite Thanjavur district during the year 1993-94. So poverty estimate for the year 1993-94 is not available for Nagappattinam separately.

Table No 5.5

Poverty Estimation

Year	Poverty Indicators	Nagapattinam	Tamil Nadu
1993-94	BPL Population (in Lakh)	-	170.52
	% of BPL Population	-	31.66
	Rural	-	11200960 (28.93)
	Urban	-	5851174 (38.63)
	Combined	-	17052134 (31.66)
2004*	Percentage of Poverty	-	-
	Rural	3.8	11.4
	Urban	15.8	31.8
	Combined	6.8	21.6
	Poverty rank among districts	29	-

* NSSO data compiled by Department of Economics and Statistics, 2005

The National Sample Survey Organisation conducts a quinquennial sample survey on Consumption Expenditure from which monthly per capita consumption expenditure is calculated. The data is analysed and the poverty line derived from the minimum calorie intake needed for sustenance is determined by the Union Planning Commission. Based on the poverty line, the proportion of people living in poverty is estimated.

The last two rounds of Sample Survey on Consumption Expenditure was conducted in 1999-2000 (55th round) and 2004-05 (61st round) respectively. The NSS data on Consumption Expenditure for Nagappattinam district is analysed in comparison to the State Average.

The average monthly per capita consumption expenditure for Nagappattinam was higher than the State average in both these rounds (55th & 61st rounds). The poverty line being constant for the State as a whole, Nagappattinam with higher average monthly per capita consumption expenditure shows lower poverty ratio. The inverse relationship between higher monthly per capita consumption expenditure and lower poverty ratio for a given poverty line is found across all States in India. It should also be mentioned that the per capita income both at the State and district levels has no strong correlation with the monthly per capita consumption expenditure. The reason

for the low poverty ratio based on the NSSO data may be analysed further to understand the dimensions of lower poverty ratio in an otherwise backward district.

Instead of the consumption based expenditure which shows lowest poverty rate in Nagappattinam district, the other method of computing BPL is the household survey conducted by the Rural Development Department which lists out 13 parameters for arriving at the number of families living in poverty. These parameters range from possession of land, household consumer goods, educational level, access to drinking water and sanitation, job and credit needs. The findings of this anaysis are presented below:

Table No 5.6

Blockwise BPL families in Nagapattinam District

S.No.	Block Name	No. of Rural Families	Rural Population	No. of BPL Families	BPL Population	BPL Details					
						SC	ST	OBC	Others	Landless	IAY - Landless
1	Keelaiyur	18724	65387	6196 (33.09)	19998	2804	17	2843	532	4283	3697
2	Kilvelur	18561	64757	5831 (31.41)	19333	3843	244	1212	532	4929	4457
3	Kollidam	31273	106882	9873 (31.57)	32449	4654	35	4840	337	8861	2658
4	Kuttalam	28851	95668	8703 (30.16)	27710	4074	135	4484	0	5905	7686
5	Mayiladuthurai	34710	119451	10199 (29.38)	34041	4554	1901	3347	397	8577	7836
6	Nagappattinam	15619	20217	5144 (32.93)	7193	3103	8	1419	614	4676	4267
7	Sembanar Koil	38988	135930	11959 (30.67)	39539	5859	29	5449	622	10180	8097
8	Sirkali	25127	67609	7327 (29.15)	19389	3889	155	2500	783	6992	6124
9	Thalainayar	15731	48980	5036 (32.01)	15154	2483	21	2291	241	3758	3724
10	Thirumarugal	19553	70579	6836 (34.96)	23157	3871	63	2155	747	5437	5000
11	Vedaranyam	35511	103140	10180 (28.66)	28998	3650	33	5877	620	6896	6379
Total		282648	898600	87284 (30.88)	266961	42784	2641	36417	5425	70494	59925

Source: DRD, website
IAY – Indira Awaas Yojana

The BPL survey conducted by the Department of Rural Development to identify the poor for implementing their welfare programmes, have estimated that there are 87284 rural BPL families in Nagappattinam district which account for 30.88 of the rural families. Among the blocks, Thirumarugal has the highest proportion of BPL families with 34.96%. The highest proportion of landless families in the BPL category is found in Nagappattinam block.

Families Below Poverty Line

The Government of Tamil Nadu as well as Government of India have been making earnest efforts by implementing various programmes to enhance the socioeconomic status of the BPL families in the country. In spite of their efforts, a sizable proportion of the families still lie under the poverty line.

Panchayatwise Details of BPL Families

In Nagapattinam district there is a total number of 434 village Panchayats. Of these panchayats, two Panchayats (one in Nagapattinam Block and another in Sirkali Block) are reported to be having less than 19 percent of the BPL families while only one Panchayat (in Kollidam Block) has more than 39 percent of the BPL families. All the remaining 431 Panchayats (99.3 percent) located in the other blocks are reported to be having BPL families between 20-38 percent.

Table 5.7

Panchayatwise Details of BPL Families

Sl. No.	Name of the Panchayat Union	Village Panchayats having <=19% BPL households	Village Panchayats having BPL households between 20% - 38%	Village Panchayats having 39% and above BPL families	Total Village Panchayats
1	2	3	4	5	6
1.	Nagapattinam	1	28	-	29
2.	Keelaiyur	-	27	-	27
3.	Kilvelur	-	38	-	38
4.	Thalainayar	-	24	-	24
5.	Vedaranyam	-	36	-	36
6.	Thirumarugal	-	39	-	39
7.	Sirkali	1	36	-	37
8.	Kollidam	-	41	1	42
9.	Mayiladuthurai	-	54	-	54
10.	Kuttalam	-	51	-	51
11.	Sembanarkoil	-	57	-	57
	Total	**2**	**431**	**1**	**434**

Source: DRDA, Nagapattinam District, 2008

Rural Families with Average Monthly Income

Out of 282648 total rural families, 21.45% of rural families have an average monthly income of less than Rs.250 in Nagapattinam district. 31.36 of rural families are living with an average monthly income of Rs.250-499. Only 5.87% of families live with more than Rs.2500 as average monthly income. Among block variations, Thirumarugal block is having more number of families (27.09) who live with less than Rs.250 as average monthly income. Apart from Thirumarugal, Nagapattinam (25.37%), Thalainayar (25%) and Sembanar Koil (22.26%) are the highest number of rural families with average monthly income of less than Rs.250. Kollidam block (47.90%) has the highest number of rural families who live with a monthly income of Rs.250-499). In the following blocks, the percentatges in this income groups are: Vedaranyam (44.62%), Thalainayar (39.46%), Keelaiyur (38.50%) and Sembanarkoil (37.19%). Mayiladuthurai block has more number of rural families (9.41%) having more than Rs.2500 as average monthly income. (Source www.tnrd.gov.in)

Table No 5.8

Average Monthly Income of Rural Families

S.No.	Block	Total Rural Families	Rural Families with Average Monthly Income (In Rupees)					
			< 250	250-499	500-1499	1500 2500	> 2500	No Response
1	Nagappattinam	15619	3964 (25.37)	4926 (31.53)	5126 (32.81)	893 (5.71)	707 (4.52)	3
2	Keelaiyur	18724	2639 (14.09)	7209 (38.50)	6625 (35.38)	1460 (7.79)	784 (4.18)	7
3	Kilvelur	18561	2745 (14.78)	5776 (31.11)	7553 (40.69)	1516 (8.16)	971 (5.23)	0
4	Thalainayar	15731	3934 (35)	6208 (39.46)	4034 (25.64)	915 (5.81)	638 (4.04)	2
5	Vedaranyam	35511	6152 (17.32)	15848 (44.62)	9789 (27.56)	1811 (5.09)	1911 (5.38)	0
6	Thirumarugal	19553	5298 (27.09)	6479 (33.13)	5280 (27)	1467 (7.50)	1026 (5.24)	3
7	Sirkali	25127	11354 (0.451)	7358 (29.28)	3746 (14.90)	1563 (6.22)	1106 (4.40)	0
8	Kollidam	31273	5817 (18.60)	14981 (47.90)	6591 (21.07)	2310 (7.388)	1565 (5.00)	9
9	Mayiladuthurai	34710	4629 (13.33)	10452 (30.11)	12159 (35.03)	4195 (12.08)	3269 (9.41)	6
10	Kuttalam	28851	5436 (18.84)	8913 (30.89)	8404 (29.12)	4351 (15.08)	1736 (6.01)	11
11	Sembanar Koil	38988	8680 (22.26)	14500 (37.19)	10314 (26.45)	2971 (7.62)	2512 (6.44)	11
Total		282648	60648 (21.45)	102650 (36.31)	79621 (28.16)	23452 (8.29)	16225 (5.7)	52

Workers Distribution

According to the 2001 Census, in Nagapattinam district, agricultural labourers constituted of 53.06%, followed by other workers. Cultivators were 11.82%.

Table No 5.9

Classification of workers

Classification of workers	
Cultivators	196945
Of (a) small & marginal farmers	146357
Agricultural labourers	313174
Artisans	512
Household cottage industries	9032
Other workers	193032

Source: Census of India, 2001.

The following are the details regarding workforce in the district as per 2001 Census.

Table No 5.10

Workforce

Parameter	Total	Male	Female	Percentage
1. Population	14,87,055	7,38,287	7,48,768	100
2. Workers	5,84,310	4,11,816	1,72,494	39.29
Of 2 above, (a) Cultivators	69,072	56,497	12,575	(% to 2) 11.82
(b) Agricultural labourers	3,13,174	1,83,818	1,29,356	53.60
(c) Workers in household industries	9,032	4,866	4,166	1.54
(d) Other Workers	1,93,032	1,66,635	26,397	33.04
Of 1 above, (i) Main Workers	4,66,435	3,51,428	1,15,007	(% to 1) 31.36
(ii) Marginal Workers	1,17,875	60,388	57,487	7.93
(iii) Non-Workers	9,02,745	3,26,471	5,76,274	60.71

Source: Census of India, 2001.

Livelihood

Livelihood is the most determining need for a human being. For a decent level of human development, people need sustainable livelihoods to ensure that they and their dependants are able to have access to basic resources and basic needs to ensure a life of dignity, decent living, safe from diseases, hunger, squalor, poverty, deprivation and free from denial of basic rights. Livelihoods

ensure lack of hunger, ability to access basic health, give children basic education, ability to afford a decent shelter, clothes and resources for daily necessities and social expenditure. So, the most crucial need for a sustainable livelihood for an individual or household is employment, over a period of time that ensures a level of remuneration satisfying basic needs and quality of life.

Agriculture

Agriculture is one of the important occupations in Nagapattinam district. The district covers a total area of 2,71,583 hectares, and out of this, 1,26,149 hectares are classified as wet land, 61,880 hectares as dry land, and the remaining 83,548 hectares as *'poramboke'* or government land. Around 74 percent of the cultivators have less than one hectare of land, and 11 percent of the households own above two hectares of land. The area receives an average of 1337 mm of rainfall annually: 76 percent occurs during the northeast monsoon and 17.3 percent during the southwest monsoon The soil is predominantly sandy in texture and clayey in certain pockets, with slight salinity/alkalinity. The soil in the region belongs to the Valudalakudi series; dark deep brown to brown, sandy and possessing characteristics of mild to moderate alkalinity levels. The area lying between Nagapattinam and Vedaranyam is dominated by sand dunes and cultivated soils, mostly sandy in texture. Regarding the watertable, fresh water is overlying saline ground water. The cultivation depends primarily on rainfall, supplemented by underground water. The area lying between north of Nagapattinam and the border of Cuddalore district is covered by the delta irrigation system.

Agriculture in this region is dominated by rain fed and canal irrigation cultivation supplemented by tank irrigation for the main crop of rice and small scale irrigation is done by using underground water for the secondary crops viz., pulses, gingelly, groundnut etc. Paddy is the primary subsistence crop being traditionally cultivated in different methods. More than two thirds of the farming communities are small and marginal landholders and paddy is the most suitable staple crop for them, which is cultivated in vast farm lands three times in a year. The first crop known as 'kuruvai' (short term crop) has a duration of three and half to four months from June-July to October-November. The second crop is called 'thaladi' with duration of five to six months from October to March and the third one is 'samba' (long term crop) with six months duration from August to January. In addition to paddy cultivation, various other crops such as cereals, cumbu, ragi, maize, korra and varagu, and pulses such as red gram, green gram, and black gram, ground nuts, coconut and gingelly, castor and miger seeds in a very small area are cultivated and considered important ones.

Table No 5.11

Important crops grown with area of cultivation and yield

Name of the Crops	Area in Hectare	Yield in ton per ha.	State average yield in ton per ha.
Paddy	138945	3-3.25*	4.25
Sugarcane	3000	92	100
Cotton	1000	0.33	0.375
Groundnut	3000	1.4	1.5
Fruits and Vegetables	3000	-	-
Pulses	7000	-	-

Source: Economic Appraisal of Tamil Nadu, Govt. of Tamil Nadu, 2003–04 and 04–05

* As per study carried out by NCRC, April, 2007

Table No 5.12

Sown and irrigated area in Nagapattinam District

Year	Net area sown in ha	Gross area sown in ha	Net area irrigated in ha	Gross area irrigated in ha
1998 – 99	149706	252462	128749	157270
2003 – 2004	131890	197890	104594	126428

Source: Economic Appraisal, Govt. of Tamil Nadu, 1998 – 99 and 2003-04

The intensity of cultivation is 160 % compared to a intensity of 117 % in the entire state of Tamil Nadu and the intensity of irrigation is about 124 % compared to the state average of 120%. The area under Kuruvai and Thaladi are around 30,000 ha whereas the area under Samba cultivation varies from 75,000 ha to 1.00 lakh ha.

Due to poor rainfall and non – availability of water from Mettur reservoir, the area under paddy in the Cauvery delta is coming down. Among the three districts that are located in the Cauvery delta zone, Nagapattinam is the most affected district. This is due to the fact that the water position in Mettur reservoir is frequently insufficient to allow enough outflows to allow water to reach the tail end of the delta. However, when there is higher rainfall in the coastal areas due to cyclone / depression in the Bay of Bengal, many areas of Nagapattinam district get flooded and water logging takes place. In both situations, agriculture is affected.

Land Use Pattern

Table No. 5.13

Land use Pattern of Nagapattinam District

Sl. No.	Classification	2003-04 (ha)	% to geographical area	2004-05 (ha)	% to geographical area	Difference
1.	Area sown more than once	66984	24.66	96290	35.46	29306
2.	Barren and un cultivable users	33419	12.31	33419	12.31	0
3.	Land put to non-agricultural uses	47555	17.51	47608	17.53	53
4.	Cultivable waste	3810	1.40	3840	1.41	30
5.	Permanent pastures/ grazing land	904	0.33	964	0.35	60
6.	Land not included in net area sown	10743	3.96	10715	3.95	-28
7.	Current fallows	3190	1.17	2931	1.08	-259
8.	Other fallows	35349	13.02	24355	8.97	-10494
9.	Net area sown	131890	48.56	143118	52.70	11228
10.	Geographical area	271583	100.00	271583	100.00	0
11.	Total gross cropped area	197674	72.79	239408	88.15	41734
12.	Forest	4633	1.71	4633	1.71	0
13.	Cropping intensity (%)	149.88%		167.28%		

Source: Agriculture Department, District Office, Nagapattinam District, 2006

The land use pattern of Nagapattinam District shows that it has a total geographical area of 271583 hectares, of which only 1.71 percent area is under forest. The total cropped area in the year 2004-05 was 239408 accounting for 88.15 percent and that means an increase of 15.4 percent from 2003-04. The net area sown for the year 2004-05 was 143118 ha (52.70 percent), showing an increase of 4.1 from the previous year (2003-04).

Landholdings by Area of Irrigation

Table No. 5.14

Landholdings by Area of Irrigation

Sl. No.	Name of the Block	Area covered under Canal	% to the total	Area covered under Well	% to the Total	Area covered under tank	Area supplemented by well under tank irrigation
1.	Nagapattinam	7513	5.9	85	0.2*	0	0
2.	Keelaiyur	10366	8.2	11	0.0	0	0
3.	Kilvelur	11267	8.9	98	0.2*	0	0
4.	Thalainayar	12823	10.2	458	1.2	0	0
5.	Vedaranyam	1386	1.1*	902	2.4	0	0
6.	Thirumarugal	13977	11.1	972	3.0	0	0
7.	Sirkali	11536	9.1	4410	12.0	0	0
8.	Kollidam	11953	9.5	2107	6.0	0	0
9.	Mayiladuthurai	15472	12.3	19833	54.0	0	0
10.	Kuttalam	13779	10.9	305	0.8	0	0
11.	Sembanarkoil	16086	12.8	7516	20.4	0	0
Nagapattinam District Total		**126158**	**100.00**	**36697**	**100.00**	**0**	**0**

Source: Agriculture Department, District Office, Nagapattinam District, 2006

Table No 5.15

Area under irrigation (Area in ha)

S.	Details	2001 – 02	2002 – 03	2003 – 04
1.	Net area irrigated	125602	110113	104594
2.	Gross area irrigated	160522	131322	126428
3.	Food crops	157668	128476	121917
4.	Non-food crops	2854	2846	4511

Source: Mapping and Study of Coastal Water Bodies in Nagapattinam District, NCRC, April, 2007

Area covered under Canal

The highest coverage under canal irrigation is seen in Sembanarkoil block with 12.8 percent followed by Mayiladuthurai Municipality, with 12.3 percent.

Vedaranyam Municipality had the lowest area under canal irrigation with 1.1 percent, and for Nagapattinam Municipality the percentage was 5.9 percent.

Area covered under Well Irrigation

Mayiladuthurai Municipality had the highest area covered under well irrigation with 54.0 percent followed by Sembanarkoil block with 20.4 percent. Very low percentage of coverage of well irrigation is seen in Keelaiyur, Kilvelur and Nagapattinam Municipality.

Area covered under Tank Irrigation and supplemented by Wells under tank irrigation

There are no blocks in Nagapattinam district covered under tank irrigation and supplemented by well under tank irrigation.

Horticulture and Plantation Crops

Fruits and vegetables are the horticultural crops cultivated in the district. Small and marginal farmers cultivate fruits like mangoes of different varieties, cashew and vegetables like brinjal, tomatoes, lady's finger, snake gourd, bitter gourd, beans, cluster beans and medicinal and aromatic crops which give them a sizeable income.

Area Expansion with Pedigree planting materials 2006-2007

Table No 5.16

Area Expansion with Pedigree planting materials

Sl. No.	Details	Area in Ha	Amount in Rs.	Farmers Beneffted (Nos.)								
				Landholdings by size and by women				Castewise				
				Small	Marginal	Women	Total	SC	BC	MBC	OC	Total
1.	Fruit Crops	27	6.318	20	191	27	238	41	103	93	1	238
2.	High Yielding Vegs.	76	0.630	-	214	35	249	43	109	95	2	249
3.	Spices and Condiments	31	0.186	4	56	13	73	16	28	26	3	73
4.	Other Fruit Crops	11	0.202	-	6	-	6	-	4	1	1	6
	Total	145	7.336	24	467	75	566	100	244	215	7	566

Source: Department of Horticulture and Plantation Crops, Nagapattinam District, 2009

Damage due to Tsunami

Damage to Irrigation Channels

526 of the 1141 irrigation channels showed siltation to the extent of 6.7 lakhs m^3. 147 channels had bund damage requiring 1.67 lakh m^3 of earth work. 35 ha of channel area showed high level of weed infestation. 147 sluices required various levels of repairs and 107 shutters needed to be repaired / replaced.

Estimate for repair maintenance and new construction

The total cost of repairs, maintenance and additional constructions in the irrigation channels was estimated at Rs.264.88 lakhs. Desilting of the irrigation channels was estimated at Rs.122 lakhs, repairs of the damaged bunds at Rs.28.34 lakhs, weed removal at Rs.13.86 lakhs, repairs of shutters / sluices and other structures at Rs.86.35 lakhs and construction of additional structure at Rs. 13.69 lakhs.

Damage to Drainage channels

138 of the 181 channels had shown siltation to the extent of 34.3 lakh cubic metres. 6.36 lakh cubic meters of earth work was required to repair the bund damage seen in 99 of the channels. 27.6 ha of the drainage channel area were seen to be heavily weed-infested.

Estimate for Repairs, Maintenance and New Construction

The total cost of repairs, maintenance and additional constructions in the drainage channels was estimated at Rs.887.08 lakhs. Desilting of the drainage channels was estimated at Rs.751.91 lakhs; repair of the damaged bunds at Rs.114.36 lakhs, weed removal at Rs.11 lakhs, and repairs of the structure at Rs.9.8 lakhs.

Impact of Tsunami on water resources and agriculture

The Tsunami of 26th December 2004 impacted the coast of Tamil Nadu, Kerala and Andhra Pradesh on the Indian mainland, with the Tsunami waters exerting their damaging effect up to 2 km from the coastline. Nagapattinam district was the worst affected district in Tamil Nadu. While the impact on the fishing community was most obvious, over 8460 ha of agricultural land was also affected by the tsunami, of which over 4650 ha was in Nagapattinam district, according to official reports. Apart from the waves that inundated lands close to the shore, the inflow of water through the channels and backwaters in the area resulted in the inundation of fields up to a distance of seven kilomter from the coast, causing extensive damage.

