HUMAN DEVELOPMENT RESEARCH AND CO-ORDINATION UNIT

STATE PLANNING COMMISSION
EZHILAGAM, CHEPAUK, CHENNAI 600 005.

# DISTRICT HUMAN DEVELOPMENT REPORT
# DHARMAPURI DISTRICT

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# Foreword

Many yardsticks have been applied to evaluate and measure the progress found in the economies of different countries. Human development approach has been evolved by the United Nations in 1990 to ascertain the impact of economic growth on poverty, income and employment. Since the publication of the Human Development Report in 1990, Human Development Index has been widened by including life expectancy, literacy, per capita income, maternal mortality, infant mortality, gender equality, environment issues, cultural and language rights. So far 20 Human Development Reports have been published by UNDP. The Union Planning Commission published its first National Report in 2001, in which Tamil Nadu's achievements in education, health, family welfare were highly commended. States in India have also been publishing Human Development Reports following the UNDP model. To ascertain the inter-district inequalities found among the population and to take appropriate policy intervention programmes, district human development reports have been published by many states in India. This approach may yield good results to design appropriate policies and strengthen the micro level and micro level area planning to address the crucial issues of the backward regions.

The State Planning Commission with the cooperation of the UNDP and Union Planning Commission is seeking the assistance 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 design and apply meaningful intervention programmes to alleviate poverty and to ensure social equalities and social justice in the backward regions.

Already Human Development Reports for Cuddalore, Nagapattinam, Thiruvannamalai, Dindigul, Sivaganga districts have been published by the State Planning Commission in 2009. I feel happy that Human Development Reports for Nilgiris, Dharmapuri and Kanyakumari are being published in 2011.

I commend the services of the District Collectors and officers of District Administrations for the help they rendered to collect data and required information in the preparation of the District Human Development Reports. I convey my thanks to the Chief Secretary, Principal Secretary, Planning Development, Principal Secretary - Member-Secretary, State Planning Commission 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, Department of Economics, University of Madras and DHAN foundation, Madurai.

பிணியின்மை செல்வம் விளைவின்பம் ஏமம்
அணியென்ப நாட்டிற்கிவ் வைந்து - குறள் 738

(Rich yield, delight, defence and wealth
Are jewels of land with blooming health – Kural 738)

Surprisingly Thiruvalluvar had elegantly pleaded for the enhancement of human development indices of the current era about 2000 years ago and he was of the firm opinion human development alone constitute a vibrant society and a nation. In this context, the District Human Development Reports of Nilgiris, Dharmapuri and Kanyakumari will form a milestone in the overall planning and development of the state of Tamil Nadu.

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## FOREWORD

"Human Development" is an alternative development thinking which puts the people at the center of development, by expanding their choices and enhancing their capabilities. With the focus of development shifting to human development globally, many countries have also brought out Human Development Reports including India.

Tamil Nadu released its first Human Development Report in 2003. Taking this concept of Human Development further, the State has prepared District Human Development Reports for five districts with the funding from United Nations Development Programme and the support of the Union Planning Commission, under the Project "Strengthening State Plans for Human Development" and released them in October 2009. These reports served as a tool to identify the status of development of the district in human development framework and prescribe appropriate remedial actions.

Encouraged by the response of the State, the Union Planning Commission and UNDP, provided funds for taking up this exercise in three more districts – district with the least HDI ranking, district with the highest HDI ranking and district with unique geographical terrain. Accordingly, the Human Development Reports of Dharmapuri District,

Kanniyakumari District, and The Nilgiris District have been prepared. These reports measure the status of human development in terms of literacy, health and income parameters in the districts. The flow of Government funds for social sectors into the districts have also been analysed which is a unique feature of these reports.

All these attempts will lead to in-depth knowledge of the intra district disparities, with understanding of the bottlenecks involved so as to enable reorientation of the development strategies. These reports will serve as a useful tool for inclusive growth of the districts.

I place on record my sincere gratitude and appreciation to all the stakeholders for their contributions in bringing out these reports.

24 2 2011

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**FOREWORD**

Dharmapuri District nestled in the North –Western region of Tamil Nadu, is endowed with rich natural resources and unique human resource. However, this district has for long, remained in the backwaters of development. Past studies have indicated that Dharmpapuri district is quite backward in terms of infrastructure and human development indicators. But during the last few years, the rays of development have seeped in an unprecedented manner and the district has witnessed tangible improvement in its socio-economic profile. Remarkable progress can be now seen in sectors like health, education, employment and connectivity. This report is an attempt to capture and analyze these changes. I am sure that this report will be a valuable resource for administrators, planners and academicians. I congratulate and thank all the scholars and researchers who have worked tirelessly in compiling this report.

**Collector,**
**Dharmapuri**

# HUMAN DEVELOPMENT RESEARCH AND CO-ORDINATION UNIT

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### DISTRICT HUMAN DEVELOPMENT REPORT
### DHARMAPURI DISTRICT

# Chapter 1
# DISTRICT PROFILE

## 1.1 Introduction

In the last few decades, there is a shift in development paradigm from economic growth approach to human development approach. The merit of the human development approach is that it focuses on the state of existence of people, the lives they lead. In this context, social sector has become a prime candidate for attention. The term "social sector" is a flexible one that refers to activities which contribute to human capital formation and human development. Some of the important sub-sectors of social sector are education, health and medical care, housing, water supply and rural development.

There is an uninformed criticism that social sector programs are populist schemes. A policy option that is open to governments to redistribute income is to change the composition and direction of public expenditure. This policy option has relevance in developing nations for two reasons:

First, government expenditure has become a significant proportion of national income: The poorest section of the people have disproportionately less income in comparision to the size of their population. Therefore, there is a need for the Government to spend on this population.

Second, the public budget can be used to increase the consumption of specific public goods and services which would on the whole benefit a larger section of the society and would give multiple and longlasting benefits. Furthermore, the positive fallouts of such measures would lead to the overall development in the quality of life of the people..

## 1.2 Dharmapuri: A Human Development Profile

Dharmapuri had 29 districts ahead of it to chase and cross in the development race i.e. it was placed last in 2003 (TNHDR, 2003). Its position continued to be thirtieth in 2007 too (SPC,2007). The district has taken Herculean efforts to achieve most of the notional human development targets of the state as indicated in Table 1.1.

**Table 1.1 Select Plan Targets: Tamil Nadu and Dharmapuri District**

| **Social Indicators** | **Plan Targets of Tamil Nadu** | **Dharmapuri District Status** |
|---|---|---|
| Poverty Reduction | Reduction by 5.5 percentage points (from 22.5 % in 2004-05 to 17 % in 2012) | 32.3 percent BPL Population: |
| Student Enrolment | Universal completion of elementary education | 98.81 Enrolment ratio |
| Literacy Rate | 90 per cent Total Literacy | Total 52.3% Male 60.9. Female 43.2. |
| I M R | Reduction of 17 by 2012 (from 37 per 1000 live births in 2005 to 20 per 1000 live births by 2012) | 24 |
| M M R | Reduction of 50 % (from 0.9 per 1000 in 2005 to .45 per 1000 by 2012) | 0.7 |
| Drinking Water | Provision of clean drinking water to all by 2012. | Fully Covered: 89 % Partially Covered: 11 % |
| Gender Inequality | Raising Sex Ratio from 942 in 2001 to to 950 by 2012. | 927 |

Note: The targets are as per the Eleventh Five Year Plan Document (2007-2012), Government of Tamil Nadu.

The district has unique development and resource pattern. The district has made a but solid gain between 2003 and 2007; the absolute value of the human development indicators has moved from 0.584 to 0.656 during this period.

And secondly, as it is clearly evident that public intervention has made such improvement possible, there is greater scope to consolidate the past gains and to improve the present position by intensifying the interventions on old as well as new district-specific areas of concern.

Among the total population of 12.9 lakhs, 32.3 per cent are BPL population. As a proportion of the state, the district accomodates about 2.4 per cent of the state BPL population. In the literacy front, this district has a lot to achieve the Sakshar Bharat for adult equivalent literacy is in implementation here. Among such districts in India, Dharmapuri is in a comfortable creamy layer with many districts in Rajasthan are with below 30% literacy. And the gender gap in literacy in the district is the highest with 29.1 percent against the state average of 21.8 percent.

As per the Eleventh Plan Document of the SPC (2007), the district is placed in the 30th place position in terms of human and gender development indicators. However, in terms of per capita income, Dharmapuri is in the in the 20th position. This parameter confirms the perception of human development succeeds economic development. The state intervention might have helped financial independence and social indicators are showing definite signs of improvement.

**1.3 Geography**

Dharmapuri district was carved out from the then composite Salem district in October 2. 1965. It was again bifurcated on February 9, 2004 into Dharmapuri and Krishnagiri districts. Sizable number of industrial units and service industries are located in the Hosur region of Krishnagiri district. But, Dharmapuri, having inherited unique topography and resource endowments, has a different socio-economic set up. Many of the human development are of outdated or combined nature. This report tries to capitalize the six years of separate existence and nine years of improvements in the indicators after 2001 census.

The district is located on the western side of the Eastern Ghats and is mostly a hilly terrain. The district has 3.46 percent (4498 sq. km) of the state's geographical area and most of it are undulations with varying slope from 380 to 1395 MSL[1]. Though the river Cauvery is passing through the western side, the radiating catchment area and the tributaries mark the nature of watershed. Eventhough, the river Cauvery is not directly irigating any of the districts' field, the presence of such valley facilitates the typical watershed geography paving way for atleast three significant reservoirs on the tributaries.

The district has two revenue divisions (Dharmapuri and Harur), five taluks of varying sizes viz., Dharmapuri (784.4 sq.km with 18 percent), Harur (907.6 sq.km with 21 percent), Pennagaram (1175.5 sq.km with 27 percent), Palacode (756.1 sq.km with 17 percent) and Pappireddipatti (788.3 sq.km with 18 percent) and 470 revenue villages. In terms of local government units, there are eight blocks, 251 village panchayats, ten town pachayats (Anexure I) and one municipality (Dharmapuri).