The agricultural land and water bodies were affected in the following manner due to the Tsunami:

- Drying and scorching of the standing crop

- Spreading of debris to a distance of up to 1km
- Depositing of sand over the agriculture lands to depths varying from 3 to 15 inches
- Formation of sand mounds in some places
- Depositing of sea mud / saline soil up to 3 inches deep in some places
- Siltation of skimming wells with sea sand
- Contamination of water bodies by sea water
- Formation of guilles (Channels developed due to erosion) in some areas

Other Issues

i.. Processing of Mango

Processing of mango is a potential activity in the district and workshops/ interaction meets are to be organised to spread awareness and motivate entrepreneurs to take up such activities. Fruit processing, especially mango pulping, can be undertaken in Vedaranyam area. The message is being propagated through Farmers' Clubs operating in the area. Similarly processing of tamarind has potential in the district. The inhibiting feature for such initiatives is the seasonal operation of the proposed units, degree of sophistication requiring high investment in machinery, strict and stringent quality and hygiene requirements for FPO registration etc., and special efforts to spread the message and develop multi- product based processing units for better capacity utilisation of processing infrastructure is necessary.

ii. Dryland Horticulture

Dryland horticulture tree species could be supported in the waste land areas to assist the conservation measures as well as to provide sustainable income flow to the beneficiaries operating in the area. The role of the banks in these areas is very crucial and systematic planning for meeting diverse credit needs is required.

iii. Cold Storages and Rural Godowns

Cold Storages and rural godowns is another area for future development. The district has inadequate storage capacity for fruits and vegetables. There is a need to augment the storage infrastructure to protect the interest of the farmers as well as to reduce post-harvest losses. The cold storages for fruits, vegetables, tamarind, flowers, pulses, chillies, egg, etc. and storage godown for onions could be established.

iv. Involving SHGs

Self-Help Groups have to be motivated for taking up flower cultivation and vegetable cultivation as well as mushroom cultivation by co-ordinated action of

NGOs, block officials and bankers in selected clusters. Mushroom cultivation may be encouraged in a big way involving SHGs in the district. Mushroom cultivation may be taken up on a cluster approach in select areas under proper extension services in the district.

v. There is scope for drawing up area development schemes for **cashew** in Sirkali, Vedaranyam and Thalainayar blocks. Efforts are being made to involve women SHGs undertaking cultivation of jasmine on a cluster basis in Vedaranyam and Thalainayar blocks. Vegetable cultivation may be taken up in Sirkali, Kollidam, Mayiladuthurai, Sembanarkoil and Vedaranyam blocks of the district.

vi. The Government of Tamil Nadu has launched a unique **Comprehensive Wasteland Development Programme** whose objective is to ensure Wasteland Development through forward linkages to agri-business, storage and markets. Under this programme, blocks of land lying currently fallow and waste would be developed with high value horticultural crops etc., and serve as a fulcrum for agri-business. Major thrust will be given to cultivation of **Flowers, Medicinal plants and Herbs, Aromatic plants, Spices and Condiments, Plantation crops** including **Cashew.**

vii. Medicinal and Aromatic Plants

With a view to promoting medicinal and aromatic plants in a big way, the Government of India had notified this sector as a thrust area. Medicinal Plant Boards have been set up at the national and state levels. Agri Export Zones will offer a focussed attention and thrust to this sector. These policy initiatives and support mechanisms will be supplemented by credit linked subsidy schemes through NMPBs and SMPBs in various States.

Tamil Nadu is blessed with varied agro-climatic conditions and it facilitates to cultivate wide varieties of medicinal and aromatic plants. Over 90% of the senna (*Cassia* angustifolia) exported from the country is produced in the state and this crop has been cultivated over centuries. *Gloriosa superba* is another plant which is commercially cultivated in the state over a decade. There is no authentic data base for medicinal and aromatic plants. The district has about 520 ha of glory lilly. Farmers are interested to take up cultivation of medicinal plants like *Aloe vera, Safed Musli* and *Amla.*

(a) Medicinal and Aromatic Plants -
Availability and Gaps in Infrastructure and Support Services

The Government of Tamil Nadu has been emphasising crop diversification and commercialisation of agriculture during the last few years. The developmental activities of this sector are coordinated by the Assistant Director of Horticulture and other technical staff.

NABARD has identified cultivation of medicinal and aromatic plants as a thrust area and prepared many bankable model schemes for the guidance of bankers and entrepreneurs. These models were circulated to all the banks and can also be accessed from the web site ***www.nabard.org.***

Fishing

Fishing plays an important role in the economy of India. It helps in augmenting food supply, generating employment, raising nutritional level and earning valuable foreign exchange. India ranks third among the major fish producing countries of the world. The total fish production which was 7.52 lakh tonnes during 1950-51 increased to 63.99 lakh tonnes during 2003-04 registering 751 percent growth during the last 53 years, i.e., annual growth rate being 14.17 percent. More than two-thirds of the output is mainly obtained from five states, namely West Bengal, Kerala, Gujarat, Maharashtra and Tamil Nadu providing over 70 percent of the marine fish production in the country. West Bengal is the leading producer of inland fish in the country with 30.89 percent followed by Andhra Pradesh, Bihar, Uttar Pradesh, Assam and Orissa contributing 71 percent of inland fish production in the country.

Tamil Nadu is endowed with one of the largest and richest fisheries in India, having a coast line with a length of 1076 kms covering both east and west coast forming almost 15 percent of country's coastline stretching along the Bay of Bengal, Indian ocean and Arabian sea. It has thirteen coastal districts, starting from Pulicat in Thirvalluvar district to Thengapattinam in Kanyakumari district. Ramanathapuram has the longest coastline length with 237 kms consisting of highest number of fishing villages with 184 out of 591 fishing villages in Tamil Nadu. A large chunk of marine fish catch is done through machanised crafts and deep sea fishery vessels. Over the years, the traditional fishing crafts were replaced by out board motors with subsidy to fishermen. There are 8.8 lakh fishermen population including seven lakh marine fishermen living in 591 marine fishing villages and urban centres scattered along the shores of the state's thirteen coastal districts. Around 1.8 lakh inland fishermen depend on resources comprising of 3.7 lakh hectares of fresh water resources all over Tamil Nadu including reservoirs, long and short seasonal tanks, brackish water area etc. Seasonal tanks account for the major share of 87 percent of the inland fish production. The marine fish production in Tamil Nadu dominated the entire sector with 75 percent to 86 percent during 1994-95 to 2004-05. In 2004-05 the marine fish production was 3,07,693 tonnes compared to inland fish production of 77,561 tonnes.

Nagapattinam, a coastal region, has a coastline spread over 187.9 kms. It has a good fishing potential due to its rich coastal area. Here two types of fishing activities - coastal fishing and inland fishing - are carried on. The coastal fish production is higher than the inland fish production. The inland fresh water

area in the district is spread over 1000 hectares i.e., 10 sq km. Marine fishing is very important in these areas and is practised in 60 coastal villages. The fishes mainly caught in these areas comprise of leegnathus, sharks, flying fish, chank, catfish, prawns, silver bellies, crabs, rays and other varieties. There are 1005 mechanized boats, 265 catamarans and 4773 FRP Vallams. Dugout canoes are also used for fishing. Fish landing facility constructed at Pazhayar, Nagapattinam and Arcottuthurai cater to the needs of marine fishermen with a workshop in the coastal area.

Fishing being the main occupation, the fishing related activities play a crucial role in the economic profile of the coastal villages in Nagapattinaam district. The different types of workers engaged in the fishing sector are shown in the following table.

Table No 5.17

Different categories of workers engaged in Fishing Sector

Sl. No.	Category of Workers engaged in fishing sector	Functions
1.	Direct Fishing	
a.	Traditional fish workers	Engaged in kattumaram* and FRP boats**
b.	Mechanized fish workers	Working in trawlers
2.	Fishing related occupation	They buy from the beach and engaged in retail selling in markets, streets and interior households
a.	Head load fish vendor woman	
b.	Cycle load fish vendor	They buy from the beach and engage in retail selling in village market place
c.	Stall based stationery retailers	They buy from the beach and sell them through stalls they own in the designated fish market.
d.	Dry fish vendors	They buy fish from the beach during gluts, dry and sell it later.
e.	Fish merchants	Procure fish by employing others, take it into distant wholesale market and engage in export.
f.	Commission agents	These are men who work for fish companies for a fixed commission.
g.	Fish companies	They perform the same functions as the merchants.
h.	workers in fish processing companies	These are labourers who do the cleaning peeling and processing work in the company
i.	Fish procure women	They operate in between the fishermen

		who catch the fish and the merchants who await to transport fish to distance places and receive commission for the fish they procure.
j.	Loading and unloading workers	Men who are employed by the fish company owners to load and unload fish in the mini-lorry.
k.	Ice plant owner	Supplying Ice to those engaged in the fish trade.
l.	Drivers of mini lorry/autos	Four wheelers and three wheelers are used in transporting fish from the landing centre to the market place
m.	Boat carpenters	They repair both traditional and mechanized boats.

* Kattumaram – with or without an engine, ** FRP Boats – Motorized Boats

Fish Catch Details

Table No 5.18

Volume of Marine Catch and Value

S.No.	Name of the fishing crafts	Total No. of crafts as on 31.01.2009	Average fish catch per day	Aaverage fish catch per year	Total cost per year (Rs. In crores)
1	Mechanised Boats	997 @ 500 Kgs.	498 Tonnes	498 Tonnes x 10 days per month = 49800 Tonnes	Rs.50/- per Kg. Rs.249 Crores
2	FRP Vallams	4473 @ 40 Kgs.	178 Tonnes	178 Tonnes x 10 days per month = 17800 Tonnes	Rs.50/- per Kg. Rs.89 Crores
3	Catamaran	2620 @ 15 Kgs.	39 Tonnes	39 Tonnes x 10 days per month = 390 Tonnes	Rs.50/- per Kg. Rs.19.50 Crores
	Total income per year				357.50 Crores

Source: Department of Fisheries, Nagapattinam District, 2009

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	Total income per year				357.50 Crores

Source: Department of Fisheries, Nagapattinam District, 2009

Fishermen Population Details

Table No 5.19

Fishermen Population

S.No.	Name of the village	ADULTS			CHILDREN			TOTAL		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Kodiyampalayam	384	365	749	238	196	434	622	561	1183
2	Pazhayar	1482	1365	2847	664	634	1298	2146	1999	4145
3	Tharkas	619	634	1253	264	252	516	883	886	1769
4	Madavamedu	284	262	546	195	173	367	479	434	913
5	Koozhaiyar	287	262	549	183	156	339	470	418	888
6	Thoduvai	553	564	1117	688	474	1162	1241	1038	2279
7	Thirumullaivasal	729	682	1411	596	563	1159	1325	1245	2570
8	Melamooverkarai	140	134	274	110	108	218	250	242	492
9	Keelamooverkarai	495	504	999	298	297	595	793	801	1594
10	Savadikuppam	141	167	308	50	39	89	191	206	397
11	Nayakarkuppam	380	305	685	220	219	439	600	524	1124
12	Madathukuppam	264	227	491	168	140	308	432	367	799
13	Pudukkuppam	186	183	369	132	117	249	318	300	618
14	Kaveripoompattinam	1182	1143	2325	754	744	1498	1936	1887	3823
15	Vanakiri	1136	1099	2235	737	756	1493	1873	1855	3728
16	Cinnamedu	226	194	420	117	82	199	343	276	619
17	Cinnankudi	709	713	1422	477	385	862	1186	1098	2284
18	Thamaraipulam	91	73	164	16	21	37	107	94	201
19	Puduppettai	412	402	814	200	196	396	612	598	1210
20	Perumalpettai	351	342	693	286	258	544	637	600	1237
21	Vellakovil	116	103	219	81	73	154	197	176	373
22	Kuttiyandiyur	454	415	869	205	200	405	659	615	1274
23	Tarangampadi	1184	1177	2361	1088	971	2059	2272	2148	4420
24	Chandrapadi	476	432	908	263	220	483	739	652	1391
25	Cinnoorpettai	74	72	146	43	48	91	117	120	237
26	Nagore	1144	1194	2338	1057	912	1969	2201	2106	4307
27	Samanthanpettai	511	455	966	352	314	666	863	769	1632
28	Nambiyar Nagar	1521	1505	3026	1187	1054	2241	2708	2559	5267
29	Nagaiariyanattu theru	1601	1670	3271	773	742	1515	2374	2412	4786
30	Keechankuppam	1579	1505	3084	1043	975	2018	2622	2480	5102
31	Akkaraipettai	3041	2687	5728	1114	841	1955	4155	3528	7683
32	Kallar	292	243	535	102	74	176	394	317	711
33	Vellankani	469	445	914	160	166	326	629	611	1240
34	Seruthur	762	781	1543	457	471	928	1219	1252	2471
35	Kameswaram	214	211	425	140	144	284	354	355	709

36	Vanavanmadevi	303	311	614	204	207	411	507	518	1025
37	Vellapallam	465	530	995	247	224	471	712	754	1466
38	Naluvethapathy	755	650	1405	162	145	307	917	795	1712
39	Pushpavanam	238	250	488	107	92	199	345	342	687
40	Arcottuthurai	1115	1200	2315	330	337	667	1445	1537	2982
41	Pannal	125	136	261	67	55	122	192	191	383
42	Maniyantheevu	324	333	657	83	101	184	407	434	841
43	Kodiyakkarai	702	692	1394	283	220	503	985	912	1897
44	Kodiyakkadu	732	666	1398	233	204	437	965	870	1835
45	Seruthalaikadu	293	303	596	157	163	320	450	466	916
46	Sinthamanikkadu	223	240	463	55	51	106	278	291	569
47	Annapettai	391	334	725	88	88	176	479	422	901
48	Vaomedu (South)	138	116	254	30	33	63	168	149	317
49	Vilunthamavadi	196	200	396	122	120	242	318	320	638
50	Cinnakottaimedu	60	69	129	51	54	105	111	123	234
51	Kottaimedu	188	177	365	101	115	216	289	292	581
52	Kallimedu	14	10	24	4	5	9	18	15	33
53	Sembodai	200	164	364	28	21	49	228	185	413
		30099	**29050**	**59149**	**16918**	**15248**	**32266**	**47017**	**44398**	**91415**

Source: Department o Fisheries, Nagapattinam District, 2009

Table No 5.20

Educational Status of Fishermen

Sl. No.	Educational status	No. of Persons
1.	Primary	35030
2.	Secondary	22782
3.	Above secondary	4223
4.	Illiterates	29380
	Total	**91415**

Source: Department o Fisheries, Nagapattinam District, 2009

Salt Pan Labourers

The salt pans located in and around Vedaranyam belong to the Government of India. The salt is produced on land leased from the government. Salt production here is a seasonal occupation where the workers work from January to September and are away from work during the rainy season ie., from October to December. After this gap, taking up work again in January requires a lot of land preparation work and investment. Around 7000 workers depend on the salt industry. It has small producers and large scale and medium sized salt manufacturers. For most of the workers, this is the prime means of livelihood.

Small Business on the Seashore

Petty business on the seashore like food stall, tea stall, vegetable vending, snacks stalls and basket making are various means of livelihoods in and around the coastal region of the district.

Taluk	Agro-based activities	Other activities
Nagapattinam	Cattle Feed Unit, Seed Processing Plant, Rice Mill, Groundnut based products, Milk Processing/ Fish	Handloom, Food products like Bakery, Sweets, Pickles making., Automobile service units, General Engineering, Steel fabrication,
Vedaranyam	Tamarind Products, Flower extraction, Groundnut based products, Mango/Cashewnut /Fish	Food products like Bakery, Sweets, Pickles making. Automobile service units, Palm leaf, General Engineering, Steel fabrication, etc.
Kilvelur	Groundnut products, Pulses, Milk Processing, Food products like Bakery, Sweets, Pickles making.	Bricks, Automobile service units, General Engineering, Steel fabrication,
Tarangambadi	Fishery products, dry fish, fish pickle	Bakery, Sweets, Pickles making. Automobile service units, Mat weaving
Mayiladuthurai	Paddy, Pulses, Groundnut/ Gingelly based products, Milk Processing,	Ready-made Garments, Blue Metal Jelly, Food products like Bakery, Sweets, Pickles making. Automobile service units
Sirkali	Flower, Banana, Groundnut based products, Essential Oil extraction units, Food products like Bakery, Sweets, Pickles making, Fish	Ready-made Garments, Bricks, Automobile service units, General Engineering, Steel fabrication, Mat weaving, Cane and Bamboo
Thirukuvalai	Milk	

Thrusts in Agricultural Development

More than 80% of the water available is used for agriculture in Tamil Nadu. Hence it is essential that the available water be used efficiently, and economically. The main thrusts in Agricultural Development are as follows:

1. Increasing the availability of surface and ground water
2. Increasing the water use efficiency, in canal, tank irrigation and in well irrigations
3. Increasing the yield per unit of water, land and time
4. Introducing advanced method of irrigation in paddy cultivation (SRI method) and drip and sprinkler methods in well irrigation
5. Bridging the yield gap in various crops grown in the district
6. Changing crop and cropping pattern based on the availability of water and introducing more areas under horticulture crops like growing fruit trees and vegetables in areas irrigated by ground water
7. Increasing the fertility of soils and reducing the soil salinity
8. It will also be worthwhile to start an attempt by pumping saline water from nearby canals on both sides into the canals and recharging them through flood / rain water, which will result in reducing salinity in aquifers in the long run.

Conclusion

Nagapattinam district has the potential for improvement in the primary sector since agriculture and fishing are the main occupations of the people. This district is prone to disaster. Therefore, disaster management becomes a part of the life of the people living here and the government and non-government institutions have to be vigilant always in this regard in order to ensure the livelihood of the people.

CHAPTER 6
Gender

Introduction

No report on human development can be complete unless and until it unravels gender inequities in human development, analyses the strengths and weaknesses of efforts to address these, and suggests possible strategies to bridge the gender gap in the future. The performance of Tamil Nadu with respect to female literacy, female IMR, female life expectancy and fertility rate shows that the status of women in Tamil Nadu is higher than that in other States barring Kerala. However, while women have registered improvements in absolute levels of literacy, enrolment and life expectancy, their position *vis-à-vis* men has remained unchanged (for example, persistent gender gap in literacy) or even worsened in many ways (for example, the declining sex-ratio). Unfortunately, neither data nor comprehensive and up-to-date studies exist on the condition (absolute levels of wellbeing) and position (wellbeing relative to males) of women in Tamil Nadu with regard to most gender dimensions, which can indicate the lack of concern for gender issues.

The Gender Agenda of UN-conventions in the context of Disaster

The importance of gender consideration is endorsed by the respective organizations at the highest level in the policy documentation but there is limited evidence of application of the same at the planning and implementation level.

In recent years, there has been a major conceptual shift in how people seek to cope with disasters from natural hazards. While humanitarian response capacities are vital and need to be continued, human intervention designed to reduce the vulnerability of communities and assets can reduce the impact of disasters. Gradually, environmental and developmental stakeholders are becoming more involved in the management of risk and vulnerability reduction due to their close interaction with natural resources management.

Commission on the Status of Women

The UN Commission on the Status of Women, in its Programme of work for 2002-2006, stated that it would consider "environmental management and mitigation of natural disasters from a gender perspective". For this, the United Nations Division organised an Expert Group for the Advancement of Women known as 'Development and Advancement of Women in New Era' (DAWN) in collaboration with the ISDR Secretariat. The expert group meeting discussed in detail the link between gender and environmental management and expressed their concern to address this issue holistically having women's rights on centre stage.

Self-Help Groups (SHGs)

The Self-Help Groups are emerging as one of the important local institutions in villages in every state. A group of 12-20 persons of similar economic class, generally poor, mostly women, get together to organize themselves into cohesive groups to improve their social and economic position through collective action. The

formation of this group was started on an experimental basis in 1984 under the International Fund for Agricultural Development (IFAD) assisted Women's Development Project. These Self-Help Groups are developing into strong local institutions providing a legitimate avenue for members to participate in public life outside their homes giving tremendous physical mobility among women, increasing their bargaining capacities, self-confidence, awareness about health, nutrition, immunization, education, empowering women to cope with important social problems like alcoholism, domestic violence, abandonment, dowries, female infanticide and in life skills areas such as accounts keeping, money management, savings and credit among the rural poor, especially among women.

Table No. 6.1

Literacy level and Sex Ratio– Comparison

Item	All India	Tamil Nadu	Nagapattinam
Female Population	495.74 million	30.84 million	0.75 million
Literacy Level	54.16%	64.55%	61 %
Sex ratio	933	986	1014

Source: Census of India, 2001

Table No. 6.2

Details about Self-Help Groups (as in March 2006-2007)

Sl. No.	Name of the Block	Total Members	% to Total Members	% of Savings to Total	SC Members	% of SC Members to Total Members
1	Nagapattinam	7070	5.9*	121.07	3614	51.1
2	Keelaiyur	8146	6.9	107.41*	4611	57.0
3	Kilvelur	9172	7.8	184.37	6011	66.0
4	Thalainayar	8186	6.9	129.91	4273	52.1
5	Vedaranyam	12091	10.2	206.34	6804	56.2
6	Thirumarugal	10725	9.1	169.35	8042	75.0
7	Sirkali	13366	11.3	232.25	8866	66.3
8	Kollidam	8651	7.3	109.44	4196	49.0*
9	Mayiladuthurai	14729	12.5	323.03	8739	59.3
10	Kuttalam	11095	9.4	243.91	8268	75.0
11	Sembanarkoil	14978	12.7	219.57	10605	71.0
District Total		**118209**	**100.00**	**2046.15**	**74089**	**63.0**

Source: District Rural Development Agency, Nagapattinam, 2008

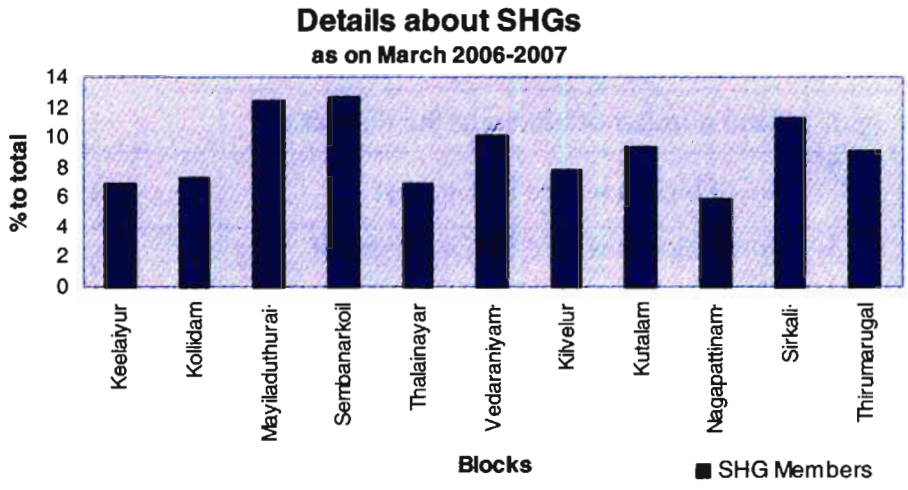

Figure 6.1

The blockwise details showing the total number of members in different blocks, savings and total number of Scheduled Caste members about the self-help groups as in March 2006-07 are given in Table 6.2.

Self-Help Group members

Nagapattinam district is having a total number of 118209 SHGs. Out of these, the highest number of SHGs were found in Sembanarkoil block, there were 14978 members in the block with 12.7 percent of the SHGs in the district. The lowest percentage of SHGs were found in Nagapattinam Municipality and these SHGs had 7070 members (5.9 percent in the district).

Savings

Mayilduthurai block in Nagapattinam district is having the highest percentage of savings (323.03 percent) and the lowest percentage of savings is found in Keelaiyur block (107.41 percent).

Table No. 6.3

Micro Finance Profile in the District

1.	Total number of blocks in the district	11
2.	No. of blocks where SHGs exist	11
3.	No. of blocks where SHGs are credit linked	11
4.	No. of NGOs in the district*	13
5.	No. of NGOs participating in the linkage programme	13
6.	No. of additional NGOs to be roped in during the year	2
7.	Total No. of bank branches in the district	117
8.	Of which No. of branches participating in the linkage programme	117
9.	No. of additional branches proposed to be roped in during the year	2
10.	No. of Govt./ Post Offices/ Other Agencies participating	2
11.	No. of Govt./ Post Offices/ Other Agencies likely to participate	1
12.	No of SHGs in the district	11,265
13.	No of savings linked SHGs in the district	11,178
14.	No of credit linked SHGs	10,490
15.	No of SHGs which have taken up micro enterprise	NA

* Data available only in respect of NGOs approved by Mahalir Thittam of TNCDW and SHGs promoted by them.

Source: DRDA, Nagapattinam District, 2008

Scheduled Caste Members (SC)

In case of Scheduled Caste members to the total SHG members in various blocks, it is seen that the highest SC members are found in Kuttalam and Thirumarugal blocks with 75.0 percent showing same values and the lowest was observed in Kollidam block with 49.0 percent.

Study findings of SHG-Bank linkage programme

NABARD conducted a Quick Study on SHG-Bank linkage programme in Tamil Nadu during 2006-07. The findings reveal that a social revolution has taken

place in a decade's time in rural parts of Tamil Nadu as a result of the SHG movement. But there is a need for reliable data base and MIS on NGOs, SHGs & credit linkages. Direct linkage is not given preference by Government Departments and NGOs in some districts. Impact of large scale subsidy oriented schemes has also vitiated the scenario in some districts. The quality of SHGs largely depends on the strength of the promoting organisations. The quality of groups promoted by experienced and reputed NGOs was relatively better than that of the groups promoted by the small, upcoming NGOs. The quality also depended on the continued attention paid by the NGOs. Wherever NGOs withdrew after promotion, there was slackness in maintenance of records, periodicity of meetings etc. Lack of proper training was one of the major reasons for poor quality of SHGs vis-a-vis book keeping, group dynamics etc. Members other than leaders were not aware of banking procedures. Political involvement in group formation affected quality of groups in a few cases. Internal loans are used mainly for consumption purposes. In a good number of groups, loans are used by members for a variety of economic activities. No major default in repayment/NPA accounts has been reported. There is a need for maintaining a database about the non-Mahalir Thittam(Tamil Nadu Corporation for Development of Women) NGOs & SHGs.

The micro finance activities in the district are primarily addressed through the involvement of NGOs approved under the Mahalir Thittam of TNCDW, coordinating with the commercial and co-operative bank branches. Now, we have reached a stage where the expansion of SHGs has covered almost all villages of the district. In fact, there is not a single village not covered by SHG programme and there is no public function which has not talked about Self-Help movement in the district.

Now, the need is to consolidate the gains and make the SHGs focus on economic activities. The consolidation of groups has to be attended to by NGOs and Mahalir Thittam officials.

Child Labour

Incidence of Child Labour

There is no universally accepted, precise definition of child labour. This issue is determined by reference to the age of a child, the potential impairment of health, physical development and education and engagement of child labour in the worst forms such as trafficking and illegal or hazardous activities. More than 10 percent of the world's 2.2 billion children are engaged in child labour where the majority of them are working in the agriculture sector, often with hazardous chemicals or machinery. And about 10 millions are steeped in slavery, trafficking, prostitution and armed conflict.

The problem of child labour is substantially located in the developing world where poor parents send their children to work for reasons of economics; expenditure, unable or sometimes unwilling to perceive the long term value of education for the family's prospects. In this way, poverty and child labour are mutually reinforcing and are often passed on from generation to generation.

In 1989, the United Nations General Assembly accepted the Convention on the Rights of the Child (CRC) that singly enshrines the full range of rights of children necessary to their survival, development and protection in society. Because of the connection between child rights and survival and development, virtually all of the Convention's articles apply to the distressing effects of child labour.

Article 32 recognizes the right of children to be protected from work that threatens their health, education or moral development. This almost ratified human rights framework, together with the 1999 United Nations International Labour Organization (ILO) Convention for the elimination of the worst forms of child labour, provides a consistent paradigm and solid foundation for tackling child labour.

The data on child labour in Nagapattinam district shows that child labour incidence is the highest in Kilvelur block and Nagapattinam Municipality with 18.8 percent followed by Sirkali Municipality with 16.6 percent and the lowest is observed in Kollidam and Thirumargual blocks showing the same value with 10.4 percent. In case of male child labour, the highest is seen in Sirkali Municipality, with 22.9 percent, followed by Kilvelur block and Nagapattinam Municipality, showing the same value with 17.1 percent. The lowest is seen in Mayiladuthurai Municipality, with 5.7 percent. As for female child labour, the highest percentage is seen in Mayiladuthurai Municipality, with 30.7 percent and the lowest is seen in Vedaranyam Municipality, Kilvelur block and Nagapattinam Municipality, showing the same value with 23.1 percent. There is no incidence of child labour in Sembanarkoil block, Thalainayar block and Kuttalam block.

Table No. 6.4

Incidence of Child Labour 2006

S.No	Blocks	Male	% of the Male child labour	Female	% of the Female child labour	Total	% to District Total
1	Nagapattinam	6	17.1	3	23.1*	9	18.8
2	Keelaiyur	-	-	-		-	-
3	Kilvelur	6	17.1	3	23.1*	9	18.8
4	Thalainayar	-		-		-	-
5	Vedaranyam	3	8.6	3	23.1*	6	12.5
6	Thirumarugal	5	14.3	-		5	10.4*
7	Sirkali	8	22.9	-		8	16.6
8	Kollidam	5	5.7*	-		5	10.4*
9	Mayiladuthurai	2		4	30.7	6	12.5
10	Kuttalam	-		-		-	-
11	Sembanarkoil	-		-		-	-
District Total			100.00		100.00	48	100.00

Source: District Statistical Department, Nagapattinam, 2007

Violence

Incidence of violence against woman can be seen in different forms throughout the world like female infanticide, female foeticide, rape, wife battering, eve-teasing, molestation, pornography, trafficking, child marriage, forced marriage, child labour, dowry related harassment and witch hunting which are taking place in various institutions, such as family, work place, schools, colleges, hospitals and roads. Some of these incidents of violence are not reported due to the tendency of society to victimize the victim as well as the feeling that violence within the family is a private issue. Therefore, disaggregated data are not available on various incidents from the people.

Table No. 6.5

Blockwise Registration of Violence Against Women 2006

Sl. No.	Name of the Blocks	Total No. of Registration of cases of violence against women	% of registration of cases of violence against women to Total
1	Nagapattinam	12	8.4
2	Keelaiyur	29	20.4
3	Kilvelur	5	3.5
4	Thalainayar	5	3.5
5	Vedaranyam	13	9.1
6	Thirumarugal	3	2.1*
7	Sirkali	8	6.0
8	Kollidam	14	10.0
9	Mayiladuthurai	37	26.0
10	Kuttalam	4	3.0
11	Sembanarkoil	12	8.4
District Total		**142**	**100.0**

Source: Office of Superindentent of Police, Nagapattinam District, 2007

The blockwise registration of cases of violence against women is shown in Table 6.5. It tells that there were a total number of 142 cases of violence against women registered in the year 2005-2006 in Nagapattinam district. Out of these, the highest number of cases is registered in Mayiladuthurai Municipality with 26.0 percent, followed by 20.4 percent in Keelaiyur block. The lowest number of cases of violence was registered in Thirumarugal block, showing 2.1 percent.

Table No. 6.6
Crime Against Women - Particulars for the Years 2001 to 2004

S. No.	Head	2001						2002						2003						2004					
		REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF
1.	Rape	11	05	04	01	-	01	23	07	11	05	-	-	04	01	-	03	-	-	09	1	3	4	-	10
2.	Attempt to Commit rape	01	01	-	-	-	-	04	01	02	-	-	01	01	-	01	-	-	-	-	-	-	-	-	-
3.	Molestation	55	15	38	02	-	-	83	35	36	07	-	05	50	13	27	03	-	07	28	4	16	5	-	3
4.	Kidnapping & Abduction	25	-	06	03	-	16	04	02	-	-	-	23	19	-	03	02	-	14	14	-	03	01	-	10
5.	Eve – teasing	13	09	04	-	-	-	06	04	02	-	-	-	04	01	03	-	-	-	03	2	-	01	-	-
6.	Dowry death	04	01	03	-	-	-	09	02	06	01	-	-	09	04	05	-	-	-	05	01	02	01	-	01
7.	Dowry Harassment	08	-	07	-	-	01	14	02	09	-	-	03	25	01	11	05	-	08	09	02	02	04	-	01
8.	Female infanticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	117	31	62	06	-	18	163	51	66	14	-	32	112	20	50	13	-	29	68	10	26	16	-	16

Source: Office of the Superintendent of Police, Nagapattinam District, 2008

1. REP: Number of cases registered, 2. CON: Number of cases convicted, 3. ACQ: Number of cases acquitted, 4. PT: Number of cases pending trial in the court, 5. UI: Number of cases under investigation, 6. UN: Number of cases undetected

Table No. 6.7
Crime Against Women - Particulars for the Years 2005 to 2008

S. No.	Head	2005						2006						2007						2008					
		REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF	REP	CON	ACQ	PT	UI	UNIREF
1.	Rape	13	0	04	07	-	02	09	-	04	04	-	01	14	02	05	07	-	-	10	-	-	06	04	-
2.	Attempt to Commit rape	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Molestation	42	09	10	21	-	02	73	13	07	50	-	03	53	04	10	35	-	04	59	04	06	44	02	03
4.	Kidnapping & Abduction	16	-	-	01	-	15	13	-	01	02	-	10	26	-	04	04	-	18	24	-	01	03	07	13
5.	Eve – teasing	10	02	03	05	-	-	13	04	01	08	-	-	25	04	03	17	-	01	08	02	-	06	-	-
6.	Dowry death	02	-	02	-	-	-	06	01	-	05	-	-	04	-	01	03	-	-	04	-	-	03	01	-
7.	Dowry Harassment	18	01	04	08	-	05	09	-	01	07	-	01	22	-	03	15	-	04	08	-	-	08	-	-
8.	Female infanticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	101	12	23	42	-	24	123	18	33	55	-	17	144	10	26	81	-	27	113	06	07	70	14	16

Source: Office of the Superintendent of Police, Nagapattinam District, 2009

Table No. 6.8

Crime statement of SC/ST cases for the last 8 years (2001 – 2008)

S. No.	2001										2002								
	Head	Reported	Convicted	Acquitted	PT	UI	MF	@ to IPC	% con	Reason for Acq	Reported	Convicted	Acquitted	PT	UT	MF	@ to IPC	% con	Reason for Acq
1.	Murder	1	1	-	-	-	-	-	100%	-	2	-	2	-	-	-	-	0	-
2.	Attempt to murder	1	-	1	-	-	-	-	0%	Witnesses turned hostile	3	1	2	-	-	-	-	33%	-
3.	Rape	2	-	2	-	-	-	-	0%	-	4	1	3	-	-	-	-	25%	Witnesses turned hostile
4.	Arson	-	-	-	-	-	-	-	-	-	2	-	1	-	-	1	-	0%	-
5.	Rioting	4	1	3	-	-	-	-	25%	Witnesses turned hostile	5	-	2	1	-	2	-	0%	-
6.	Hurt	1	1	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-
7.	Other cases	5	1	4	-	-	-	-	20%	Witnesses turned hostile	25	-	12	-	-	13	-	-	Witnesses turned hostile
	Total	14	4	10	-	-	-	-	28%	-	41	2	22	1	-	16	-	9%	-

S. No.	2003										2004								
	Head	Reported	Convicted	Acquitted	PT	UI	MF	@ to IPC	% con	Reason for Acq	Reported	Convicted	Acquitted	PT	UT	MF	@ to IPC	% con	Reason for Acq
1.	Murder	-	-	-	-	-	-	-	-	-	3	-	3	-	-	-	-	0%	-
2.	Attempt to murder	1	-	-	1	-	-	-	-	Witnesses turned hostile	1	-	-	-	-	-	1	-	-
3.	Rape	1	1	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	Witnesses turned hostile
4.	Arson	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
5.	Rioting	3	1	1	-	-	1	-	50%	Witnesses turned hostile	3	-	-	1	-	1	1	-	-
6.	Hurt	1	-	1	-	-	-	-	0%	-	6	1	2	2	-	-	1	-	-
7.	Other cases	26	3	10	-	-	12	1	24%	Witnesses turned hostile	20	1	8	-	-	7	4	-	Witnesses turned hostile
	Total	32	5	12	1	-	13	1	30%	-	34	2	14	3	-	8	7	25%	-

S. No.	2007										2008								
	Head	Reported	Convicted	Acquitted	PT	UI	MF	@ to IPC	% con	Reason for Acq	Reported	Convicted	Acquitted	PT	UT	MF	@ to IPC	% con	Reason for Acq
1.	Murder	2	2	-	-	-	-	-	100%	-	1	1	-	-	-	-	-	100%	-
2.	Attempt to murder	2	1	1	-	-	-	-	50%	Witnesses turned hostile	1	-	-	-	-	-	-	-	-
3.	Rape	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	10%	Witnesses turned hostile
4.	Arson	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Rioting	1	-	1	-	-	-	-	0%	Witnesses turned hostile	3	-	-	1	-	1	1	-	-
6.	Hurt	4	-	3	-	-	1	-	0%	-	2	-	-	-	-	-	2	-	-
7.	Other cases	15	-	5	3	-	6	1	0%	Witnesses turned hostile	21	1	9	2	-	6	3	10%	Witnesses turned hostile
	Total	**24**	**3**	**10**	**3**	**-**	**7**	**1**	**24%**	**-**	**28**	**2**	**10**	**3**	**-**	**7**	**6**	**16%**	**-**

PT: Number of cases pending trial in the court; UI: Number of cases under investigation; MF: Number of cases treated as mistake of fact

Source: Office of Suprindentent of Police, Nagapattinam District, 2009

Table No. 6.9

Representation in Panchayat Council 2006

Sl. No.	Name of the Block	Contested			Elected			Elected as % to Contested		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
1	Nagapattinam	26	15	41	10	4	14	38.4	27.0	34.1
2	Keelaiyur	30	14	44	8	4	12	27.0	29.0	27.2
3	Kilvelur	20	14	34*	8	4	12	40.0	29.0	35.2
4	Thalainayar	26	16	42	7	4	11	27.0	25.0	26.1
5	Vedaranyam	47	22	69	17	8	25	36.1	36.3	36.2
6	Thirumarugal	25	24	49	10	6	6	40.0	25.0	33.0
7	Sirkali	74	25	99	14	7	21	19.0	28.0	21.2
8	Kollidam	47	41	88	12	11	23	26.0	27.0	26.1
9	Mayiladuthurai	83	46	129	16	11	27	19.2	24.0*	21.0
10	Kuttalam	48	25	73	14	9	23	29.1	36.0	32.0
11	Sembanarkoil	56	32	88	19	11	30	34.0	34.3	34.0
District Total		**482**	**274**	**756**	**135**	**79**	**214**	**28.0**	**29.0**	**28.3**

Source: Election Department, District Office, Nagapattinam, 2006

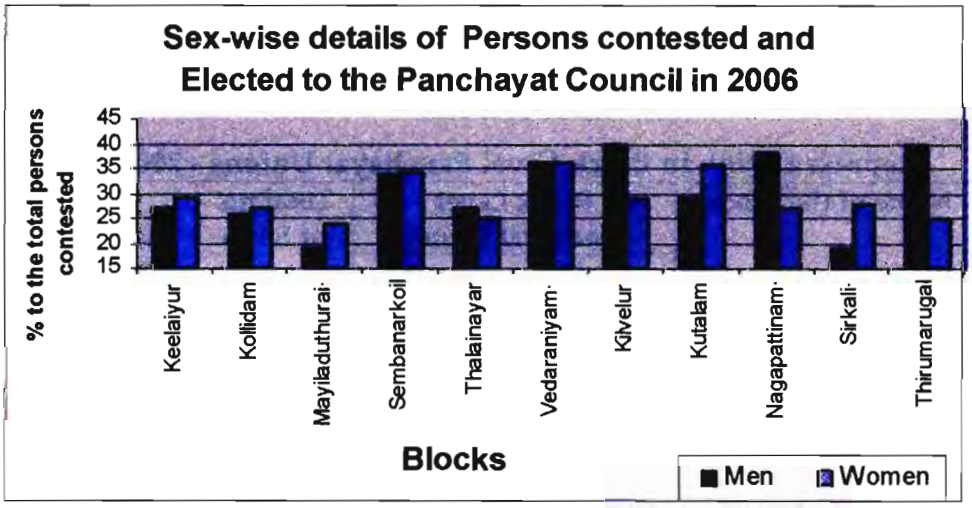

Figure 6.2

The gender details of persons who contested and elected to the Panchayat Union Councils block wise are presented in Table 6.9. It indicates that a total of 756 persons contested the election. Out of these 482 were males and 274 were females. The highest number of persons contesting, both male and female, was from Mayiladuthurai block with a total of 129 persons and the lowest was seen in Kilvelur block with 34 persons. It is seen from the table that on an average 28.3

percent of those who contested from all blocks were elected. The gender-wise break-up shows that the male percentage elected was 28.0 and the female percentage elected was 29.0. The blockwise percentage of those elected to those who contested for females was the highest in Vedaranyam Municipality with 36.3 percent, followed by Kuttalam block with 36.0 percent which are higher than the average percentage for Nagapattinam district. The lowest was seen in Mayiladuthurai Municipality with 24.0 percent.

Decision-Making or Representation at Block Level Panchayat Union (Ward Members)

The basic objective of human development is expanding choices for all sections of the people to take part in administrative and economic decision-making. Experience from most of the countries in the world shows that a more broad based participation in decision-making influences in a positive way. Gender differences continue to exist across the world, but India has taken the lead as far as the Constitution and statutory initiatives are concerned. The recent increase in the participation of woman in grassroots democracy has paved the way for women's increased mobility outside their home, creating space to voice their concerns. But still there is a long way to go before full participation. The 73rd and the 74th Constitutional Amendments in 1992, which went a long way in reactivating decentralized democracy in India, made it mandatory to reserve one third of seats in local bodies for women. This has facilitated women's participation in the political process not as passive voters or party workers alone, but as candidates.

Table No. 6.10

Representation in Block Level Panchayat Unions - 2006

Sl. No.	Name of the Block	Block Level Panchayat Unions		Total no. of Seats	% of males to Total no. of Seats	% of females Total no. of Seats
		Male	Female			
1	Nagapattinam	10	4	14	71.4	-
2	Keelaiyur	8	4	12	67.0	33.3
3	Kilvelur	8	4	12	67.0	33.3
4	Thalainayar	7	4	11	64.0	36.3
5	Vedaranyam	17	8	25	68.0	32.0
6	Thirumarugal	10	6	16	63.0	38.0
7	Sirkali	14	7	21	67.0	33.3
8	Kollidam	12	11	23	52.1	48.0
9	Mayiladuthurai	16	11	27	59.2	41.0
10	Kuttalam	14	9	23	61.0	39.1
11	Sembanarkoil	19	11	30	63.3	37.0
District Total		**135**	**79**	**214**	**63.0**	**37.0**

Source: Election Department, District Office, Nagapattinam, 2006

The blockwise representation of males and females in block level Panchayat Union (Ward Members) shows that, the total number of candidates elected in Nagapattinam District was 214, out of which 135 were males with 63.0 percent and 79 persons were females, with 37.0 percent.