[1] Mean Sea level

## 1.4 Demographic Profile

The district has a total population of 12.9 lakhs (2001 census), which is 2 percent of the state population. This is one of the least urbanised districts in the state with 15 per cent of its inhabitants living in urban areas against the state average of 44 percent. The density of population is also relatively thin with 288 per sq.km against the state average of 480 per sq. km.

Table 1. 2: Total Population of the Dharmapuri District by Taluk

| Taluk | Male | | | Female | | | Row Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total | % |
| Dharmapuri | 83 | 17 | 52 | 82 | 10 | 48 | 83 | 17 | 100 | **29** |
| Harur | 85 | 15 | 51 | 84 | 9 | 49 | 84 | 16 | 100 | **16** |
| Palacode | 87 | 13 | 52 | 86 | 8 | 48 | 86 | 14 | 100 | **23** |
| Pappireddipatti | 86 | 14 | 51 | 86 | 8 | 49 | 86 | 14 | 100 | **17** |
| Pennagaram | 87 | 13 | 52 | 86 | 8 | 48 | 86 | 14 | 100 | **15** |
| Column Total | **85** | **15** | **52** | **85** | **9** | **48** | **85** | **15** | **100** | **100** |

Source: Census 2001

93 percent of the district population are Hindus, about 4 percent are Muslims, less than 2 percent are Christians and the rest are others such as Sikhs, Buddhists and Jains.

Table 1.2 shows the population profile of the Dharmapuri district in terms of gender and rural-urban divide. The district has an adverse sex ratio of 927. Dharmapuri taluk has the largest share, 29 percent, of the people followed by Palacode (23 percent), Pappireddipatti (17 percent), Harur (16 percent) and Pennagaram (15 percent).

About 85 percent of the people live in rural areas and the remaining 15 percent live in the urban areas. The rural population is slightly less in Dharmapuri (83 percent) and Harur (84 percent) taluks than that of the other three taluks with 86 percent of rural population.

Table 1.3 provides the spatial distribution of Scheduled Castes(SC), Scheduled Tribes (ST) and non-SC/STs across the taluks of the district by sex. The district has 19 percent of SC/ST population and the rest 81 percent are non-SC/ST population. 89 perceent of the SC/ST population are in rural areas. In terms of the

spatial spread, the proportion of SC/ST population is high in Pappireddipatti (36 percent) and Harur (35 percent) taluks. The other three blocks have around 10 to 13 percent SC/ST population.

Table 1.3 : Total Population of Dharmapuri District by Caste

| Taluk | SC/ST | | | Non-SC/ST | | | Row Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total | % |
| Dharmapuri | 90 | 10 | 11 | 82 | 18 | 89 | 83 | 17 | 100 | 29 |
| Harur | 90 | 10 | 35 | 81 | 19 | 65 | 84 | 16 | 100 | 16 |
| Palacode | 92 | 8 | 10 | 86 | 14 | 90 | 86 | 14 | 100 | 23 |
| Pappireddipatti | 85 | 15 | 36 | 86 | 14 | 64 | 86 | 14 | 100 | 17 |
| Pennagaram | 88 | 12 | 13 | 86 | 14 | 87 | 86 | 14 | 100 | 15 |
| Column Total in percentage | **9** | **11** | **19** | **84** | **16** | **81** | **85** | **15** | **100** | **100** |

Source: Census 2001

Table 1. 4: Population: Growth and Structure

| Taluk | 1991 | 2001 | Annual Growth Rate | Sex Ratio by Taluks 2001 (Number of Females for 1000 maless) | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rural | Urban | Total | 0-6 Age Group |
| Dharmapuri | 323046 | 378118 | 1.61 | 921 | 976 | 931 | 824 |
| Harur | 178403 | 301580 | 1.67 | 936 | 976 | 942 | 859 |
| Palacode | 256012 | 208131 | 1.78 | 926 | 978 | 933 | 820 |
| Pappireddipatti | 185302 | 215471 | 1.63 | 946 | 945 | 946 | 876 |
| Pennagaram | 180820 | 194882 | 0.78 | 900 | 941 | 906 | 762 |
| Total | 1123583 | 1298182 | 1.76 | 936 | 953 | 938 | 869 |

Source: Census 1991 an 2001

The decadal (1991-2001) variation of the district population is 17.6 percent. The district has a sex ratio of 927 against the state ratio of 987. The sex ratio of rural population is lower than that of the urban population among the taluks. The sex ratio for rural and urban are respectively 936 and 953. The highest sex ratio is reported in the case of Pappireddipatti taluk. In terms of growth rate of population, Pennagaram Taluk has recorded the least growth of 0.78 percent per annum (Table 1.4). This taluk has also recorded the lowest sex ratios of 906 (total) and 762 (0-6 age group) in the district.

Table 1.4 shows that the sex ratio of population in the age group 0-6 is 869 for the district. It is to be noted that the urban areas of Dharmapuri, Harur and Palacode taluks have recorded higher sex ratios.