The highest percentage of females to total seats was seen in Kollidam block, with 48 percent followed by Mayiladuthurai Municipality with 41 percent. The lowest percentage of female ward members was found in Nagapattinam Municipality, with 29 percent.

Status of Women in Nagapattinam after Tsunami

One of the most significant of all marginalized sections in the village communities is that of women. Both in the fishermen community and the farming community, women were found to be bearing the double burden of poverty and conventional male subjugation. As the sphere of agricultural activities shrinks primarily due to the desalination of land in the post-tsunami period, women agricultural labourers find it hard to get employment and are increasingly being engaged in the production of thatches from coconut leaf, in milch animal rearing and other petty trades. During discussions and surveys, the majority of them were found to be in poor health, with many suffering from anaemia.

A large number of widows were found in the target villages. It was observed that due to acute diseases resulting from alcoholism and smoking, mortality rate was high among middle-aged men. The diseases found common in the fishermen community were asthma, jaundice and arthritis.

There have also been cases of poor landless agricultural labourers committing suicide due to abject poverty and their inability to repay loans. The suffering of their widows who are left without any material and emotional support is heartrending. Due to societal control, their mobility is restricted, which makes their situation worse. Widows of the fishermen community especially are in a bad situation as they are not allowed to switch over to choose any other vocation, which makes them completely dependent on the families. In a resource scarce society, this leads to an unpleasant atmosphere as they are considered an additional burden. Low production of agriculture and fishing in the post-tsunami period has only added to the problem.

Divorced women and those separated from their husbands also have been found to be having problems similar to those of the widows. Lack of proper education along with absence of opportunities of livelihood make the bargaining power of these women very low.

What also came to the notice of the facilitators during the course of micro-planning are the problems faced by adolescent girls. The majority of them are not permitted to continue their studies after secondary school and are compelled to

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go for wage employment in the agriculture/construction sector. Due to poor literacy, lack of maturity, lack of understanding of the society and the world around them, the adolescent girls are subjected to exploitation and many of them are anaemic and unaware of personal health and hygiene. The educated among them have shown interest to learn new skills--tailoring, toy making, and coir production--that would help them to earn some income of their own. During the course of discussion, it was found that the girls sought guidance to acquire computer knowledge/skills. These go to show the keenness among the adolescent girls to be independent.

The SHG activities among women are yet to scale up to economic activities. They have been getting training in trades like coir production, candle production, handicraft work from palm leaves but due to various issues in the credit linkages, they lack production activities. Illiterate women members of SHGs demand good education to their wards and vocational training to their adolescent girls.

It is learnt that the fisherwomen and women agricultural labourers have habits that are harmful to their health. It was found that they have the practice of chewing pan (betel leaf) with tobacco and are used to managing their hunger by having just tea and bun. This has been the main cause of the deterioration of their health. Many mothers in poor families said that due to demand--cash and jewels--as dowry, the marriages of their daughters are getting delayed. This leads to the womenfolk of the selected villages living with stress and tension.

Special care was taken to include the voices of women through providing special sessions and to integrate the issues of various sections of women with the larger issues of social development. In all the sectors, women's problems were articulated. It was found that the dropout rate was more in case of girl students than boys, that parents were not ready to send their daughters to schools that had no proper sanitation facilities. Many women were also found not being sent to hospitals even during the delivery as these were considered to be intricately linked to family prestige and women's honour. Poor attention to reproductive health of women was primarily due to the lack of awareness as well as lack of access to healthy sanitation provisions.

In any disaster, women are the most vulnerable lot and in the tsunami the loss of life was more among women and children. With women playing multiple roles they become more prone to stress in a post-disaster situation. The Tsunami meant increased responsibility for women to care for their family when they were left without any source of income or savings. They became economically and psychologically weak. Loss of spouse, children and relatives brought more difficulties and they were left with no other option but to support the family. The following is the list of issues brought out by a group of pregnant women, feeding mothers, single mothers and mothers who had lost a child.

Psychological impact	Social impact
¤ Death of husband resulted in isolation of the widows by the husband's family ¤ shock due to death of the husband ¤ Fear and shame of facing the village men as they were without cloth ¤ Forcing the widow into remarriage ¤ Adolescents girls are feeling insecure because of men ¤ Death of children and relatives ¤ Loss of assets ¤ Not able to relax ¤ Miscarriage due to anxiety and fear ¤ Premature delivery due to panic ¤ Problems in menstrual cycle ¤ Decrease in appetite ¤ Decrease in sleep ¤ Body aches ¤ Feeling fatigue ¤ Not interested in talking and mingling with the others ¤ Not going out of the shelter and remaining aloof ¤ Ill-treatment by in-laws ¤ Scapegoat for loss of husband or children ¤ Confusion about the situation ¤ Fear about the future ¤ Loss of confidence in life ¤ Suicidal thinking and attempted suicide	¤ The displacement of the family caused trouble in adjusting to the new environment ¤ Living in a new area without basic minimum facilities ¤ Feeling uncertainty about their future as they are waiting for the government to announce rebuilding of their homes and houses ¤ Widows joining orphanage due to death of husband and child ¤ Adolescent girls forced to marry as second wife to men who lost their wife ¤ Restriction on widows against remarrying ¤ No privacy in the camps and temporary shelters for women for daily chores ¤ The rumours create continuous panic in them and their children ¤ Feeling helpless and hopeless because of loss of property and life of spouse and / or children ¤ Shock of doing last rites to her children had affected their mental health ¤ No rituals performed after death of the husband or others ¤ Increase in stealing and robbery (Stealing ornaments from the corpse and creating rumours and utilizing the fear to steal while people run out of their houses)

¤ Feeling vacuum and emptiness ¤ Change in behaviour and habits – irritability, anger, not able to eat ¤ Restless and not able to sit in one place ¤ Feeling of hatred ¤ Becoming very rigid and wanting to help others ¤ Memory loss and forgetfulness ¤ Not talking like before ¤ Not able to think clearly ¤ Change in relationship between the spouses ¤ Getting repeated dreams about the tsunami ¤ Feeling guilty of not feeding the child, as they are not lactating.	¤ Marriages being stopped for those who got engaged ¤ Those who had undergone family planning surgery and lost their children had the fear that they were left without no chance of conceiving ¤ Death of family members left the aged women with no support

Physical impact	Economic Impact
¤ Loss of life ¤ Injuries; due to injuries, loss of beauty; inability to escape due to saree being caught on thorns ¤ Fatigue ¤ Numbness ¤ Pregnant women not able to run ¤ Miscarriage and increased bleeding ¤ Sleep and appetite have come down ¤ Weight loss ¤ Loss of eyesight and decrease in clarity ¤ Not able to lactate	¤ Death of husband left nobody to fend for the family ¤ Loss of household property ¤ Loss of fishing boats and nets ¤ Loss of job for the husband ¤ Not able to sell fish ¤ Death of cattle ¤ Health complications ¤ Brooding due to new living situation ¤ In pregnancy, no money for medical expenses ¤ No savings and the irresponsible

¤ Due to death of the child, mother not able to extricate the breast milk, resulting in fever ¤ Due to lack of food, not eating, anaemia ¤ Headache, stomach ache, joint pain ¤ Increased blood pressure ¤ Chest pain due to running to save themselves ¤ Loosening of sutures of women who had delivered recently	spending by the men resulted in no money at hand ¤ Not able to fulfill the basic needs of the children and the family due to lack of money.

Source: Understading gender implications of the Tsunami Study carried out by EKTA, Madurai

Tsunami and Livelihood

The 2004 Tsunami had an adverse impact and left the community vulnerable to economic hardships. There was a need to make the lost resources available to support people's life. The NGOs that focused on rehabilitation programmes looked beyond reinstating lost livelihoods towards introducing new economic opportunities that reduced people's vulnerability and enhanced their capacities to handle future calamities.

The government gave importance to the long term development needs of the affected people. These affected families were given cash for work initially to support their livelihoods. The Oxfam introduced equal wages for work by women, ensuring their equal rights. These organizations had several constraints in coping with the need for rehabilitation that covered diverse livelihoods, differential skill sets, understanding the pre-tsunami patterns of livelihoods, and offering choices in traditional/ alternative livelihood based on the capacity and choices of the people to have successful restoration. The various activities carried out by the humanitarian organizations in marine livelihoods, agriculture, salt pan, income generation programmes and strategies took off.

To the fishermen community, provision of boats and nets was the major input by most of the organizations. Engine repair and replacement was also taken up. The other tools that were supplied to the marine fishermen included marketing sheds, ice boxes for fish storage, fish landing centres, net mending sheds, cold storage, fish crates, fish drying yards, solar fish dryers, fish transporting vehicles, communication facilities, sea safety kits, fish finders for fresh water and sea water.

The tsunami had destroyed the quality of agricultural land and made it unsuitable for cultivation. A few NGOs were engaged in reclamation work of the salt-affected lands. Some provided Rs.5000 - Rs.50,000 to land owners based on the extent and coverage of activities per hectare. Some of the activities undertaken by the humanitarian organizations included reclamation of salt affected lands, suitable farming practices through low external input and organic farming practices, cleaning ponds, cleaning and desilting of canals and drainages, providing green manures, appropriate seed inputs, tools and equipments, assistance to agriculture operations, sericulture, organic compost preparation support to agricultural labour, diversifying livelihood activities.

Further, a number of income generation programmes were also taken up by these organizations and these helped to provide support for reestablishing lost livelihoods as well as to open up new avenues. The following are some of the activities: petty shops, food stalls, vegetable shops, cycle shops, providing goats, cows, rice line, sanitary napkin making, coir making, agarbathi making, papad making, fish pickle making, garment making, tailoring, sea weed culture, lobster fattening, support to artisans and handicrafts making, rexine bag making, doll making, brick making, terracotta products, ecosan toilet seat making, handicrafts, shell crafts, net making and mending, footwear production, soap, phenyle making, shell powder marketing, hand made paper and cloth products.

Thus education and opportunities for skill development were provided to facilitate strengthening and diversification of livelihood options of tsunami affected fishing and other communities with focus on women and the youth.

Box 6. 1 Tsunami Experience

"On that fatal morning, Vasanthi, a woman activist of SNEHA in Nagai, was attending to her household chores with her daughter and son, while her second daughter Vineetha was away in her grandmother's house. Before Vasanthi could realize what was happening, 50 feet of tidal wave washed away her house. Vasanthi and her son ran for their lives and got stuck in wild thorn bush. They lay there dead. When Vineetha realized that she had lost her mother, brother and sister, her heart was torn apart. Every evening Vasanthi used to come to her mother's place and hold Vineetha. Now, everyday Vineetha recalls her mother holding her and weeps inconsolably. Struck by the trauma, her grandfather has become speechless. (Report of SNEHA, 2005)

Vimala sobs as she recalls the horrors of the tsunami that devastated the sma1I fishing communities of Kanyakumari district at the southern tip of India. It took mere minutes to destroy us completely, " she says. My husband, my mother-in-law and I just managed to grab a child each, then we were swept out. My child slipped out of my grasp. I thought that was it. Then a body hit me. I grabbed at it. By some miracle, it was my daughter brought back to me."

Gender Concern in the context of Tsunami

Disaster is not gender neutral. It affects different sections in the society differently. In fact, approximately three times as many women as men died in the tsunami and according to early reports from Pakistan, more women than men were killed in the October 2005 earthquake. The precise number of women who died in the Asian tsunami has not been established as government statistics were not separated by sex. The global fund just added up survivors (source: Caught in storm: Global fund for women). Against this backdrop EKTA, a women rights organization in Tamil Nadu, conducted a study to understand the gender implications of the tsunami on the lives of coastal communities and evolved strategies for recommending to include gender in the development process. The suggestions and recommendations were:

The effectiveness of aid programmes will fall short unless greater attention is paid to gender equality because ownership is central to the new Aid strategy. It must include women who are not only citizens but also key stakeholders in their country's development. (Noelin Heyzer, Executive Director, UNIFEM).

- The relief and rehabilitation policy should be inclusive, making special provisions for those at the very bottom of the socio-economic hierarchy.
- Disaggregate data by sex, caste, class, age, ethnicity, religion and disability.
- Both state and non-state agencies working with the affected communities need to be made aware about the gender specific needs of women. Gender sensitive guidelines must be issued to officials to ensure that women and girls are guaranteed safety and security from gender based violence.
- It is absolutely necessary that women become a part of the structures of administration put in place to deal with displacement and other problems faced by those who are affected by the tsunami at every level, from the village level right up to the state and central level operations. In particular, it is critical that women become an integral part of the committees at the district and state level.
- Recognize women's capacity as a resource in both risk reduction and in disaster management and reject the view of women as helpless victims. Provide women with necessary information and skills that will enable them to reduce their vulnerability. Include women in all stages of disaster management plans.
- Ensuring of land rights, housing and shelter benefits, creation of employment; training and livelihood support for women, particularly those who lost their husbands and otherwise single women, women with disability and old women should be given priority.

- The planning for relocation must have women's participation, as they are the most vulnerable category. The physical security of women and their children will be far greater in communities that are well known to them and where they have strong social resources. For example, women who are able to access familiar religious sites, markets, hospitals, relatives, friends and other resources will be far less vulnerable to abuse, exploitation and psychological distress. Relocating in unfamiliar areas will have negative implications for their psychosocial and emotional status.
- Special attention must be paid to land rights, housing and shelter benefits, creation of employment, reestablishment of livelihoods, training and livelihood support for women. Special consideration should be given to the specific needs of widows, women supported households, women with disability and aged women.
- Women's groups and community based groups should be supported to work with displaced women and to build closer relationships that may pave the way for more open discussions regarding the issue of violence as well as more constructive interaction with officials and important decision makers.
- Counselling for children and women needs to be organized on a sustained manner with due recognition of the local realities. Equally important is the sensitivity to the age group and gender practices in the region.
- In the current situation, protection of women and their dignity in the temporary shelters and in camps is necessary. Privacy issues need to be addressed by placing water sources, toilets and kitchens at convenient locations. In camps, it means designating private spaces where women can undergo medical examination. (Oxfam Paper)
- The panchayat government should be entrusted with the responsibility of dispersing the funds from the state for reconstruction and monitoring the reconstruction process in coordination with Non-Governmental Organisations (NGOs) and Community Based Organizations (CBOs).
- Tamil Nadu state has announced the formation of "Tsunami Waves Relief Committees" at district, panchayat and ward levels in all the coastal districts. It has to be constituted immediately with adequate women's representation.
- The elected government must prepare the demographic data; the need assessment data and village development plan and the reconstruction plan must be executed by the CBOs under the leadership of the elected government
- Reduce relief expenditure by investing more on disaster risk reduction and on building communities with equal opportunities for work that can strengthen their ability to cope with disaster. The rehabilitation process needs

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- to prioritize the following vulnerable groups: women living in poverty, elderly women, women with disabilities, women supported households, socially isolated widows, women in shelters/landless, women living alone, and women with chronic illness.

Conclusion

The analysis on gender shows that women were affected most in tsunami. The rehabilitation measures given to them are quite appreciable but not sufficient. The increasing incidents of violence against women should be taken into account seriously. In spite of the law to prevent domestic violence against women, the incidents are on the increase. Women's empowerment process and the awareness among the public to respect women is the need of the hour. Many studies have shown that economic upliftment of women together with rising the social consciousness will lead to gender equality. Economic contribution of women in primary sector is often unaccounted because of the gender division of labour. Due consideration should be given to ensure equal wage for men and women in Nagapattinam district.

CHAPTER 7

Infrastructure

Roads and bridges are not only the means of Transport but also the infrastructure that hastens the economic progress

- State Planning Commission

Tamil Nadu is a large state with a high rate of urbanization (43.86%, 2001 Census). Infrastructural facilities play a crucial role in the development of human development indicators. There are different types of infrastructure like road, telecommunications, electrification, housing, banking, water connection, toilet facilities etc. This chapter focuses on this infrastructure and its implications for human development.

Transport and Communications

The district is having a road network comprising of National Highways 71.2 km, State Highways 115.750 km, Corporation and Municipality road 232.024 km, Panchayat Union and Panchayat roads 2298.8 km, Town panchayat and Township roads 249.482 km. The broad gauge conversion of the railways in this section is expected to facilitate development of non-farm sector activities. The port at Nagapattinam is considered to be an intermediate port and crude palm oil is imported from Malaysia. There are 241 post offices, 96 post and telegraph offices, 49 telephone exchanges with a telephone subscriber base of 60572 nos.

ii. Infrastructure development taken up during the previous year

Under the NAMT scheme, 17 projects were set up with own funding arrangements. About 9 projects are under various stages of consideration by the banks out of which 7 have been sanctioned. As cent per cent of villages are electrified, the district has a good network of power transmission lines. Eighteen power transmission stations / sub-stations are functioning in the district, with a total capacity of 197 M.V.A. About 36.428 million units accounting for 14.24 % of the total power consumption of the district are consumed by the Industrial sector including SSIs, Tiny and Cottage Industries.

Under tranche IX of RIDF, 05 works for enhancement of power transformer capacity, erection of additional distribution transformers, erection of additional HT and LT. lines and installation of LT. fixed capacitors were taken up with a total financial outlay of Rs. 569.18 lakh.

Table No. 7.1

Length of the Roads 2005-2006

Panchayat Union/ Municipality/ Town Panchayat	Surfaced roads(in Km)				Unsurfaced roads (in Km)	Grand Total
	Cement Concrete	Bituminous	Water bound Macadam	Total		
Keelaiyur	1.5	93.42	19.28	114.20	34.50	148.70
Kollidam	9.7	91.0	66.8	167.5	18.7	186.3
Mayiladuthurai•	16.3	76.4	16.8	109.5	1.4	110.9
Sembanarkoil	5.49	44.25	55.38	105.12	1.38	106.50
Thalainayar	0.7	67.78	44.2	114.68	55.08	169.76
Vedaranyam•	5.4	81.5	40.25	127.25	66.45	193.70
Kilvelur	3.214	5.36	35.75	44.324	49.317	93.641
Kuttalam	4.16	78.26	45.36	127.78	37.37	165.15
Nagapattinam•	2.4	33.1	16.8	52.3	39.2	91.5
Sirkali•	5.745	34.85		39.995		39.995
Thirumarugal	0.52	22.98	9.67	33.17	14.93	48.1
Nagapattinam Municipality	27.328	72.993	1.200	101.521	3.018	104.539
Mayiladuthurai Municipality	8.902	74.859	3.782	87.543		87.543
Sirkali Municipality	7.292	46.397	5.061	58.75	0.481	59.231
Town Panchayat						
Kuttalam	16.46	2.8	8.93	28.19	0.44	28.63
Kilvelur	1.20	13.72	0.73	15.63	0.155	15.809
Vaitheeshwarankoil	3.1	6.046	3.425	12.571	0..23	12.594
Tarangambadi	1.06	19.925	3.200	24.185	13.976	38.161
Thalainayar	1.10	27.50	2.66	31.26	7.95	39.21
Manlmadu	1.25	21.00	2.1	24.35	0.21	24.56
Thitachedi	2.9	16.7	3.0	22.6	5	27.6
Vellanganni	6.15	5.70	1	72.85	0.45	13.30
Vedaranyam	1.600	57.85	9.35	68.80	33.70	102.500

Source: From the office of respective blocks, Town Panchayat, and Municipality

Highways

In Nagapattinam district, the following categories of roads are maintained by Highways department.

Table No. 7.2
Highways Department

Sl. No.	Particulars	Road in kms.
1.	State Highways	169.70
2.	Major District Roads	344.20
3.	Other District Roads	702.34
4.	Sugarcane Road	32.00
5.	National Highways	89.80
	Total	1338.04

Source: Highways department, Nagapattinam district, 2008

The comparative status of the development of infrastructure in the district vis-a-vis the State average is given in the following table:

Table No. 7.3
Infrastructure Component

Sl. No	Infrastructure component	District	State	Category
1	**Electricity**			
a	Percentage of villages electrified (as per pre 2003-04 definition)	100	100	A+
b	Percentage of villages electrified (as per 2003-04 definition)	100	100	A+
c	Percentage of rural consumers to total consumers	55	NA	
2	**Transportation**			
a	Road density per 1000 sq. km.	1794	1,373	A+
b	No of transport vehicles (registered vehicles of all types) per 1000 sq. km.	27692	51,919	D
c	Villages connected by pucca roads		9,300	
3	**Irrigation**			
a	Irrigated area to net cropped area	79.3	45.8	A+
b	% Area irrigated through groundwater	0	46.98	
c	% Area irrigated through surface water	100	53.01	A
d	No of tubewells per 100 ha of cropped area	0	4	D
4	**Communication**			
a	No of telephone lines per hundred population	4.06	7	D
b	Population served per post office	4567	4,157	A
c	Average area served per post office (sq. km)	8.33	9	A+
5	**Education**			
a	Literacy rate	76.34	73.47	A+
b	Literacy rate - Male	84.89	82.33	A+
c	Literacy rate - Female	67.96	64.55	A+
d	No of schools (elementary education upto Standard 8) per 1 lakh population	68.85	63	A+

Sl. No	Infrastructure component	District	State	Category
e	No. of secondary and senior secondary schools per 1 lakh population	8.86	14	C
f	No of Degree and professional colleges per 1 lakh population	0.6	4	D
g	Teacher-Pupil ratio			
	Upto Class V	43	39	A
	Class V to Class VIII	36.7	40	A+
6	**Health**			
a	Birth rate (per 1000 persons)	17.3	18.5	A+
b	Death rate (per 1000 persons)	6.9	7.7	
c	Maternal Mortality Rate (MMR) per 1000 live births	2.4	1.5	D
d	Infant Mortality Rate (IMR) per 1000 live births	30.2	44	A+
e	Life Expectancy at Birth			
	Male	59	67	A
	Female	60	69.5	A
f	Sub-centres / primary health centres / community health centres per 1 lakh population	20.217	16	A+
g	No. of Dispensaries and Hospitals per 1 lakh population	1.74	1	A+
h	No. of beds in hospitals per 1 lakh population	66.36	81	B
i	Doctors (modern i.e. allopathic system) per 1 lakh population	6.17	15	D
7	**Water Supply**			
	% of Villages having drinking water supply (fully or partially)	100	88.65	A+
8	**Agricultural Markets**			
	No of agriculture markets per 100 sq.km.	NA	NA	
9	**Poverty**			
	% of rural people below poverty line	32	27.1	B
10	**Agricultural Marketing**			
a	No. of regulated markets.	8	288	
	No of regulated markets per 100 sq. km.	0.29	0.22	A+
11	**Productivity of major Agriculture Crops in Kg/ha**			
	Paddy	1910	2,308	A
	Sugarcane (Gur Kg/ha)	9134	9,192	A
	Black Gram	250	409	C
	Groundnut	1292	1,552	A

Source: NABARD, Annual Credit Plan, Nagapattinam District, 2008

CHAPTER 8

Millennium Development Goals

In order to sustain overall development and also to ensure human wellbeing, all the member countries of the United Nations gathered at the UN Millennium Summit in New York in September 2000. The Summit has evolved eight development goals along with 18 time bound targets and 48 indicators for measuring the progress of activities in reaching the goals. It has been designed to represent the collective desire of all the countries to enable a better future for their citizens who are deprived of the decent standard of living and wellbeing. From 2000 onwards, efforts have been made by these countries to achieve the MDGs.

To achieve these goals, India has taken several measures through policy initiatives at the national and state levels. National Rural Employment Guarantee Act, Sarva Sikhsa Abhiyan, National Rural Health Mission, Bharat Nirman are some of the key welfare programmes launched by Government of India for achieving the MDGs throughout the country. Likewise, the state governments have launched several welfare measures namely, Nutritive Noon Meal Programme, providing Rs.6000/- as maternity assistance to the pregnant women belonging to the poor families, medical screening of the school going children and so on. These programmes are also operated at Nagapattinam district. Apart from the initiatives of the Government, many institutions and NGOs are working towards these goals. In Nagapattinam district, because of Tsunami, a large number of bilateral and multilateral agencies have come and actively involved in reconstruction work. Many of the human development activities were carried out in the district after the natural disaster. Though it was unfortunate that a natural disaster struck the Nagapattinam area, it was considered an opportunity to relook at the social and economic condition of the people. As a result, reconstruction works were initiated and thereby, a lot of infrastructure works were carried out. Facilities have been created to improve the living conditions of the people and more particularly the poor.

Hence it is necessary to capture the status of MDGs in Nagapattinam, district with the aim of focusing the attention of all the institutions and organizations working on development through schemes and programmes on the targets and goals to be reached. The previous chapters revealed the status of *human development* in this district. This chapter makes an attempt to present the position of Nagapattinam district in attaining the MDGs. This attempt has been made by analyzing data presented in the previous chapters along with the MDG target to be achieved at the national level and the status of *human development* in Tamil Nadu.

Table 8.1

Official List of MDG indicators

Millennium Development Goals (MDGs)	
Goals and Targets (from the Millennium Declaration)	**Indicators for monitoring progress**
Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below $1 (PPP) per day 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below $1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national Parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate 4.3 Proportion of 1 year-old children immunised against measles

Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bednets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources Target 7.B: Reduce biodiversity loss,	7.1 Proportion of land area covered by forest 7.2 CO2 emissions, total, per capita and per $1 GDP (PPP) 7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits

achieving, by 2010, a significant reduction in the rate of loss	7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums
Goal 8: Develop a global partnership for development	
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development and poverty reduction – both nationally and internationally Target 8.B: Address the special needs of the least developed countries Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the	*Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.* <u>Official Development Assistance (ODA)</u> 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing States as a proportion of their gross national incomes <u>Market access</u> 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and

outcome of the twenty-second special session of the General Assembly)	textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product
Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	8.9 Proportion of ODA provided to help build trade capacity Debt sustainability 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC and MDRI Initiatives 8.12 Debt service as a percentage of exports of goods and services
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population 8.15 Cellular subscribers per 100 population 8.16 Internet users per 100 population

Source: (http://www.un.org/millennium/declaration/ares552e.htm)

Halving Poverty and Hunger

In order to achieve the goal of halving income-poverty and hunger, India has to reduce the population below BPL from 37.5 per cent in 1990 to 18.75 per cent in 2015 at the National level and from 40.90 per cent to 20.45 per cent at the State level. But at the end of 1999-2000, the poverty head count ratio was 26.1 per cent at the national level and 21.12 per cent at the State level. Against this, the poverty ratio in Tamil Nadu was 21.6 percent as per NSSO data for the year 2004-05. The government of Tamil Nadu has planned to eradicate poverty by 2012 i.e, by the end of Eleventh Plan. In 2004-2005, the percentage of population living in poverty in Nagapattinam district was 6.8. This has to be reduced to 0.65 in order to attain the MDGs target of reducing the proportion of people living on less than a dollar a day by half. As far as rural poverty is concerned, it is 3.8 percent in Nagapattinam district. When we compare this with the state, the percentage of BPL population in Nagapattinam district is lower than the state's. The state government is implementing a number of poverty alleviation programmes like Vazhndhu Kattuvom, Mahalir Thittam, and National Rural

Employment Guarantee scheme. The main objective of the Vazhndhu Kattuvom project is to reduce rural poverty and empower the poorest of the poor. Among the districts in Tamil Nadu, Nagapattinam has the lowest number of people living in poverty. The NREGS and Vazhndu Kattuvom schemes are being implemented in Nagapattinam district in the first phase itself. If the district administration implements the schemes rigorously, it can completely eradicate the poverty and it can achieve the target by reducing it to 0.12 percent in the year 2015, stipulated time to achieve the MDGs target. The data shows that in Nagapattinam district, this can be achieved.

India has witnessed around 8 % growth in GDP in the last couple of years and it has planned to accelerate the growth by 9 % at the end of the Eleventh Plan. Economic development and urbanization have resulted in increasing number of population in urban areas. Tamil Nadu is one of the most urbanized states in India; 44 % of its 65 million population is residing in urban areas against the national average of 28 %. The present data also shows that urban poverty (15.8) in Nagapattinam district is on the increase; it is almost five times greater than the rural poverty and of course, much lower than the urban poverty (23.5) in Tamil Nadu. This has resulted in urbanization of poverty in the district. This poses the problem of housing, sanitation, health, education, social security and livelihoods. The state government should take special measures to eradicate urban poverty by taking innovative measures. The urban poverty of Nagapattinam district has to be reduced to 5.36% by 2015.Then only the target of the state government in reducing the proportion of people living on less than a dollar (US) a day by half can be achieved.

As per the Millennium Development Goals, the following targets in education are proposed to be achieved by 2015.

→ All children to complete the full course of five years of primary school.

→ Eliminate gender disparity in primary and secondary education by 2005 and in all education by 2015.

Tamil Nadu has been one of the best performing states in India. With a view to attaining the goal of universal primary education, the enrolment rate should be increased to 100 per cent and the dropout rate is to be wiped out by 2015. The State achieved 98.38 per cent enrolment rate at the primary level in 2004-05. The completion rate in the State for the year 2004 was 77.57 per cent. For achieving 100 per cent enrolment at the primary level, the Government of India introduced Sarva Siksha Abhiyan (SSA) throughout the country in the year 2003. The SSA aimed to complete five years of primary schooling by 2007 and eight years of elementary schooling by 2010. It also envisaged achieving universal retention by 2010. Improvement in enrolment rates has increased the overall

literacy rate (7+ age group) of the State from 62.7 per cent in 1991 to 73.5 per cent in 2001 as against an increase from 52.2 per cent to 64.8 per cent at the national level.

The analysis on the performance of Nagapattinam district in education shows that the district marginally lags behind the state average in NER. The NER of Tamil Nadu in the year 2004 was 98.38 against 98.15 in the district. The completion rate at primary level during the year 2008 in Nagapattinam district was 67.68 against the state average of 77.57. For the attainment of universal primary education and to ensure that all boys and girls complete their primary schooling, the district administration should ensure that 100% enrolment and completion take place so that by 2015 it can achieve universal primary education. This will contribute for the achievement of state as well as union government's target.

Gender Equality in Education

The gender bias in providing education has led to a gap in literacy rates between male and female. In terms of gender parity, Tamil Nadu's performance has been second only to Kerala among major states. The literacy rate of male and female in 1991 was 74 and 51 respectively, which later increased to 82.4 and 64.4 in 2001 in Tamil Nadu. In Nagapattinam district, the literacy rate of male and female is 84.9 and 68.0 respectively. This imbalance has to be rectified by 2015 to achieve the third goal of MDG. The ratio of literate females to males in the age group in 15-24 according to 2001 census is 96.03 for Nagapattinam district. This has to be increased to 100 percent. In 2002, the overall girl-boy enrollment ratios in primary and upper primary levels were 92.9 and 92.3 respectively. The male-female proportion in the primary education in the state was 54: 46 in 1990-91 and 51:49 in 2000-2001. This shows that state has performed better than the national average. But the analysis on Nagapattinam district shows that The NER of boys in the year 2004 was 98.15 which is lower than that of the girls (98.27). Girls completion rate is also better than that of boys in Nagapattinam district. As per MDG, the gender disparity in education at primary and secondary level has to be eliminated by 2005 and at all levels by 2015. Literacy gap and girls' performance in educational indicators are better in Nagapattinam district. If district administration concentrates more, the gender gap can be bridged completely and it can achieve 100 percent in all educational indicators. Measures should be taken to reduce the gap in order to attain the goal. After the introduction of SSA, the infrastructure facilities, access to schools and teacher strength have increased. Similar effort has to be made to enrol all eligible girl children in schools and ensure that teachers are gender sensitive.

Reducing Infant Mortality Rate

Reducing the mortality rates of infants and under 5 age groups needs much attention. In India, the infant mortality rate of 125 per 1000 live births in 1988- 92 has to be brought down to 42 by 2015. It has comedown to 80 per 1000 live births in 1990 to 60 in 2003 and further to 58 in 2004. The IMR of the state has also shown reduction from 53 in 1998 to 44 in 2002 and further declined to 23.8 in 2005-2006. The IMR of Nagapattinam district has declined from 25.74 in 2003 to 19.26 in 2006. In order to achieve the target, it has to reduce IMR to 10.26 by 2015.

Reducing Maternal Mortality Rate (MMR)

The policy of Government to take care of the pregnant women till lactating period was initiated long back. At the national level, it was envisaged to bring down MMR from 437 in 1991 to 109 at the end of 2015. With a view to reducing the maternal risks, the expectant mothers are advised to take delivery assistance from the skilled health professionals. The proportion of institutional deliveries increased form 25.5% in 1992-93 to 39.8% in 2002-03 at the all-India level and in the state it increased from 64.2% in 1992-93 to 90.4% in 2005-06 (NFHS-3). The MMR of Nagapattinam district in the year 2006 was 1.41 whereas for the state it was 0.93.This has to be reduced to 0.9 per 1000 live births by 2015. In Nagapattinam district, the percentage of institutional deliveries has improved from 92.48 in the year 2003, to 98.25 in the year 2007. In the year 2003, in Nagapattinam district, 43.54% of pregnant women were affected by anaemia. For the state according to NFHS-3 it was 56%. Anaemia coupled with domiciliary deliveries will pose a great threat to both the mother and the child. Increasing institutional deliveries, providing access to health services and decreasing the prevalence of anaemia will certainly have an impact in reducing the MMR.

Institutional Deliveries

Tamil Nadu has made significant progress in increasing the proportion of institutional deliveries. Institutional deliveries comprise 94.1% of the total deliveries in the Tamil Nadu. However, the Nagapattinam district has 98.25% and it is far better than state average. The district administration has to achieve 100 per cent institutional deliveries to improve the other health indicators. The percentage of children who received full vaccination is 89.0 % in Nagapattinam and it is lower than the state average. Decrease in the rate of congenital diseases and increase in the rate of child immunization has to be done to ensure the attainment of health related MDGs.

Combat HIV/Malaria and other Congenital diseases

In India, the prevalence of HIV among pregnant women is at a lower rate compared to other developing countries. However, the rate increased from 74 per one lakh pregnant women in 2002 to 86 in 2003. This trend has to be

reversed. The malarial and TB deaths are consistently coming down. The incidence of malarial deaths during the year 1990s was 1.2 lakh. This was reduced to 35,000 in the year 2002. Geographical information system is being developed in Tamil Nadu for carrying out epidemiological mapping of the villages and identifying vulnerable area and seasonal pattern of disease outbreak. The Tamil Nadu State AIDS Control Society was established in the year 1994 to tackle the problem of AIDS in a more effective manner. As far as Nagapattinam district is concerned, the number of AIDS patients were 206 in the year 2004, whereas for Tamil Nadu the figure was 7805. The district accounts for the lowest number of AIDS cases. The spread of HIV /AIDS has to be stopped to attain the goal of reversing the spread of HIV/AIDS and the district administration has to bring down this to zero. Measures like awareness creation, sensitization, and proper treatment have to be given. Similarly, the prevalence rate of TB in Nagapattinam was 218 in the year 2004 as against the state average of 196 and the prevalence rate of malaria was higher in the district and it was 197 but it was only 69 in the state. The district administration has to take steps to eradicate malaria and TB and it has to bring them down to zero. Mosquitoes have to be controlled effectively to reduce the rate.

Ensuring Environmental Sustainability and Access to Safe Drinking Water

In view of the persistent efforts taken by the government to protect and nurture natural resources, the total land area covered by different forests was found to be 20.64 per cent as assessed in 2003. As per National Forest Policy 1998, the national goal is to have a minimum of one third of the total land area of the country under forest or tree cover. In the hills and in mountainous regions, the aim should be to maintain two-thirds of the area under such cover in order to prevent erosion and land degradation and to ensure the stability of the fragile ecosystem. The reserved and protected forests at the all-India level together accounted for 19 per cent of the land area and this rate is maintained for biological diversity. In Tamil Nadu, the proportion of forest area in the total area worked out to 17 per cent in 2003-04 as against 15.58 per cent in 1979-80. The afforestation programmes are effectively implemented in the State and the deforestation activities either for fuel purpose or for construction have been curtailed. Proportion of households using forest logs as firewood has come down considerably. The present scheme of providing LPG gas to the BPL category by the state government reduces the usage of logs as firewood. In Nagapattinam district, the recorded forest area to total geographical area is 1.17 percent. This has to be increased to 3.5 percent. In Nagapattinam district after the killer wave devasted coastal areas, many NGOs took steps to grow bio shields. Mangroves were grown in the coastal villages. M.S.Swaminathan Research Foundation made efforts in this regard in Manalmedu, a coastal village in Sirkali block of Nagapattinam district. The impact of Tsunami was less in the villages where thick growth of casurina and mangroves were on the shores. The district

administration can make similar efforts in the entire coastal belt of Nagapattinam district.

The proportion of population without sustainable access to safe drinking water and sanitation has to be halved by 2015. The efforts taken by the State in this regard are remarkable. The slum population in all the cities is increasing due to the large scale migration from the rural areas. Perhaps the provision of urban facilities in the rural areas would help to contain crowding of cities. In 2001, only 57.6 of rural households did not have access to safe drinking water through tap in Tamil Nadu and 35.41 percent in Nagapattinam did not have access to safe drinking water. This has to be reduced further and it has to reach 9.19 percent in the year 2015. As far as rural and urban situation are concerned, 32.51% (2001) of rural popualation in district did not have access to safe drinking water and the District administration has to bring it down to 8.75% in the year 2015. In the urban areas, the percentage of population without access to safe drinking water has to be brought down from 45.24% (2001) to 10.71% in the year 2015. With regard to the sanitation situation, in 2001, 74.41 of households did not have access to sanitation facilities. The position has improved now and 41.21 percent of the households have to be provided sanitation facilities in the year 2015 in order to achieve MDGs target. Water and sanitation facilities have to be improved because they are related to the health and wellbeing of the people. It is imperative that local bodies - both rural and urban - have to be sensitized on these issues and they have to work very effectively on these areas. Periodical sensitization of local body leaders will improve the situation as more number of schemes are available to the local bodies for these kinds of activities.

Table 8.2
MDG Factsheet of Nagapattinam District

Development Indicators	MDG target (All India Level)	Present Status			Targets for the District 2015
		India	Tamil Nadu	Nagapattinam	
(1)	(2)	(3)	(4)	(5)	(6)
Sex Ratio - overall - 0-6 years		 933 927	 987 942	 1014 963	
LEB		65.5	66.7	66.4	
Income					
% of BPL population (2004-2005) Combined Rural Urban		 27.5 28.3 25.7	 21.6 19.8 23.5	 6.8 3.8 15.8	 0.65 0.12 5.37
Employment Employment-to-population ratio	Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	39.26	44.78	39.41	42.00
Nutrition	Halve, between 1990 and 2015, the proportion of people who suffer from hunger				
	Prevalence of Underweight children under 5 years of age				
Grade II, III&IV malnutrition (2005) (0-3 years)			3.04	7.82	5.0

(1)	(2)	(3)	(4)	(5)	(6)
Education	Ensure that all boys and girls complete a full course of primary schooling				
Literacy rate 2001 (%)		64.8	73.5	76.3	100
Male Literacy Rate		75.3	82.4	84.9	100
Female literacy rate		53.7	64.4	68.0	100
NER – Primary - Total - Boys - Girls		90	 98.38 98.48 98.27	 98.15 98.27 98.0	 100 100 100
Completion Rate – Primary Total Boys Girls			 77.57 76.14 79.07	 67.68 65.25 70.19	 100 100 100
Ratio of literate females to males in 15-24 age group Census 2001		72	90.35	96.03	100
Health	Reduce by 2/3rds the mortality rate among children under five Reduce by three quarters the maternal mortality ratio Halt and begin to reverse the spread of HIV AIDS, the prevalence and death rates associated with and major diseases				
U5MR (2006)			35.5	NA	
IMR (2006)		55	23.8	19.26	10.26
CPR (2006)		49	47	43.1	70

(1)	(2)	(3)	(4)	(5)	(6)
MMR (2006)		-	0.93	1.41	0.9
Institutional delivery (2007)			94.1	98.25	100
Prevalence rate of TB (2004)			196	218	0
Prevalence rate of Malaria (2004)			69	197	0
Number of AIDS cases (2004) - male - female - Total			 5499 2306 7805	 151 55 206	 0 0 0
Percentage of Children who availed full vaccination			91.4	89.0	100
Environment	Integrate the principles of sustainable development into country policies and programmes Reverse loss of environmental resources Reducing to half the proportion of people without sustainable access to safe drinking water Achieve significant improvement in lives of at least hundred million slum dwellers by 2020				
% of recorded Forest area to total geographical area		23	17	1.71	3.5

% of houses without access to safe drinking water (2001) Total - rural - urban			57.6 58.52 59.2	35.41 32.51 45.24	9.19 8.75 10.71
% of houses without access to toilet facilities (2001)			64.84	74.41	41.21

Notes

1. Target for poverty reduction is based on the Poverty rates for combined Thanjavur district and poverty rate for Nagapattinam 1999-2000 estimates
2. Targets for WPR has been based on the growth rate in WPR from 1991 to 2001, source Census 2001
3. Proportion of Underweight children has been Nutritional Grading of children of Grade II, Grade III & IV, and targets have been fixed based on the 2001 data
4. Targets for educational indicators, NER and CR based on 2001 rates
5. Targets for Maternal and Child mortality are based on the declining trend of the State/ District
6. Targets fro AIDS prevalence/ TB and Malaria prevalence are based on the incidence in the reference year
7. Targets for increasing Forest/ Tree coverage are based on the land use pattern of the district
8. MDG Target for 2015 with regard to Access to Water & Toilet facilities is based on Census 1991 figures
9 .CPR worked out based on 11th Five Year Plan targets

Sources: Census of India, 2001, DLHS-2 (2002-2004), Tamil Nadu economic Appraisal 2005-2006, Tamil Nadu Human Develoment Report 2003, Monthly Bulletin of Family Welfare Performance in Tamil Nadu- February 2009, Dindigul District Statistical handbook 2004.The Tamil Nadu Sentinel Surveillance Report, 2005.