**1.5 Workforce Status**

The total workforce of the district constitutes about half (51 percent) of its population and the other half are classified as non-workers by the 2001 Census. It may be noted that the degree of non-workers is an indicator of the extent of backwardness. About 70 percent of the total workers are engaged in agriculture either as cultivators or as agricultural labourers.

**1.6 Dharmapuri Economy: Growth and Structure**

The income levels of Dharmapuri district as axcertainied by the per capita GSDP (Gross District Domestic Product) has always been at a good enough position when compared with the per capita Gross State Domestic Product. Also, over the years the per capita income of the district has beeb showing an increasing trend signifying growth. The per capita income of the district in 1999-2000 was Rs. 18219.

Table: 1.5 Tamil Nadu and Dharmapuri District Per capita Income
(at 1999-2000 prices)

| | Percapita Income | | Annual Growth Rate | | Per capita GDDP as % of Per Capita GSDP |
|---|---|---|---|---|---|
| Year | Tamil Nadu | Dharmapuri | Tamil Nadu | Dharmapuri | |
| 1999-00 | 21783 | 18219 | | | 84 |
| 2000-01 | 23607 | 19388 | 8.4 | 6.4 | 82 |
| 2001-02 | 23726 | 19374 | 0.5 | -0.1 | 82 |
| 2002-03 | 24972 | 20681 | 5.3 | 6.7 | 83 |
| 2003-04 | 27452 | 21476 | 9.9 | 3.8 | 78 |
| 2004-05 | 31417 | 24473 | 14.4 | 14.0 | 78 |
| 2005-06 | 36166 | 29295 | 15.1 | 19.7 | 81 |
| 2006-07 | 42319 | 34629 | 17.0 | 18.2 | 82 |

Source: Department of Economics and Statistics, Government of Tamil Nadu.
*Figures for the last two years are estimates made by Department of Economics and Statistics, Government of Tamil Nadu..

The per capita GDDP as ratio of the per capita GSDP was 84 per cent in 1999-2000. That is, the district per capita income is less than that of the state (Rs. 21783) just by 16 percent.

Table 1.5 shows that the growth rate has fluctuated widely. The per capita GDDP of the district has increased in- between 1999-2000 to 2006-07 by 1.6 times and the growth rates have widely varied from the -0.1 to 19.7.

The growth rates of the district are mostly similar to that of the state. Though, the per capita GDDP as a ratio of the state per capita GSDP has been declining steadily from 84 percent to 78 percent during 1999-2000 to 2004-05, the trend has made a turnaround in the last two years.

Table 1.6 District Income, Growth and Structure

| | 1999-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|---|---|---|---|---|---|---|
| District Income (GDDP at 1999-2000 constant prices) Rs.in lakh | | | | | | |
| Primary | 68855 | 56894 | 46689 | 70047 | 82116 | 95760 |
| Secondary | 58334 | 71482 | 83539 | 62869 | 71370 | 78005 |
| Tertiary | 111599 | 120776 | 131514 | 148058 | 163574 | 185350 |
| GDDP | 238788 | 249152 | 251742 | 280974 | 317060 | 359114 |
| Sectoral Share in GDDP (%) | | | | | | |
| Primary | 28.8 | 23 | 19 | 25 | 26 | 27 |
| Secondary | 24.4 | 29 | 29 | 22 | 23 | 22 |
| Tertiary | 46.7 | 48 | 52 | 53 | 52 | 52 |
| Annual Growth Rate of GDDP | | | | | | |
| Primary | 3.4 | -18 | -17.9 | 50 | 17.2 | 16.6 |
| Secondary | 3.2 | 25.8 | 2.9 | -14.6 | 13.6 | 9.3 |
| Tertiary | 4.5 | 5.1 | 8.9 | 12.6 | 10.5 | 13.3 |
| GDDP | 3.8 | 3.4 | 1.0 | 11.6 | 12.9 | 13.3 |

Source: Department of Economics and Statistics, Government of Tamil Nadu.

The structural composition of the GDDP facilitates further understanding of the district income and development profile of Dharmapuri. The second column of Table 1.6 is the annual average GDDP of the district during 1999-00, 2000-01 and 2001-02. Keeping this as the bench mark, the rest of the years are compared.

While about half of the income is derived from tertiary sector, the other half is almost evenly shared by primary and secondary sectors. But, over the recent years, the share of primary sector has been declining. From 28.8 per cent in the base year,

the share of primary sector has declined to 19 percent during 2003-04. However, the primary sectoral share made a recovery in the subsequent years.

Table 1.6 also shows trend in the growth rates of the primary sector. From an average growth rate of 3.4 percent for four years, (1999-2003), the sector has witnessed a fall to -18 percent for two consecutive years (2002-03 and 2003-04). This was mainly due to the fall in the production of agricultural sector which in turn was the outcome of drought during this period. The sector made a recovery during the subsequent years. Steps have also been taken to enhance the availability of rural credit and also incentive investment in agriculture and public investment in irrigation etc. towards the development of agriculture.

The share of secondary sector has declined sharply from 29 percent in 2002-03 to 22-23 percent during the later years. One of the main reasons for the fall is the sharp reduction in the registered manufacturing units during this period was the bifurcation of Krishnagiri from Dharmapuri. The district derived 47-48 percent of its income from the tertiary sector and this has increased further to 52-53 per cent during the recent years.

Thus, being a district with 85 percent of rural population, where most of them depend on primary and its allied activities, the dwindling share of primary sector coupled with stagnant secondary sector share in Dharmapuri district is a cause for increasing public expenditure in this district.

**1.7 Agriculture**

The district receives rainfall from the South West as well as North East monsoon. Dharmapuri district is drained by two major rivers viz., the Cauvery and the *Ponnaiyar*. The Cauvery enters into Tamil Nadu through the south-western boundary of the district, though the district does not get any irrigation facilities directly from the Cauvery river due to its elevation, the tributaries that flow towards this major river, mainly Chinnar and also three reservoirs across the district provide much water for irrigation. The south-western part of the district is covered by hilly terrains and reserved forest. The rest of the area of this district is drained by *Ponnaiyar* river systems with its major tributaries *Pambar, Vaniyar* and *Kallar*. The gross and net irrigated areas are 57261 (30.1 per cent) and 51447 (30.28 per cent) hectares respectively.

The soil in the district is of different types such as black or mixed loam, red ferruginous and gravel. In Pappireddipatti and Harur taluks, red and sandy soils are found; considerable stretches of good loam and black soil are seen in Dharmapuri taluk. Generally, the soil in the district is quite deep, and loose friable with its colour varying from red to dark reddish brown. The soil has low nitrogen and phosphate contents.

A major portion of cultivable land comes under horticulture, paddy, groundnut, sugarcane, cotton, pulses and coconut. Similarly, in the dry land, farmers cultivate coarse cereals/millets and pulses like *ragi, samai*, horse gram, *mochai* and red gram during the rainy season. Dharmapuri is a major mango producing district in the State. Much of it is exported and thus Dharmapuri contributes to the foreign exchange inflow to the government exchequer. Sericulture is another major activity in the district.

**1.8 Industries**

Currently, the district has no major industries except a few agro-based industries. A number of Sago Mills in Dharmapuri and Harur taluks are engaged in the production of starch from Tapioca. In Harur taluk, there is a solvent extraction unit under private sector producing oil from rice bran. There are three spinning mills under private sector in this district. The main horticultural produce of Dharmapuri District are tapioca and mangoes. Having ideal agro-climatic conditions in this district, measures have been taken to increase greatly of these productions. Tapioca is used as a raw material for manufacturing sago and starch.

There are five rural silk reeling training centres, three grainages, rural mini-filiature unit, four cocoon markets, a primary seed grainage, and two demonstration-cum-training centres. The district is connected with Mettur Electricity system and above 1 lakh pump sets have been provided power.

**1.9 Human Development Index: Dharmapuri**

In a maiden effort, The Tamil Nadu Human Development Report (2003) examined the district level human development and found that "Dharmapuri ranks the lowest in literacy rate and Gross Enrolment Ratio (GER)". Out of the 29 districts, Dharmapuri scored the least Human Development Index (HDI) value of 0.584 against the state average of 0.675.

A similar performance is found in Gender Development Index (GDI) also; Dharmapuri scored the least GDI value of 0.582 against the state average of 0.654 in 2001. In 2007, the State Planning Commission (SPC) compiled HDI by using life expectancy at birth (2006), literacy rate (2004/05), gross enrolment ratio (2006) and per capita income (2002/03) as indicators. It was found that Dharmapuri remained at the least ranking among 30 districts with 0.656 against the state average of 0.736 in HDI value, as well as, 0.640 against the state average of 0.722 in GDI value. In terms of the absolute value, Dharmapuri has improved HDI value from 0.584 to 0.656 (GOTN, 2007). But the relative performance of the district is not so encouraging.

It may also be noted that that the neighbouring districts viz. Krishnagiri and Thiruvannamalai have also made equally lower human development attainment with close rankings of 29 and 27 respectively. Though, the general development profiles of these two districts are different from Dharmapuri, they all are located in the same region and they are among the last four districts of the state in HDI ranking. *Hence, this region as a whole needs to be the focus of any special drive of the public intervention to promote human development.*

**1.10 Conclusion**

The narration of the geographical and development profile provides the district-context for public intervention policies for human development. Unfavourable natural endowments, topography and the consequent underdevelopment are the major causes for the backwardness of Dharmapuri district.

With 85 percent rural population, 75 percent of the workforce in the agricultural sector, the failure of the primary sector in the district coupled with a stagnant secondary sector is a cause for concern and a reason for more public expenditure in this district.