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3. Government of Tamil Nadu, **Monthly Bulletin on Family welfare**, Chennai: Directorate of Family Welfare, Tamil Nadu, February 2009.
4. www.tnhealth.org
5. www.mohfw.nic.in

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CHAPTER 9

Summary and Way Forward

For a long period, growth was measured on the basis of only economic indicators like GDP and GNP. But this approach has been challenged on the ground that "the objective of Human Development is not simply to produce more goods and services for material enrichment but to increase the capabilities of all people to lead full, productive and satisfying lives". The UNDP, in the year 1990, first took this initiative and prepared the Human Development Report based on the above perspective. The UNDP stressed that "the real wealth of the country is its people and the purpose of development is to create an enabling environment for them to enjoy long, creative and healthy lives". The three essential elements of Human Development are: to enable people to lead long and healthy lives; to access knowledge and education; and to possess the resources needed for a reasonable standard of living. Consequently, three areas have been identified as being of primary social concern--health, education and material wellbeing. Accordingly, state and central governments have started preparing Human Development reports. Further below, attempts have also been made to prepare Human Development reports at the district level. This Report attempts to summarize the Human Development scenario of Nagapattinam district. In Nagapattinam district, one of the worst Tsunami affected districts in Tamil Nadu in the year 2004, growth and development in all aspects are in quandary than they were before. The Tsunami, a natural disaster, made this coastal district a much affected place which drew the attention of governments, civil society organizations and donor organizations in India and abroad, which resulted in a number of special welfare schemes and serious attention to implementing them. Relief, rehabilitation and reconstruction activities were also directed towards building infrastructure, ensuring livelihood security and achieving social development.

Demography, Health and Nutrition

A healthy nation is made by healthy people. This is stressed by the MDGs with three of the goals bearing directly on health. India, with its vast population, has always faced a challenge in providing quality healthcare to its population. Poverty is closely associated with health. Malnutrition and anaemia are the biggest challenges that threaten the overall health status of the nation. IMR, MMR and SBR prevalence is dominant because of these factors and the poor access to and availability of health services. The analysis of the health status of Nagapattinam district shows that the health seeking behaviour and the access to health facilities have been improving over a period of time. However, the district faces the problem of inadequate medical and paramedical personnel. The doctors posted in Nagapattinam district do not prefer to stay in the district for a long period. So necessary steps should be taken to keep them there.

There are various government schemes in operation to improve the health status of the people. But the achievements of these schemes are measured only in

terms of output and not outcome. The review meetings of the district officials always focus on the target achievement in numbers. Actually the focus should be on the type of outcome. Such a kind of perspective should be developed. Improving health does not depend on the creation of health facilities alone. Needed awareness has to be created among the people about how to lead a decent human life. Issues of health can be discussed with the people. Now they are mystified. They have to be simplified. Cleanliness of the habitat and cleanliness of the body, can be discussed with the people. Health issues are no longer subjects for experts only. The Gram Sabha is the best instrument through which such a kind of awareness can be created. In the same way, data pertinent to malnourished children, anaemia affected women and adolescent girls can be mainained in the Panchayat office in every Gram Panchayat. Health personnel have to be instructed to keep the data in this manner. Panchayats can carry out their health related activities through the Health Committee of the Panchayat and needed awareness and sensitization can be created through the Gram Sabha.

The departments of the government have to be instructed to prepare fact sheets annually about the health condition of the people for each block and the same should be sent to the Block Panchayat for discussion.

The whole demography and health status of Nagapattinam district can be summarized as follows: There is a stable population growth in Nagapattinam district. Nagapattinam Block has the highest population density followed by Mayiladuthurai block. Except in Nagapattinam block, the rural population is more than the urban population in all other blocks. There is increase in sex ratio from 2001 to 2006, which is a good trend. Keelaiyur has the highest sex ratio of 1043 whereas Sirkali has the lowest one of 994. With regard to the health status of Nagapattinam district, it has a lower birth rate than the state average but the death rate is the same as the state average. Still birth rate is high in a few blocks like Kilvelur, Thirumarugal and Sembanarkoil. Myladuthurai block has the highest IMR. Like the still birth rate, MMR is also high in Kilvelur, Sembanarkoil and Nagapatthinam. Keelaiyur has the highest number of anaemic pregnant women. Kilvelur block shows the lowest number of institutional delivery. At the same time, only 49.90 percent of pregnant women receive ANC before 12 weeks in Kilvelur block. On all the health indicators the performance of Kilvelur block is very poor. A fact sheet on the health conditions has to be prepared for Kilvelur block and the same has to be sent to the Kilvelur block Panchayat for discussion in the Block Development Council meeting and the review meetings of the Departments.

Generally, orientation and sensitization are imperative for officials to be conscious of the outcome rather than the output. Equally, orientation and sensitization are needed for peoples' representatives in local bodies on the issues of local bodies. This has been demonstrated in the experimental villages through the micro plan prepared in seventeen Gram Panchayats in Nagapattinam district after the natural disaster which struck the villages.

To reduce the still births and MMR and to improve the overall health of the infants and the mothers, it is necessary to care for the mothers in the antenatal stage,

giving them the opportunity to have a balanced diet. It may be done through a scheme like the Noon Meal Scheme.

Mothers are to have at least one square meal of balanced nutrition per day. The present scheme of providing Rs.6000 to the expectant mothers or young mothers often does not serve the purpose for which it is given for but it goes to meeting children's school fees, celeberating local festivals or repaying petty loans.

Educating girl students in reproductive health by including a course in their 9th and 11th standards, when the pressure of facing public examinations is minimum, will help them understand the importance of such health issues. A gynaecologist and a reproductive specialist should be posted in all block level PHCs, preferably a lady doctor. Village level misconceptions should be gradually eliminated by creating better awareness and providing needed awareness through the media. Special attention can be given to the lowest performing blocks. The negative factors responsible for the poor performance should be identified and measures should be taken to rectify them.

Literacy and Education

Achieving universal primary education being the topmost priority, the government is implementing various schemes to improve the literacy rate in both urban and rural areas. SSA and educational assistance to poor school going children have resulted in improvement in the literacy rate. But, in some places, we can witness children going to school only for benefits like noon-meal and free uniform.

This report shows that Nagapattinam district, mostly a rural coastal area, has low female literacy in both urban and rural areas. The total gender gap in rural literacy is 16.94. This vast gender gap in literacy has to be narrowed down. The highest literacy gender gap is found in Thalainayar block, at 21.12. In Nagapattinam district, more children are studying in private schools than in government ones. The administration has to identify the reasons and has to put in an effort for a higher rate of enrollment in public schools. The dropout rate in Keelaiyur block is increasing over the years. As in health status, Keelaiyur block is poor in educational status also. The pupil – teacher ratio has improved over a period but the learning level among students is low. This was reflected in the ASER 2007 report. The reasons have to be identified in order to improve the student's performance. In all educational indicators, girls' performance is better than boys' performance. But the dropout rate for girls is higher than that for boys. The Tsunami of 2004 provided an opportunity for the district to look at the conditions of the people afresh. The state government, along with civil society organizations, actively took part in bringing back normalcy. They provided books and uniforms and established tuition centres and non – formal education centres. The district administration, with the help of the established infrastructure, could improve the educational status.

Suggestions

Special attention should be given to Kollidam, Sirkali, Sempanarkoil, Thalainayar and Keelaiyur Blocks. Sensitizing teachers is imperative to increase the completion rate of girls. Building strong public accountability through the Gram Sabha is yet another step to be taken. Strengthening the supervision mechanism will

help improve the condition. Panchayats should be given needed monitoring power. Identifying best practices and motivating others to replicate the same in the field of education is yet another step to be taken. Proper awareness among parents and children should be created. The Gram Panchayat, in partnership with the Government departments can do the above work. The Education Committee of the Panchayat should be activated and made effective. Activating Parent – Teachers Association is the need of the hour.

Income and Livelihood

The livelihood of 70% of the population of India depends on agriculture and agri-related activities. In this era of globalisation, this primary sector's contribution to the growth of GDP is often considered meagre. The diversion of agricultural lands to non-agricultural purposes and the falling income from agriculture are the results of lowering the importance of agriculture in the development of the nation.

Agriculture is the most important occupation in Nagapattinam district. Failure of monsoon, frequent floods and cyclones have led to the slowdown of agricultural activities. There is good potential for agriculture allied activities like mango processing and dry land horticulture. Establishment of cold storages, rural godowns and modern rice mills can improve the district's economy. The alternative livelihood opportunities created after the Tsunami have to be sustained. The skills upgraded during the aftermath of the Tsunami have to be put to use. The Rural Business Hubs initiated in the villages, provide intervention in terms of technology and know-how, good farming practices, agriculture inputs, standardisation and quality enhancement measures, value addition, branding and marketing, training and skill development and elimination of non-value adding activities result in terms of higher incomes through increased yields, improved quality, transfer of know-how, entrepreneurship development and reduced transaction cost. The Rural Business Hubs must be strengthened in order to improve the livelihood of the people of Nagapattinam district.

Fishing, another main occupation of Nagapattinam district, plays a crucial role in the economy of the district. The district administration can concentrate on infrastructural facilities like establishment of cold storage and containers for export. Fishermen can be trained in preparing fishing related allied products. SHG women can also be trained in this. Another important economic activity of Nagapattinam district is salt production. Nagapattinam district is prone to heavy rain and floods. Salt pan workers get employment only for six months. Once they resume work after the rainy season, they have to prepare the land for work for which they need investment. As in Thoothukudi district, the district administration can take some measures in this regard.

Gender

Any development will not be holistic, unless gender equality is made an important component of it. All development activities should be reviewed on the basis of how women and men are getting benefits out of them. Most of the development interventions are gender blind and they do not favour women. Indeed women are more burdened by them. But this human development perspective has

included gender in its framework. While preparing the human development report for Nagapattinam district, gender has been made an important dimension.

The impact of the Tsunami and other disasters on women are high in Nagapattinam district. Girl child labour, atrocities against women are prevalent in Nagapattinam district. Many development reports have mentioned that incidence of child marriage and denial of women's representation in respect of relief materials are widespread. Non – consideration of women and children's needs in respect of relief materials during disasters is also mentioned in those reports. Since Nagapattinam district is prone to disaster, gender sensitization among officials is required. Gender gap in literacy should also be concentrated upon along with improving the health status of women. After the Tsunami struck Nagapattinam district, gender sensitization programmes have been organized as part of many programmes. This has to be continued to keep the sensitivity on gender alive and vibrant.

Way Forward

Local bureaucracy and administration should be sensitized on the need for Human Development. People are sensitive on issues related to their daily requirements like water, public distribution and community transport but they are not sensitive on sanitation, public health and primary education. Awareness should be created through NGOs, Local Bodies, filed level staff and CBOs. The district administration can use NSS volunteers and media like FM radio for awareness creation and information dissemination. Accountability should be built downwards. The local bureaucracy has been oriented to be accountable to their higher officials but they should also be made accountable to the people. In this way sensitivity can be created.

Enhancing and building the capacity of the local bureaucracy is the need of the hour. Constitutionally established Local Bodies and institutions can effectively monitor the functions of all line departments at the grassroots level. The Gram Sabha is an effective instrument to disseminate information about the status of Human Development. Local Body leaders can be motivated to make their Panchayats free of anaemia, malnourished and underweight children. They can make efforts to ensure that all deliveries take place in institutions. This will help in achieving the target of the Millennium Development Goals as well as attaining Human Development. In Nagapattinam district 17 Gram Panchayat presidents have already prepared Village Development Plan in the Tsunami affected area. This can be replicated in the remaining villages also to bring about Human Development.

Preparation of Village Development Plan by the Gram Panchayats should be made mandatory, and implementing the same will help to attain Human Development goals from the grassroots. Linkage between local governance and public institutions can be strengthened to improve the quality of services and to deliver the same effectively. Review meetings of the line departments should focus on Human Development instead of targets.

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ABBREVIATIONS

AIDS	- Acquired Immuno Deficiency Syndrome
ANC	- Ante Natal Care
ASER	- Annual Status of Education Report
BG	- Broad Gauge
BPL	- Below Poverty Line
CBR	- Crude Birth Rate
CDR	- Crude Death Rate
CPR	- Couple Protection Rate
CR	- Completion Rate
DDHS	- Deputy Director of Health Service
DISE	- District Information System of Education
DLHS	- District Level Household Survey
DOES	- Department of Economics and Statistics
DPEP	- District Primary Education Programme
DR	- Dropout rate
GAR	- Gross Access Rate
GDP	- Gross Domestic Product
HDR	- Human Development Report
HDI	- Human Development Index
HIV	- Human Immuno Deficiency Virus
HUD	- Health Unit District
ICDS	- Integrated Child Development Scheme
IFA	- Iron and Folic Acid
IMR	- Infant Mortality Rate
ITI	- Industrial Training Institute
LBW	- Low Birth Weight
LIC	- Life Insurance Corporation of India
MDG	- Millennium Development Goals
MG	- Metre Gauge
MMR	- Maternal Mortality Rate
MPCE	- Monthly Per Capita Consumption Expenditure
NDP	– Net Domestic Product

NER	- Net Enrolment Ratio
NFHS	- National Family Health Survey
NGO	- Non-Governmental Organisation
NMP	- Noon Meal Programme
NSA	- Net Sown Area
NSSO	- National Sample Survey Organisation
PDS	- Public Distribution System
PHC	- Primary Health Centre
PTR	- Pupil- Teacher Ratio
RSVY	- Rashtriya Sam Vikas Yojana
RCH	- Reproductive and Child Health
SBR	- Still Birth Rate
SC	- Scheduled Caste
SHG	- Self-Help Group
SRI	- Systemic Rice Intensification
SSA	- Sarva Shiksha Abiyan
ST	- Scheduled Tribes
TAHDCO	- Tamil Nadu Adi Dravida Housing Development Corporation
TFR	- Total Fertility Rate
TINP	- Tamil Nadu Integrated Nutrition Project
TN	- Tamil Nadu
UN	- United Nations
U5MR	- Under-Five Mortality Rate
WPR	- Work Participation Rate

Glossary

Antenatal Period

The period from conception and till the onset of labour approximately 40 weeks.

Attendance Rate

The percentage of classes attended by the students.

Completion rate

The Percentage of students completing their education in the primary standards may be defined as the completion rate in the primary standards.

Cropping Intensity

The percentage of gross cropped area to Net cropped area in a year.

Crude Birth rate

CBR is number of live births in per 1000 of mid-year population.

Crude Death Rate

CDR is number of deaths in per 1000 population.

Dropout Rate

The percentage of students leaving school system without completing a particular school cycle.

Gross Access Ratio

GAR in Primary means the percentage of total habitations having schools within the walkable distance or within a radius of 1 Km from the habitation.

GAR in Upper primary means the percentage of total habitations having the schools within walkable distance or within a radius of 3 Km from the habitation.

Infant Mortality rate

The number of deaths of infants under age 1 per 1000 live births in a given year.

Irrigation Intensity

The percentage of Gross irrigated area to Net irrigated area.

Life Expectancy at Birth

LEB is the average number of years a new born child would be expected to live if the child is subject to the age pattern of mortality prevailing at the time of its birth .

Literacy Rate

The percentage of literates to the total population aged 7 years and above

Low Birth Weight

The weight at birth is less than 2500 gm.

Maternal Mortality Ratio

The ratio refers to the number of women who die during pregnancy or during the first 42 days after delivery per 1000 live births in a given year from any cause related to or aggravated by pregnancy but not from accidental or incidental causes.

Net Enrolment Ratio

The ratio of the number of children actually attending school to the number of school-age children in the population.

Prenatal Period

The period between conception and birth.

Pupil-teacher ratio

The Pupil-Teacher Ratio means the average number of pupils per teacher.

Repetition rate

Proportion of pupils from a cohort enroled in a given standard at a given school year who study in the same standard in the following school year.

Still Birth Rate

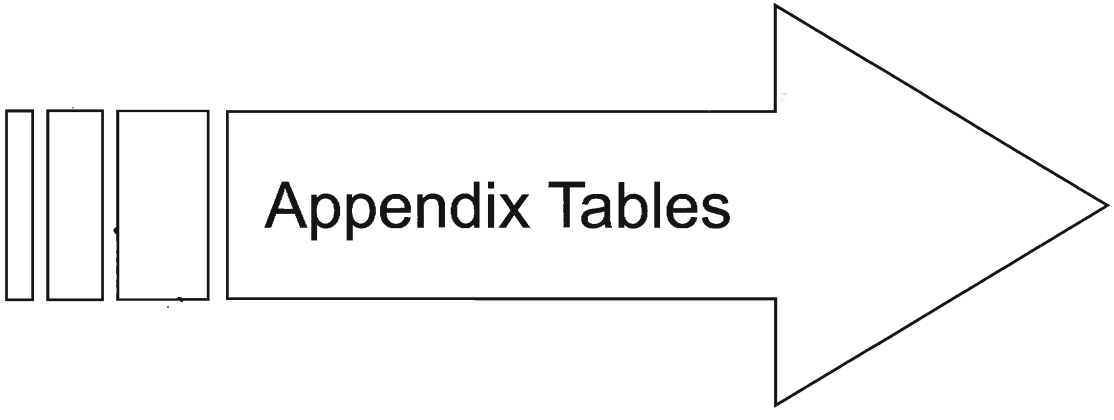
The death of the foetus weighing at least 500 gm (or when birth weight is unavailable, after 22 completed weeks of gestation or with a crown-heel length of 25 cm or more), before the complete expulsion or extraction from its mother.

Total Fertility Rate

The number of live births per 1000 women of reproductive age, usually taken as 15-44 years in a given year.

Work Participation Rate

The percentage of persons employed in labour force.


Appendix Tables

Annexure

Table No. A.1

Status of PRI System in the District: Block wise no. of Village Panchayats

Name of the Block	No. Of Village Panchayats	Name of the Block	No. Of Village Panchayats
1. Nagapattinam	29	7. Mayiladuthurai	54
2. Keelaiyur	27	8. Sembanarkoil	57
3. Kilvelur	38	9. Kuttalam	51
4. Thirumarugal	39	10. Sirkali	37
5. Thalainayar	24	11. Kollidam	42
6. Vedaranyam	36	**Total**	**434**

Town Panchayats: 4
Manalmedu, Thalainayar, Kuttalam and Tarangambadi
Municipalities : 4
Nagapattinam, Mayilduthurai, Vedaranyam and Sirkali

Table No. A 2

Hospitals, Dispensaries, bed strength, Doctors and Nurses

Classification	Modern Medicine	Indian Medicine						Grand Total
		Ayur Vedic	Siddha	Unani	Ayur Vedic, Siddha, Unani combined	Total	Homeopathy	
Hospitals	12	1	11	2	14	26	1	27
Dispensaries			2			2		2
PHCs	43	1	13			14		57
Health Sub centres	258							258
Other Medical Institutions- Rural Dispensary								
Bed Strength	970		25			25		995
Number of Doctors	72	1	23			24		96
Number of Nurses	135		3					138

Source: Modern Medicine, JDHS(GH Nagai), Indian Medicine and Allopathy Siddha Hospital GH Nagai.

Table No. A 3

Household assets Census 2001-Rural

Sl.no	Details	Radio/transistor	TV	Telephone	Bicycle	Scooer /motorcycle/ moped	Car/ Jeep/ van	None of specified assets
1.	Nagapattinam	122051	60451	18677	111657	21737	3483	108144
2.	Tamil Nadu	3193451	2013409	420853	3299103	888461	88481	3314616

Table No. A 4

Household assets Census 2001-Urban

Sl.no	Details	Radio/transistor	TV	Telephone	Bicycle	Scooer /motorcycle/ moped	Car/ Jeep/ van	None of specified assets
1.	Nagapattinam	38576	34759	14099	36983	11856	1512	14641
2.	Tamil Nadu	2978752	3581977	1171687	2715837	1392281	221114	1274424

Table No. A 5

Household assets Census 2001-Total

Sl.no	Details	Radio/transistor	TV	Telephone	Bicycle	Scooer /motorcycle/ moped	Car/ Jeep/ van	None of specified assets
1.	Nagapattinam	160627	95210	32776	148640	33593	4995	122785
2.	Tamil Nadu	6172203	5595386	1592540	6014940	2280742	309595	4589040

Table No. A 6

Households with electricity as source of lighting

Sl.no	Details				SC			ST		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1.	Nagapattinam	166015	53082	219097	46347	4241	50588	994	496	1490
2.	Tamil Nadu	5890371	5191053	11081424	1365152	649793	2014945	109770	91241	201011

Table No. A 7

Distribution of Households/000′ by type of fuel used for cooking -Total - census 2001

Sl.No	Details	Total no HHs	Firewood	Crop residue	Cow dung	Coal/ lignite/ charcoal	Kerosene	LPG	Electricity	Bio gas	Any other	No Cooking
1.	Nagapattinam	337514	281479	8165	1621	27	9562	34457	207	1022	305	669
2.	Tamil nadu	14173626	9107668	342810	29675	4309	1855901	2703970	10958	59413	12674	46248

Table No. A 8

Distribution of Households/000′ by type of fuel used for cooking- Rural - Census 2001

Sl.No	Details	Total no HHs	Firewood	Crop residue	Cow dung	Coal/ lignite/ charcoal	Kerosene	LPG	Electricity	Bio gas	Any other	No Cooking
1.	Nagapattinam	271034	243845	6559	1567	17	2332	15438	192	478	180	426
2.	Tamil nadu	8274790	74413737	234953	20235	1560	296072	534343	5307	38427	7925	22231

Table No. A 9

Distribution of Households/000′ by type of fuel used for cooking- Urban - Census 2001

Sl.No	Details	Total no HHs	Firewood	Crop residue	Cow dung	Coal/ lignite/ charcoal	Kerosene	LPG	Electricity	Bio gas	Any other	No Cooking
1.	Nagapattinam	66480	37634	1606	54	10	7230	19019	15	544	125	243
2.	Tamil nadu	5898836	1993931	107857	9440	2749	1559829	2169627	5651	20986	4749	24017

Table No. A 10

Rural water supply- status of Coverage of Habitations

Sl.No	Details	NC	PC	FC	Total
1.	Nagapattinam	134	1093	1381	2608
2.	Tamil Nadu	11790	40930	29067	81787

Source; TWAD resurvey 2003.

Table No. A 11

Bathroom, Sanitation and Drainage Facilities availability Census, 2001- Combined

Sl.No	Details	Bathroom	Type of Latrine within house				Drainage		
			Pit Latrine	Water closet	Other Latrine	No Latrine	Closed Drainage	Open Drainage	No Drainage
1.	Nagapattinam	59641	-	62123	-	251136	28621	59560	249333
2.	Tamil Nadu	5653502	-	3291248	-	9190806	2393257	4000944	7779425

Table No. A 12

Household Percentage by major source of Drinking water –TAP - Urban

Sl.NO	Particulars	TAP			
		Total	Within premises	Near premises	Away
1	Nagapattinam	45.92	56.66	39.26	33.28
2	Tamil Nadu	65.40	72.36	63.40	41.14

Source: Census of India, 2001.

Table No. A 13

Household Percentage by major source of Drinking water –Tube well - Urban

Sl.no	Particulars	Hand pump/ tube well			
		Total	Within premises	Near premises	Away
1	Nagapattinam	43.33	38.54	49.89	37.13
2	Tamil Nadu	20.51	18.75	21.88	23.27

Source: Census of India, 2001.

Table No. A 14

Household Percentage by major source of Drinking water –Well - Urban

Sl.no	Particulars	Well			
		Total	Within Premises	Near Premises	Away
1	Nagapattinam	7.11	4.65	6.74	16.27
2	Tamil Nadu	9.61	8.44	9.10	16.87

Source: Census of India, 2001.

Table No. A 15

Household Percentage by major source of Drinking water –Tank, Pond, Lake - Urban

Sl. No.	Particulars	Tank, pond, lake			
		Total	Within premises	Near premises	Away
1	Nagapattinam	0.42	0.02	0.53	1.32
2	Tamil Nadu	0.19	0.03	0.20	0.92

Source: Census of India, 2001.

Table No. A 16

Household Percentage by major source of Drinking water –River, Canal - Urban

Sl.no	Particulars	River/canal			
		TOTAL	WITHIN PREMISES	NEAR PREMISES	AWAY
1	Nagapattinam	0.50	0.00	0.21	3.08
2	Tamil Nadu	0.26	0.00	0.42	0.80

Source: Census of India, 2001.

Table No. A 17

Household Percentage by major source of Drinking water –Spring - Urban

Sl.no	Particulars	Spring			
		Total	Within Premises	Near Premises	Away
1	Nagapattinam	0.15	0.00	0.12	0.71
2	Tamil Nadu	0.42	0.00	0.68	1.32

Source: Census of India, 2001.

Table No. A 18

Household Percentage by major source of Drinking water –Others - Urban

Sl.no	Particulars	Others			
		Total	Within Premises	Near Premises	Away
1	Nagapattinam	2.57	0.13	3.25	8.21
2	Tamil Nadu	3.61	0.39	4.31	15.67

Source: Census of India, 2001.

Table No. A 19

Households Percentage by major source of Drinking water – Rural

Sl.No	Particulars	Tap	Tube well/ hand pump	Well	Tank/ Pond/ Lake	River/ Canal	Spring	Other
1	Nagapattinam	32.04	60.15	5.14	0.57	0.16	0.18	0.177
2	Tamil Nadu	60.48	24.81	11.34	1.64	0.41	0.46	0.86

Source: Census of India, 2001.

Table No. A 20

Households Percentage by major source of Drinking water – Urban

Sl.No	Particulars	Tap	Tubewell/ hand pump	Well	Tank/ Pond/ Lake	River/ Canal	Spring	Other
1	Nagapattinam	45.92	43.33	7.11	0.42	0.50	0.15	2.57
2	Tamil Nadu	65.40	20.51	9.61	0.19	0.26	0.42	3.60

Source: Census of India, 2001.

Table No. A 21

Households Percentage by major source of Drinking water – Combined

Sl.No	Particulars	Tap	Tubewell/ hand pump	Well	Tank/ Pond/ Lake	River/ Canal	Spring	Other
1	Nagapattinam	34.77	56.83	5.53	0.54	0.23	0.17	1.93
2	Tamil Nadu	62.53	23.02	10.62	1.04	0.35	0.44	2.00

Source: Census of India, 2001.

Table No. A.22

Distribution of Households Classified By Location of Drinking Water, Availability of Electricity and Latrine

Area Name	Total/Rural/Urban	Drinking water source	Total No. of households	Electricity		Latrine		Percentage of Households with water source away and electricity and latrine not available
				Available	Not available	Available	Not available	
Tamil Nadu	Total	Total	14173626	11081424	3092202	4982820	9190806	
Tamil nadu	Total	Away	1717838	1129813	588025	339548	1378290	
								9.72
Tamil Nadu	Rural	Total	8274790	5890371	2384419	1187919	7086871	
Tamil Nadu	Rural	Away	1102566	674502	428064	109236	993330	
								12.00
Tamil Nadu	Urban	Total	5898836	5191053	707783	3794901	2103935	
Tamil Nadu	Urban	Away	615272	455311	159961	230312	384960	
								6.53
Nagapattinaml	Total	Total	337514	219097	118417	86378	251136	
Nagapattinaml l	Total	Away	38455	18588	19867	4119	34336	1.17
Nagapattinaml	Rural	Total	271034	166015	105019	48303	222731	
Nagapattinaml	Rural	Away	29621	13475	16146	2130	27491	10.14
Nagapattinaml	Urban	Total	66480	53082	13398	38075	28405	
Nagapattinam	Urban	Away	8834	5113	3721	1989	6845	10.30

Source: Census of India, 2001.

Table No. A. 23

Shelter-Distribution of Census Houses by their Condition 2001

Sl. No.		Total			SC Households			ST Households		
		I	II	III	I	II	III	I	II	II
Rural										
1.	Nagapattinam	231652	36574	2808	85822	15446	1074	1408	289	41
2.	Tamil Nadu	7188098	1011031	75661	1847538	285799	19228	167312	33245	2968
Urban										
1.	Nagapattinam	57548	8317	615	74476	2449	140	608	86	14
2.	Tamil Nadu	5305132	550970	42734	763443	143922	10444	94756	16685	1601
Total (Rural, Urban)										
1.	Nagapattinam	289200 (85.69)	44891 (13.30)	3423 (1.01)	93298 (83)	17895 (15.92)	1214 (1.08)	2016 (82.42)	375 (15.33)	55 (2.25)
2.	Tamil Nadu	12493230 (88.14)	1562001 (11.02)	118395 (0.84)	2610981 (85.04)	429721 (14.0)	29672 (0.97)	262068 (82.78)	499930 (15.77)	4569 (1.44)

Source: Census of India, 2001

I – Good/Permanent

II – Livable/Temporary

III-Dilapidated

Table No. A 24

Veterinary Institutions

Sl. No	Name of the Block	Veterinary Institutions				Sub centres	Other units	
		Poly Clinic	Hos-pitals	Dispen-saries	Clinical Centre		Disease investi-gation unit	Mobile unit
1	Nagapattinam•		1	1		4		1
2	Keelaiyur		1	3		3		
3	Kilvelur			2		7		
4	Thalainayar			3		1		
5	Vedaranyam•			3		4		
6	Thirumarugal			3		5		
7	Sirkali•		1	3		4		
8	Kollidam			3				
9	Mayiladuthurai•			2	1	5		1
10	Kuttalam			5	1	4		
11	Sembanarkoil			4		5		
	Total		3	32	2	42		2

Source: www.tnrd.gov.in, 2008

Table No. 25

Annual average whole sale and retail prices of certain commodities

Sl. no.		Rice Common			
		2000-2001		2003-2004	
	Centre	Whole sale/qtl	Retail/kg	Whole sale/qtl	Retail/kg
1.	Nagapattinam	998.88	10.67	1073.20	11.46
2.	State Average	970.10	10.52	1062.38	11.52

Source: Annual statistical Abstract of Tamil Nadu, 2000-2001
Quarterly Statistics Abstract
Monthly reports of DoES on TN economy

Table No. A26

Police

Sl.No.	Particulars	No.
1	No of Police station	26
2	Out Post	2
3	Local Strength	1236

Table No. A 27

Average rates of wages paid to Agricultural Labourers (in Rs) 2000-2001

(Base year 1993-1994)

Sl. No	Details	Plough men	Sowers and pluckers of seedlings		Transpalnters and weeders		Reapers and harvesters		Other agri.labours	
			Men	Women	Men	Women	Men	Women	Men	Women
1.	Nagapattinam	7104	60.17	19	50.29	30.12	83.29	59.38	60.24	39.21

Source: Annual statistical Abstract of Tamil Nadu, 2000-2001
Quarterly Statistics Abstact; Monthly reports of DoES on TN economy

Performance of Primary Education (Year 2007)

Table No A. 28

GER, NER, CR of Primary Education - Boys

Block Name	GER	NER	CR	RR	DR
Nagapattinam	99.89	99.39	89.62	9.36	1.02
Keelaiyur	100.00	99.56	86.80	12.35	0.85
Kilvelur	100.45	99.3	92.07	7.12	0.81
Thalainayar	100.00	99.4	86.62	12.45	0.93
Vedaranyam	100.00	99.87	86.88	12.2	0.92
Thirumarugal	99.89	97.26	90.03	8.12	1.85
Sirkali	99.98	99.95	93.80	5.35	0.85
Kollidam	100.00	99.3	94.32	5.44	0.24
Mayiladuthurai	99.75	99.5	88.18	11.06	0.76
Kuttalam	100.00	99.97	94.12	5.42	0.46
Sembanarkoil	100.86	99.7	93.50	6.12	0.38
Total	**100.07**	**99.39**	**90.54**	**8.64**	**0.82**

Source: Education Department, Nagapattinam, 2008.

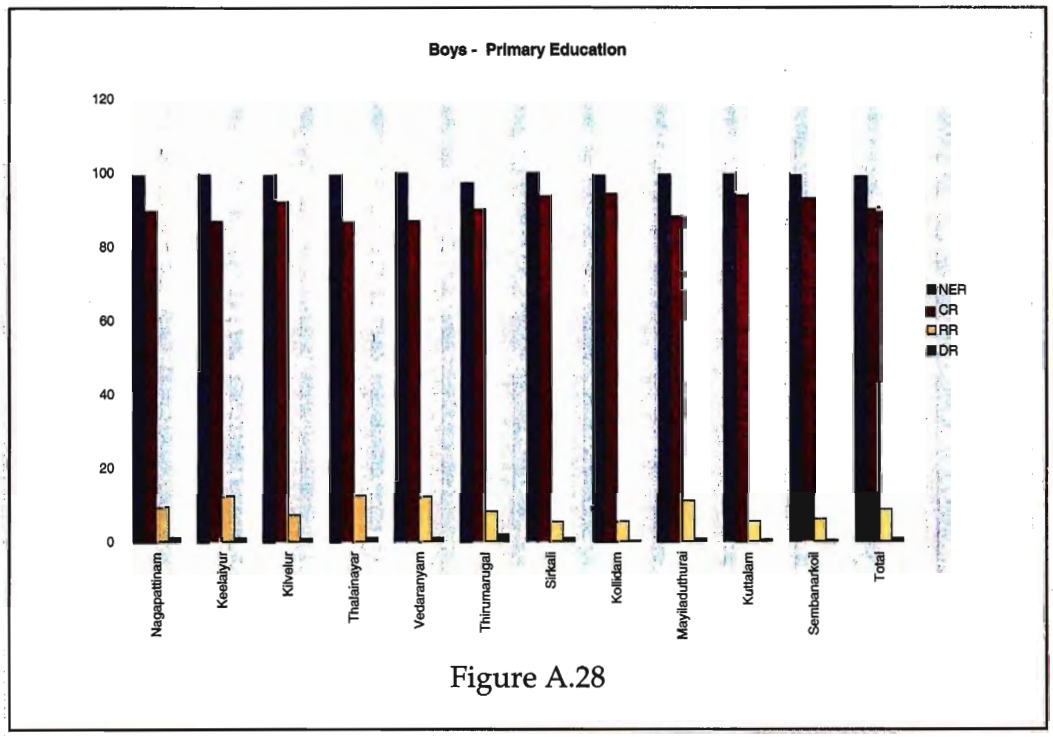


Figure A.28

Table No A.29

GER, NER, CR of Primary Education -Girls

Block Name	GER	NER	CR	RR	DR
Nagapattinam	99.98	99.8	89.10	9.56	1.34
Keelaiyur	100.00	99.8	87.10	12.75	0.15
Kilvelur	99.95	99.7	93.23	6.36	0.41
Thalainayar	100.00	99.32	87.24	11.73	1.03
Vedaranyam	99.98	99.58	87.46	12.18	0.36
Thirumarugal	99.95	99.8	89.73	7.76	2.51
Sirkali	99.85	99.7	94.92	3.37	1.71
Kollidam	100.00	99.58	94.22	5.56	0.22
Mayiladuthurai	100.85	99.54	87.82	11.24	0.94
Kuttalam	100.00	99.36	95.00	5.06	-0.06
Sembanarkoil	100.43	99.58	93.70	6.12	0.18
Total	**100.09**	**99.57**	**90.87**	**8.34**	**0.79**

Source: Education Department, Nagapattinam, 2008.

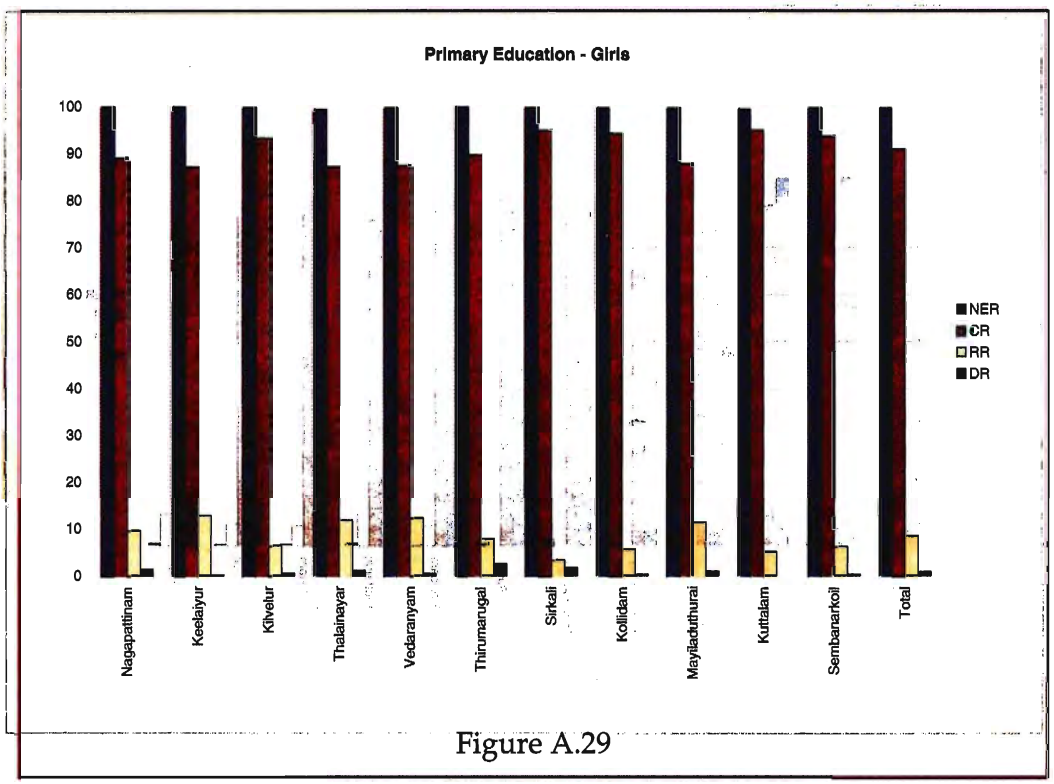


Figure A.29

Table No A. 30
GER, NER, CR of Primary Education -Total

Block Name	GER	NER	CR	RR	DR
Nagapattinam	99.94	99.68	89.36	9.46	1.18
Keelaiyur	100.00	99.68	86.97	12.55	0.50
Kilvelur	100.20	99.5	92.67	6.74	0.61
Thalainayar	100.00	99.36	86.95	12.09	0.98
Vedaranyam	99.99	99.72	87.19	12.19	0.64
Thirumarugal	99.92	98.53	89.86	7.94	2.18
Sirkali	99.92	99.82	94.38	4.36	1.28
Kollidam	100.00	99.44	94.29	5.5	0.23
Mayiladuthurai	100.30	99.52	88.02	11.15	0.85
Kuttalam	100.00	99.66	94.58	5.24	0.20
Sembanarkoil	100.65	99.64	93.65	6.09	0.28
Total	**100.08**	**99.48**	**90.72**	**8.48**	**0.81**

Source: Education Department, Nagapattinam, 2008.

Table No A.31
Performance of Upper Primary (Year 2007) - Boys

Block Name	GER	NER	CR	RR	DR
Nagapattinam	102.69	99	93.09	5.85	1.06
Keelaiyur	102.65	99.35	91.47	7.12	1.41
Kilvelur	101.96	98.69	87.32	10.24	2.44
Thalainayar	101.86	99.5	90.83	8.42	0.75
Vedaranyam	101.91	99.7	92.55	6.12	1.33
Thirumarugal	102.65	99.86	88.89	9.14	1.97
Sirkali	102.69	99	89.31	8.21	2.48
Kollidam	101.89	98.6	89.07	8.12	2.81
Mayiladuthurai	102.21	99.5	91.59	6.5	1.91
Kuttalam	101.97	99.35	86.51	11.23	2.26
Sembanarkoil	101.83	99.2	90.65	7.12	2.23
Total	**102.21**	**99.25**	**90.11**	**8.01**	**1.88**

Source: Education Department, Nagapattinam, 2008.

Table No A.32
Performance of Upper Primary (Year 2007) - Girls

Block Name	GER	NER	CR	RR	DR
Nagapattinam	102.92	99.18	90.99	7.95	1.06
Keelaiyur	102.46	99.53	93.15	5.44	1.41
Kilvelur	102.32	99.13	87.50	10.06	2.44
Thalainayar	102.60	99.68	91.25	8.00	0.75
Vedaranyam	102.68	99.78	92.09	6.58	1.33
Thirumarugal	102.73	99.6	88.97	9.16	1.87
Sirkali	102.33	99.17	91.31	6.21	2.48
Kollidam	102.57	98.97	89.03	8.16	2.81
Mayiladuthurai	102.53	99.78	92.09	6.00	1.91
Kuttalam	102.19	99.53	86.55	11.19	2.26
Sembanarkoil	102.59	99.38	90.27	7.50	2.23
Total	**102.53**	**99.43**	**90.29**	**7.84**	**1.87**

Source: Education Department, Nagapattinam, 2008.

Table No A.33
Performance of Upper Primary (Year 2007) - Total

Block Name	GER	NER	CR	RR	DR
Nagapattinam	102.81	99.08	92.04	6.9	1.06
Keelaiyur	102.56	99.43	92.31	6.28	1.41
Kilvelur	102.14	99.03	87.41	10.15	2.44
Thalainayar	102.23	99.58	1.04	8.21	0.75
Vedaranyam	102.30	99.68	92.32	6.35	1.33
Thirumarugal	102.69	99.5	88.88	9.15	1.97
Sirkali	102.51	99.07	90.31	7.21	2.48
Kollidam	102.23	99.87	89.05	8.14	2.81
Mayiladuthurai	102.37	99.68	91.84	6.25	1.91
Kuttalam	102.08	99.43	86.53	11.21	2.26
Sembanarkoil	102.21	99.28	90.56	7.31	2.23
Total	**102.37**	**99.33**	**90.21**	**7.92**	**1.88**

Source: Education Department, Nagapattinam, 2008.