Appendix 1.1: Administrative Arrangement in the Dharmapuri District

| Sl.No | Administrative Divisions | Name of the Division |
|---|---|---|
| 1 | Revenue Divisions | 1.Dharmapuri and 2.Harur |
| 2 | Revenue Taluks | 1.Dharmapuri, 2.Harur, 3.Palacode, 4.Pappireddipatti and 5.Pennagaram |
| 3 | Panchayat Unions | 1.Dharmapuri, 2.Nallampalli, 3.Palacode, 4.Pennagaram, 5.Karimangalam, 6.Morappur, 7.Harur and 8.Pappireddipatti |
| 4 | Town Panchayats | 1.Marandahalli, 2.Palacode, 3.Paparapatti, 4.Pappireddipatti, 5.Pennagaram, 6.Mallapuram, 7.Kambinallur, 8.Harur, 9.Kadathur and 10.Karimangalam |

# Chapter 2
# FLOW OF GOVERNMENT FUNDS

## 2.1 Public Expenditure and Human Development

Public expenditure plays a critical role in promoting human development. Though, per capita income has been considered as one of the indicators of human development, studies have shown that it cannot be the sole determinant of human development. This perception is also evident from Dharmapuri district which has been ranked higher in terms of per capita income than that of human development.

But, public expenditure is considered to be an important determinant of human development. Empirical as well as theoretical studies have confirmed that public expenditure on social sector has a definite role in promoting human development. (Streeten, 1979, Isenman, 1980, Sen, 1981, Anand and Kanbur, 1991, Anand and Ravallion, 1993, Chakroborty, 2002, and Qureshi, 2009). Sen and Karmakar (2007) observed : 'In most studies of government expenditure, policy priorities are either assumed to be given, or are part of the recommendations based on subjective assessments and/or perceived shortfalls in specific areas'. The case of Tamil Nadu, however, is different from such perception.

## 2.2 Tamil Nadu's Development Model

Fiscal Policy plays a critical role in Tamil Nadu's development strategy. The state has been using public expenditure as a key policy instrument for reallocation of resources, redistribution of income and provision of all necessary public goods. These public policies have been adopted with an ultimate objective of '*social justice for growth'*.

The Dravidian movement, during the first half of the 20th century, has played a significant role in shaping the social development policy of the state. It was strongly believed that social barriers, in a vertically stratified hierarchical society, with a basic structure that was unjust, are mainly responsible for the economic backwardness and the inequality. Hence, many innovative social sector schemes have been designed and implemented for social development, justice and hence growth. These schemes have aimed at addressing human deprivations of hunger, illiteracy, malnutrtion, discrimination and inequality, by exculsively targeting the

select deprived groups like weaker sections, physically handicapped, children, old people, women, lactating mothers, tribals and so on.

Thus, public expenditure in Tamil Nadu is used to directly facilitate and promote human development which is the 'means as well as the end' of the development strategy of the state due to both histrorical as well as ideological reasons. The net effect of such an approach can be witnessed from the fact that almost half of revenue expenditure of the state is spent on social sector and it has resulted in high attainment of human development in comparison with the northen states (Gulnaz, 2007). Against such broader policy backdrop of the state, the public expenditure in general and social sector expenditure in particular incurred in Dharmapuri District in recent years have been examined.

**2.3 Fund Flows to Dharmapuri**

The flow of government funds to Dharmapuri district during the recent years is taken for analysis. Funds flown through the district treasury, DRDA and other departments under different heads and various schems are taken into account.

**2.4 Human Development Expenditure in Dharmapuri District**

The various components of the government fund flows indicating the human development expenditure priorities of the Dharmapuri District are given in Table 2.1

Table 2.1 Flow of Government Funds: Dharmapuri Distirict
(Rs. in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10** |
|---|---|---|---|---|---|---|
| EDUCATION | | | | | | |
| Through Treasury | 582 | 446 | 765 | 901 | 1283 | 1094 |
| Non Treasury | 2084 | 1834 | 1786 | 2882 | 2878 | 3658 |
| **Total** | **2666** | **2280** | **2551** | **3783** | **4161** | **4752** |
| | | | | | | |
| HEALTH | | | | | | |
| Through Treasury | 4300 | 2868 | 3514 | 6107 | 6405 | 7835 |
| Non Treasury | | | 122 | 177 | 322 | 263 |
| **Total** | **4300** | **2868** | **3636** | **6284** | **6727** | **8098** |
| | | | | | | |
| AGRICULTURE* | **1151** | **565** | **332** | **418** | **2585.32** | **2301.72** |
| | | | | | | |
| RURAL DEVELOPMENT and INFRASTRUCTURE | 1226 | 95 | 150 | 821 | 121 | 299 |
| Non Treasury | 2270 | 2848 | 1908 | 3095 | 4278 | 4856 |
| **Total** | **3496** | **2943** | **2058** | **3916** | **4399** | **5155** |
| | | | | | | |
| **TOTAL(R E)** | **11613** | **8656** | **8577** | **14401** | **17872.32** | **20306.72** |
| | | | | | | |
| Grand Total | 11614 | 8656 | 9030 | 15150 | 18495.32 | 21001.72 |
| (RE + CE ) | | | | | | |

* Includes Treasury and Non-treasury expenditures

RE – Revenue expenditure; CE- Capital Expenditure.
Source: 1. District Treasury, Dharmapuri District, Dharmapuri.
** 2009-10 includes flows upto December 2009.