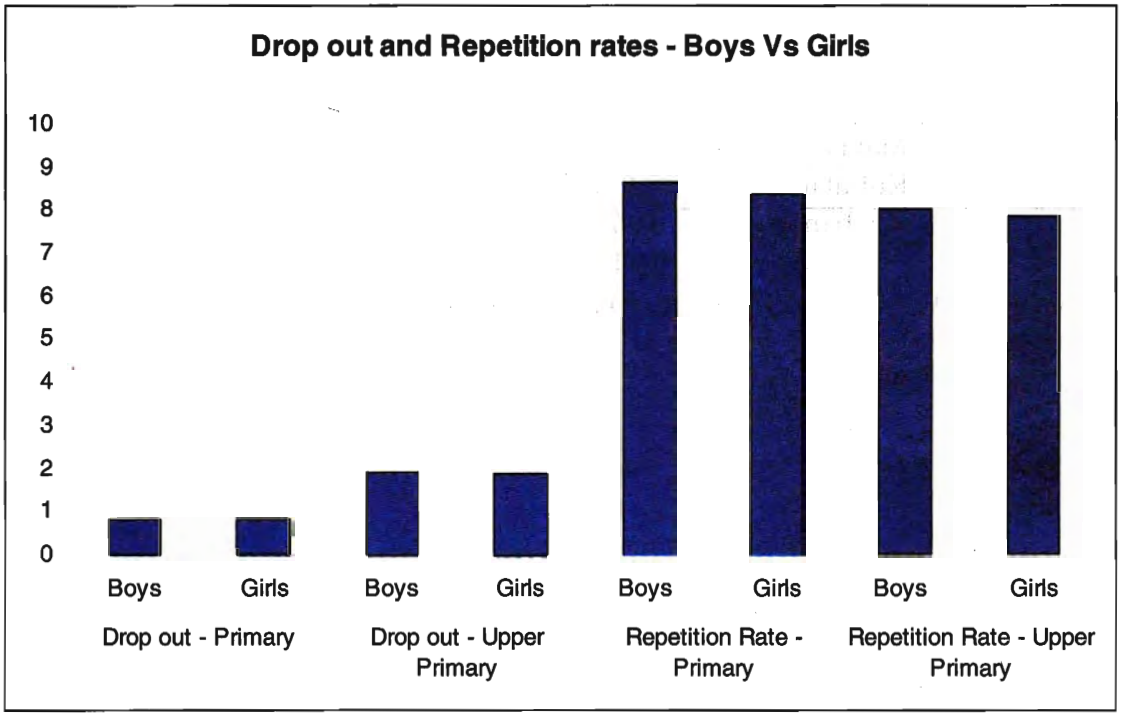


Figure A.33

Educational Indicators (Cohort Study-EER)
GER- Primary, Upper Primary

Table No. A.34										
Gross Enrolment Rate (GER)										
S. No.	**Blocks**	**ALL**			**SC**			**ST**		
		B	**G**	**T**	**B**	**G**	**T**	**B**	**G**	**T**
1	Nagapattinam	99.89	99.98	99.94	99.89	99.90	99.90	101.23	101.29	101.26
2	Keelaiyur	100.00	100.00	100.00	101.65	101.63	101.64	101.59	101.29	101.44
3	Kilvelur	100.45	99.95	100.20	100.95	101.75	101.35	101.73	101.47	101.60
4	Thalainayar	100.00	100.00	100.00	100.65	101.45	101.05	101.45	101.23	101.34
5	Vedaranyam	100.00	99.98	99.99	101.00	101.02	101.01	101.22	101.05	101.14
6	Thirumarugal	99.89	99.95	99.92	99.98	101.65	100.82	101.60	101.46	101.53
7	Sirkali	99.98	99.85	99.92	100.00	101.75	100.88	101.02	101.25	101.14
8	Kollidam	100.00	100.00	100.00	100.98	100.00	100.49	100.00	100.26	100.13
9	Mayiladuthurai	99.75	100.85	100.30	100.76	101.68	101.22	101.64	101.46	101.55
10	Kuttalam	100.00	100.00	100.00	101.35	101.46	101.41	101.62	101.22	101.42
11	Sembanarkoil	100.86	100.43	100.65	100.42	101.50	100.96	101.78	101.49	101.64
	Total	**100.07**	**100.09**	**100.08**	**100.69**	**101.25**	**100.97**	**101.35**	**101.22**	**101.29**

Source : District Information on School Education & EER 2007 – 08

Table NoA.35										
Gross Enrolment Rate (GER) -										
	Blocks	**ALL**			**SC**			**ST**		
		B	**G**	**T**	**B**	**G**	**T**	**B**	**G**	**T**
1	Nagapattinam	102.69	102.92	102.81	103.69	103.69	103.69	105.49	105.22	105.36
2	Keelaiyur	102.65	102.46	102.56	102.46	103.62	103.04	104.85	105.21	105.03
3	Kilvelur	101.96	102.32	102.14	102.89	102.86	102.88	105.36	105.17	105.27
4	Thalainayar	101.86	102.60	102.23	102.66	102.68	102.67	104.86	105.19	105.03
5	Vedaranyam	101.91	102.68	102.30	102.84	102.74	102.79	105.02	105.23	105.13
6	Thirumarugal	102.65	102.73	102.69	102.74	103.62	103.18	105.23	105.26	105.25
7	Sirkali	102.69	102.33	102.51	102.54	102.61	102.58	105.26	105.20	105.23
8	Kollidam	101.89	102.57	102.23	102.63	103.32	102.98	104.89	105.27	105.08
9	Mayiladuthurai	102.21	102.53	102.37	102.63	103.26	102.95	105.26	105.22	105.24
10	Kuttalam	101.97	102.19	102.08	102.43	102.49	102.46	104.65	105.24	104.95
11	Sembanarkoil	101.83	102.59	102.21	102.89	103.25	103.07	105.25	105.25	105.25
	Total	**102.21**	**102.53**	**102.37**	**102.76**	**103.10**	**102.93**	**105.10**	**105.22**	**105.16**

Source : DISE & EER 2007 - 08

NER- Primary, Upper Primary

Table No. A.36

Net Enrolment Rate (NER) - Primary - 2007-08

S. No.	Blocks	All			SC			ST		
		B	G	T	B	G	T	B	G	T
	Nagapattinam	99.39	9.98	99.68	99.6	99.4	99.5	95.34	95.34	95.51
	Keelaiyur	99.56	99.8	99.68	99.2	99.4	99.3	96.84	96.84	97.16
	Kilvelur	99.3	99.7	99.5	99.6	99.4	99.7	95	95	96.15
	Thalainayar	99.4	99.32	99.36	98.8	99.2	99	96.54	96.54	96.51
	Vedaranyam	99.87	99.58	99.72	99.8	99.4	99.6	97.08	97.08	96.97
	Thirumarugal	97.26	99.8	98.53	99	99.4	99.2	96.68	96.68	96.84
	Sirkali	99.95	99.7	99.82	99	99.6	99.7	96.34	96.34	96
	Kollidam	99.3	99.58	99.44	99.5	99.7	99.6	96.94	96.94	95.6
	Mayiladuthurai	99.5	99.54	99.52	99.5	99.5	99.5	96	96	96.55
	Kuttalam	99.97	99.36	99.66	99.8	99.2	99.1	95.58	95.58	96.23
	Sembanarkoil	99.7	99.58	99.64	99.8	99.6	99.7	96	96	96.14
	Total	**99.39**	**99.57**	**99.48**	**99.41**	**99.43**	**99.42**	**96.04**	**96.04**	**96.26**

Source : DISE & EER 2007 – 08

Table No. A.37

Net Enrolment Rate (NER) - Upper Primary - 2007-08

S. No.	Blocks	ALL			SC			ST		
		B	G	T	B	G	T	B	G	T
1	Nagapattinam	99	99.18	99.08	98.88	99	98.95	94.24	97.29	95.77
2	Keelaiyur	99.35	99.53	99.43	98.31	98.47	98.38	95.24	95.05	95.15
3	Kilvelur	98.69	99.13	99.03	98.53	98.83	98.74	95.64	96.49	96.07
4	Thalainayar	99.5	99.68	99.58	99.23	99.39	99.3	95.74	97.72	96.73
5	Vedaranyam	99.7	99.78	99.68	99.5	99.66	99.59	94.24	97.83	96.04
6	Thirumarugal	99.86	99.6	99.5	99.7	99.72	99.63	95.44	97.59	96.52
7	Sirkali	99	99.17	99.07	99.53	99.69	99.6	96.04	96.79	96.42
8	Kollidam	98.6	98.97	99.87	99.13	99.29	99.2	97.16	98.19	97.68
9	Mayiladuthurai	99.5	99.78	99.68	99.2	99.42	99.33	95.37	97.24	96.31
10	Kuttalam	99.35	99.53	99.43	98.76	98.92	98.83	96.11	97.39	96.75
11	Sembanarkoil	99.2	99.38	99.28	99.16	99.32	99.23	96.04	97.29	96.67
	Total	**99.25**	**99.43**	**99.33**	**99.09**	**99.25**	**99.16**	**95.54**	**97.17**	**96.35**

Source : DISE & EER 2007 - 08

Compeletion ,Repetition and Droupout Rates –Primary,Upper Primary

Table No. A.38										
Completion Rate (CR) –Primary - 2007-08										
S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	89.62	89.10	89.36	88.17	88.33	88.25	88.20	89.44	86.81
2	Keelaiyur	86.80	87.10	86.97	87.90	88.04	87.97	85.97	85.29	85.63
3	Kilvelur	92.07	93.23	92.67	92.87	94.37	93.62	85.69	82.59	84.14
4	Thalainayar	86.62	87.24	86.95	87.87	87.25	87.56	100.00	100.00	0
5	Vedaranyam	86.88	87.46	87.19	88.16	87.10	87.63	100.00	100.00	0
6	Thirumarugal	90.03	89.73	89.86	90.69	89.93	90.31	86.61	85.03	85.85
7	Sirkali	93.80	94.92	94.38	92.24	92.62	92.46	86.66	83.94	85.3
8	Kollidam	94.32	94.22	94.29	92.04	92.54	92.29	85.54	83.56	84.55
9	Mayiladuthurai	88.18	87.82	88.02	90.93	89.95	90.44	86.03	85.19	85.5
10	Kuttalam	94.12	95.00	94.58	91.37	91.79	91.58	86.13	82.67	84.4
11	Sembanarkoil	93.50	93.70	93.65	92.75	93.15	92.95	85.34	85.12	85.23
	Total	**90.54**	**90.87**	**90.72**	**90.45**	**90.44**	**90.46**	**86.33**	**84.15**	**85.25**

Source : Cohort Study 2007

Table NoA.39

Completion Rate (CR) –Upper Primary - 2007-08

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	93.09	90.99	92.04	91.51	90.15	90.83	86.09	80.15	83.12
2	Keelaiyur	91.47	93.15	92.31	91	89.20	90.1	85.32	83.18	84.25
3	Kilvelur	87.32	87.50	87.41	89.59	89.35	89.47	86.05	74.45	80.25
4	Thalainayar	90.83	91.25	91.04	91	90.20	90.6	86.11	73.39	79.75
5	Vedaranyam	92.55	92.09	92.32	90.9	89.84	90.37	85.34	85.16	85.25
6	Thirumarugal	88.89	88.97	88.88	89.13	87.59	88.36	85.28	79.62	82.45
7	Sirkali	89.31	91.31	90.31	89.63	89.13	89.08	86.13	80.57	83.35
8	Kollidam	89.07	89.03	89.05	92.66	91.82	92.24	85.39	83.43	84.41
9	Mayiladuthurai	91.59	92.09	91.84	90.65	88.63	89.94	86.58	84.72	85.65
10	Kuttalam	86.51	86.55	86.53	83.08	77.06	80.07	87.96	83.54	85.75
11	Sembanarkoil	90.65	90.27	90.56	90.53	89.29	89.91	87.69	83.01	85.5
	Total	**90.11**	**90.29**	**90.21**	**89.98**	**88.36**	**89.18**	**86.18**	**81.02**	**83.61**

Source: Cohort Study 2007

Table No. A.40
Repetition Rate (RR) – Primary - 2007-08

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	9.36	9.56	9.46	11.25	11.17	11.21	8.95	8.87	8.91
2	Keelaiyur	12.35	12.75	12.55	11.65	11.61	11.63	11.28	12.82	12.05
3	Kilvelur	7.12	6.36	6.74	6.42	4.72	5.57	11.45	14.83	13.14
4	Thalainayar	12.45	11.73	12.09	11.42	11.9	11.66	0	0	0
5	Vedaranyam	12.2	12.18	12.19	11.42	12.48	11.95	0	0	0
6	Thirumarugal	8.12	7.76	7.94	8.43	7.95	8.19	10.45	12.17	11.31
7	Sirkali	5.35	3.37	4.36	7.42	7.32	7.37	11.42	15.02	13.22
8	Kollidam	5.44	5.56	5.5	7.54	7.38	7.46	11.14	13.9	12.52
9	Mayiladuthurai	11.06	11.24	11.15	8.42	9.2	8.81	11.12	12.3	11.71
10	Kuttalam	5.42	5.06	5.24	8.42	8.18	8.3	12.12	16.64	14.38
11	Sembanarkoil	6.12	6.12	6.09	6.8	6.58	6.69	11.25	11.25	11.25
	Total	**8.64**	**8.34**	**8.48**	**9.02**	**8.95**	**8.99**	**11.02**	**13.1**	**12.06**

Source: Cohort Study 2007

Table No. A.41
Repetition Rate (RR) – Upper Primary - 2007-08

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	5.85	7.95	6.9	6.45	7.09	6.77	11.56	17.36	14.46
2	Keelaiyur	7.12	5.44	6.28	7.25	8.25	7.75	12.56	14.1	13.33
3	Kilvelur	10.24	10.06	10.15	8.25	8.41	8.33	11.43	23.17	17.3
4	Thalainayar	8.42	8.00	8.21	7.25	8.05	7.65	11.75	24.05	17.9
5	Vedaranyam	6.12	6.58	6.35	7.25	7.91	7.58	12.41	12.27	12.34
6	Thirumarugal	9.14	9.16	9.15	9.02	9.14	9.08	12.24	18.02	15.13
7	Sirkali	8.21	6.21	7.21	8.24	8.48	8.36	11.45	17.17	14.31
8	Kollidam	8.12	8.16	8.14	5.46	5.82	5.64	12.36	13.92	13.14
9	Mayiladuthurai	6.5	6.00	6.25	7.25	8.63	7.94	11.25	12.75	12
10	Kuttalam	11.23	11.19	11.21	14.06	16.8	15.43	9.52	13.7	11.61
11	Sembanarkoil	7.12	7.50	7.31	7.35	8.89	8.12	9.85	14.75	12.3
	Total	**8.01**	**7.84**	**7.92**	**7.98**	**8.86**	**8.42**	**11.49**	**16.48**	**13.98**

Source: Cohort Study 2007

Table No. A.42
Dropout Rate (DR) – Primary - 2007-08

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	1.02	1.34	1.18	0.58	0.50	0.54	2.85	1.69	2.27
2	Keelaiyur	0.85	0.15	0.50	0.45	0.35	0.40	2.75	1.89	2.32
3	Kilvelur	0.81	0.41	0.61	0.71	0.91	0.81	2.86	2.58	2.72
4	Thalainayar	0.93	1.03	0.98	0.71	0.85	0.78	0.00	0.00	0.00
5	Vedaranyam	0.92	0.36	0.64	0.42	0.42	0.42	0.00	0.00	0.00
6	Thirumarugal	1.85	2.51	2.18	0.88	2.12	1.50	2.94	2.80	2.87
7	Sirkali	0.85	1.71	1.28	0.34	0.06	0.20	1.92	1.04	1.48
8	Kollidam	0.24	0.22	0.23	0.42	0.08	0.25	3.32	2.54	2.93
9	Mayiladuthurai	0.76	0.94	0.85	0.65	0.85	0.75	2.85	2.51	2.68
10	Kuttalam	0.46	-0.06	0.20	0.21	0.03	0.12	1.75	0.69	1.22
11	Sembanarkoil	0.38	0.18	0.28	0.45	0.27	0.36	3.41	3.63	3.52
	Total	**0.82**	**0.79**	**0.81**	**0.53**	**0.58**	**0.56**	**2.65**	**2.74**	**2.70**

Source: Cohort Study 2007

Table No. A.43
Dropout Rate(DR) – Upper Primary - 2007-08

S. No	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Nagapattinam	1.06	1.06	1.06	2.04	2.76	2.4	2.35	2.49	2.42
2	Keelaiyur	1.41	1.41	1.41	1.75	2.55	2.15	2.12	2.72	2.42
3	Kilvelur	2.44	2.44	2.44	2.16	2.24	2.2	2.52	2.38	2.45
4	Thalainayar	0.75	0.75	0.75	1.75	1.75	1.75	2.14	2.56	2.35
5	Vedaranyam	1.33	1.33	1.33	1.85	2.25	2.05	2.25	2.57	2.41
6	Thirumarugal	1.97	1.87	1.97	1.85	3.27	2.56	2.48	2.36	2.42
7	Sirkali	2.48	2.48	2.48	2.13	2.39	2.26	2.42	2.26	2.34
8	Kollidam	2.81	2.81	2.81	1.88	2.36	2.12	2.25	2.65	2.45
9	Mayiladuthurai	1.91	1.91	1.91	2.1	2.74	2.42	2.17	2.53	2.35
10	Kuttalam	2.26	2.26	2.26	2.86	6.14	4.5	2.52	2.76	2.64
11	Sembanarkoil	2.23	2.23	2.23	2.12	1.82	1.97	2.46	2.24	2.35
	Total	**1.88**	**1.87**	**1.88**	**2.04**	**2.75**	**2.40**	**2.33**	**2.50**	**2.42**

Source: Cohort Study 2007

Table No. A.44
Teacher Strength - Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	413	474	505	516	518	325	462
Keelaiyur	147	197	195	208	179	235	198
Kilvelur	150	187	196	203	260	239	193
Thalainayar	126	148	172	161	225	241	170
Vedaranyam	344	405	416	436	459	368	377
Thirumarugal	171	203	209	222	275	234	249
Sirkali	279	304	343	349	532	334	400
Kollidam	197	202	240	250	328	278	289
Mayiladuthurai	406	431	439	446	680	424	503
Kuttalam	302	360	369	379	318	298	321
Sembanarkoil	353	409	408	430	512	393	404
Total	2888	3320	3492	3600	4286	3369	3566

Source: Education Department, Nagapattinam, 2008.

Table No. A. 45
Teachers Strength – Upper Primary

Block Name	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Nagapattinam	202	209	277	288	296	617	710
Keelaiyur	109	112	171	182	197	414	277
Kilvelur	103	104	162	176	190	405	295
Thalainayar	99	104	164	174	188	434	225
Vedaranyam	236	234	282	294	301	516	634
Thirumarugal	198	201	264	276	289	519	213
Sirkali	247	251	300	314	319	591	691
Kollidam	192	198	254	264	274	536	448
Mayiladuthurai	318	317	367	377	388	781	944
Kuttalam	159	164	204	216	218	462	491
Sembanarkoil	333	334	399	407	433	770	627
Total	2196	2228	2844	2968	3093	6045	5555

Source: Education Department, Nagapattinam, 2008.

Table A 49

Workers Category

Activity/ Region	Category	Nagapattinam	Tamil Nadu
Cultivators			
Total	Male	56939	3262489
	Female	15071	1853550
	Total	72010	5116039
Rural	Male	53145	3029405
	Female	14259	1743623
	Total	67404	4773028
Urban	Male	3794	233084
	Female	812	109927
	Total	4606	343011
Agricultural Labourers			
Total	Male	180592	4256360
	Female	128176	4381270
	Total	308768 (53%)	8637630
Rural	Male	169988	3642013
	Female	122187	3891753
	Total	292175	7533766
Urban	Male	10604	614347
	Female	5989	489517
	Total	16593	1103864
Household Industrial Workers			
Total	Male	6394	648589
	Female	5066	851172
	Total	11460 (1.95%)	1499761
Rural	Male	5079	350177
	Female	4045	495549
	Total	9124	845726
Urban	Male	1315	298412
	Female	1021	355623
	Total	2336	654035
Other Workers			
Total	Male	166210	648589
	Female	28286	851172
	Total	194496 (33.4%)	1499761
Rural	Male	96299	339131
	Female	15890	1068117
	Total	112189	4255202
Urban	Male	69911	6593828
	Female	12396	1623776
	Total	82307	8217604

Table A. 48

Details of Schools with 2 Teachers and Playground

Sl. No.	Name of the Blocks	Schools			Schools with Play Ground		% of Schools with play grounds		Primary Schools with 2 Teachers	% of Primary Schools with 2 Teachers
		Primary	Upper Primary	Total	Primary	Upper Primary	Primary	Upper Primary		
1.	Nagapattinam	54	22	76	-	03	-	14.0	15	28.0*
2.	Keelaiyur	42	15	57	-	-	-	-	18	43.0
3.	Kilvelur	50	18	68	-	-	-	-	29	58.0
4.	Thalainayar	48	16	64	-	-	-	-	27	56.2
5.	Vedaranyam	87	36	123	-	04	-	11.1	35	40.2
6.	Thirumarugal	62	20	82	-	01	-	5.0	54	87.0
7.	Sirkali	80	22	102	-	-	-	-	43	54.0
8.	Kollidam	67	27	94	-	02	-	7.4	33	49.2
9.	Mayiladuthurai	104	36	140	-	03	-	8.3	64	62.0
10	Sembanarkoil	102	26	128	-	02	-	8.0	40	39.2
11	Kuttalam	71	24	95	-	01	-	4.1*	43	61.0
Nagapattinam District Total		**767**	**262**	**1025**	**-**	**16**	**-**	**6.1**	**401**	**52.2**

Source: Education Department, SSA, Nagapattinam District,2007

_ Highest

* Lowest

Table A 49

Workers Category

Activity/ Region	Category	Nagapattinam	Tamil Nadu
Cultivators			
Total	Male	56939	3262489
	Female	15071	1853550
	Total	72010	5116039
Rural	Male	53145	3029405
	Female	14259	1743623
	Total	67404	4773028
Urban	Male	3794	233084
	Female	812	109927
	Total	4606	343011
Agricultural Labourers			
Total	Male	180592	4256360
	Female	128176	4381270
	Total	308768 (53%)	8637630
Rural	Male	169988	3642013
	Female	122187	3891753
	Total	292175	7533766
Urban	Male	10604	614347
	Female	5989	489517
	Total	16593	1103864
Household Industrial Workers			
Total	Male	6394	648589
	Female	5066	851172
	Total	11460 (1.95%)	1499761
Rural	Male	5079	350177
	Female	4045	495549
	Total	9124	845726
Urban	Male	1315	298412
	Female	1021	355623
	Total	2336	654035
Other Workers			
Total	Male	166210	648589
	Female	28286	851172
	Total	194496 (33.4%)	1499761
Rural	Male	96299	339131
	Female	15890	1068117
	Total	112189	4255202
Urban	Male	69911	6593828
	Female	12396	1623776
	Total	82307	8217604