Table 2.1 shows the government funds spent on various components of social sector through district treasury.

Table 2.1 shows that during 2004-05, Rs. 11613 lakh is spent on various heads under social sectors. This has increased to Rs. 20306.32 lakh during 2009-10. The amount spent on education, health and rural development has increased from

Rs. 10462 lakh to Rs. 18005 lakh during the same period. Among the social sectors, health has received highest share.

The total government funds flown to the distirct during 2004-5 are Rs. 5435 lakhs and it has increased to Rs. 11515 lakh during 2009-10. Most of these schemes, both the state and central, are poverty eradication, social welfare and human development schemes.

As discussed in the previous chapter, public expenditure plays a critical role in promoting human development. Sizable government fund have already flown in to Dharmapuri District to promote human development. But, given the HDI level of Dharmapuri, additional fund flow would facilitate further human development in Dharmapuri.

**2.5 Conclusion**

Fiscal Policy plays a critical role in Tamil Nadu's development strategy. The Dravidian movement, during the first half of the 20th century, has played a significant role in shaping the social development policy of the state. Thus, public expenditure in Tamil Nadu is used to directly facilitate and promote human development which is the 'means as well as the end' of the development strategy of the state due to both histrorical as well as ideological reasons.

The Dharmapuri district administration has accorded the highest priority for human development. Large government funds have already flown in to Dharmapuri District to promote human development. But, given the HDI level of Dharmapuri, additional fund flow would facilitate further human development in Dharmapuri. The priority areas include education and rural infrastructure.

# Chapter 3

# HEALTH

## 3.1 Introduction

Health is an important component of human development. According to World Health Organization (WHO), health means 'a state of complete physical, mental and social well-being and not simply the absence of illnesses. Health has a direct connection with economic development too. It enhances "capabilities" of the poor people leading to increase in "commodities" and further improvement in health status. Further, good infant health and nutrition directly increase the benefits of education.

The health status is usually measured by some vital indicators namely life expectancy at birth, infant mortality rate, fertility rate, crude birth rate and crude death rate. These rates are determined by numerous factors such as per capita income, nutrition, housing, sanitation, safe drinking water, social infrastructure, health and above all, public intervention in providing health care services.

The role of public intervention has an added significance in the context of Dharmapuri district where most of the health indicators are relatively at a lower level among the thirty-one districts. Some of the leading health indicators for the district are briefly examined based on the available data in the following sections.

## 3.2 Sex Ratio

The sex ratio is an important demographic indicator used to measure the extent of gender inequality in a society.

The gender difference in mortality rate is considered to be the reason for low and declining proportion of females to males in the population. These can be attributed to more girl child deaths due to lack of proper nutrition, care and attention given to them. The other reason for the decline in sex ratio could be female infanticide and foeticide.

In Dharmapuri, the District administration has taken concerted efforts like 1. Bimonthly review meeting 2. Stringent action against the families where female infanticides were reported. As a result, the percentage of infant deaths within 24 hours came down from 35 percent to 31 percent between 2007-08 and 2008-09.

Similarly, the percentage of infant deaths 1-7 days came down from 27 percent (2007-08) to 25 percent (2008-09). This gives us an idea of fall in female infanticide (DDA, 2009a). Table 3.1 provides the sex ratio at block level from 2001 to 2009.

**Table 3.1: Sex Ratio**

| S. No | Block | Sex Ratio | | | | | |
|---|---|---|---|---|---|---|---|
| | | **2001** | **2005** | **2006** | **2007** | **2008** | **2009** |
| 1 | Dharmapuri | 941 | 893 | 915 | 864 | 886 | 911 |
| 2 | Nallampalli | 916 | 938 | 935 | 946 | 903 | 949 |
| 3 | Harur | 946 | 890 | 922 | 936 | 907 | 914 |
| 4 | Morappur | 936 | 929 | 1005 | 1003 | 963 | 959 |
| 5 | Pappireddipatti | 954 | 955 | 883 | 933 | 936 | 932 |
| 6 | Pennagaram | 906 | 899 | 894 | 916 | 937 | 904 |
| 7 | Palacode | 932 | 880 | 922 | 908 | 905 | 949 |
| 8 | Karimangalam | 933 | 928 | 920 | 897 | 905 | 911 |
| | **District** | **932** | **914** | **925** | **925** | **918** | **929** |

Source: Deputy Director of Health Services, Dharmapuri and Census 2001

### 3.3 Life Expectancy

There is no adequate data on life expectancy at birth. The Human Development Report of Tamil Nadu (2003) has made estimates about the life expectancy at birth. For the state of Tamil Nadu, the life expectancy at birth is 67; it is 65 years for males and 69 years for females. The corresponding estimate for Dharmapuri district as a whole is 62 for males as well as for females. The distance between the state average life expectancy and that of the district is five years. The morbidity and relatively lower life expectancy in Dharmapuri district may have linkage with worm infestation and flourosis, poverty, poor sanitation and hygiene. The major factors for lower life expectancy are as follows:

- Lower literacy level
- Lack of awareness
- Poor sanitation and hygiene
- Alcoholism
- Need for better access and infrastructure and healthcare services especially in enroute and far flung areas

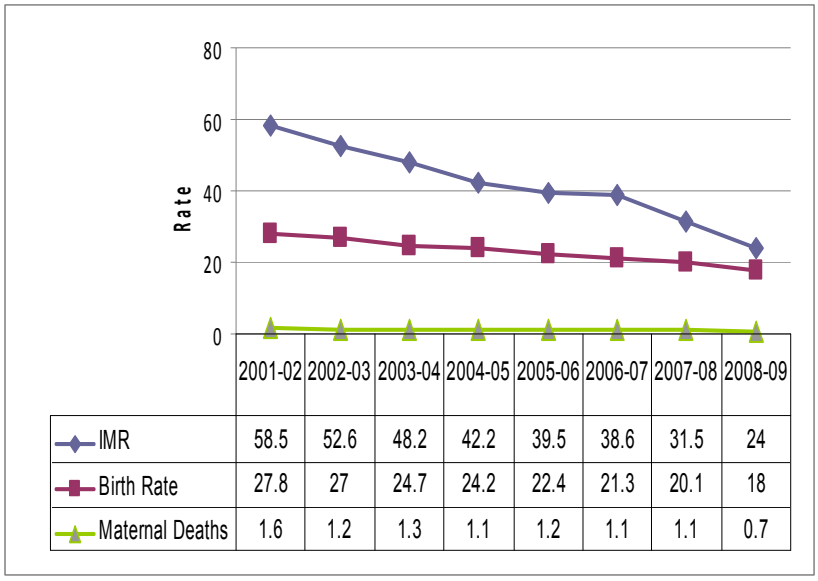
- Low in income level
- Lower proportions of healthcare spending
- Migration and therefore increased exposure to diseases

It may be noted that there is no gender gap in the life expectancy rate in Dharmapuri district. The gender gap for the district is almost negligible at 0.39 against the state average of 3.94.

### 3.4 Infant Mortality Rate (IMR)

The district has attained considerable progress in terms of the other health indicators. The performance of the district through IMR, birth rate and MMR is shown in Figure 3.1.

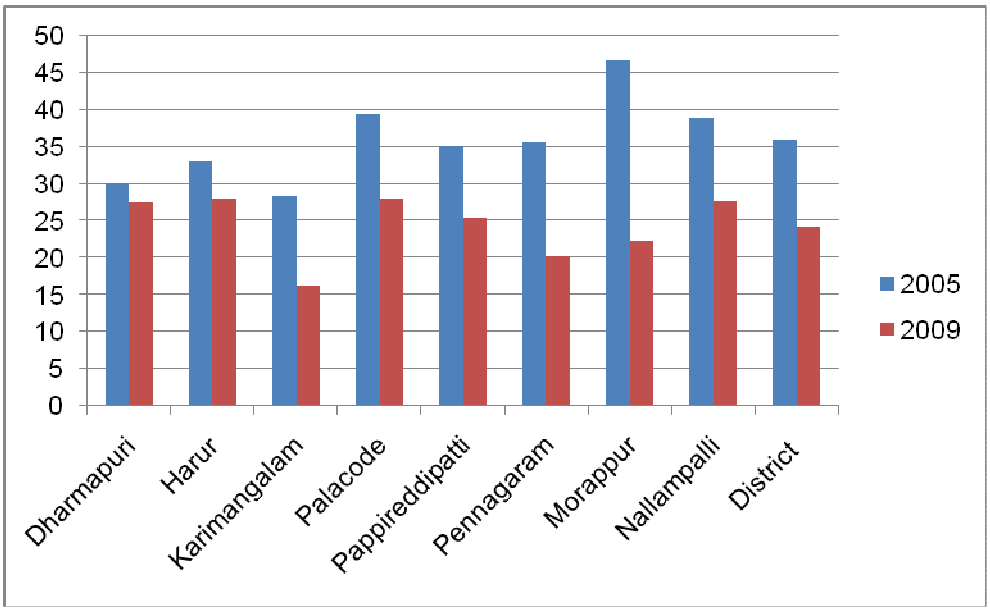
**Figure 3.1: Trend of IMR, Birth Rate and Maternal Death Rate**




| | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|---|---|---|---|---|---|---|---|---|
| IMR | 58.5 | 52.6 | 48.2 | 42.2 | 39.5 | 38.6 | 31.5 | 24 |
| Birth Rate | 27.8 | 27 | 24.7 | 24.2 | 22.4 | 21.3 | 20.1 | 18 |
| Maternal Deaths | 1.6 | 1.2 | 1.3 | 1.1 | 1.2 | 1.1 | 1.1 | 0.7 |

Source: Deputy Director of Health Services, 2009.

**Figure 3.2 IMR in Dharmapuri District by Blocks**




| Year | Dharmapuri | Harur | Karimangalam | Palacode | Pappireddipatti | Pennagaram | Morappur | Nallampalli | District |
|---|---|---|---|---|---|---|---|---|---|
| 2005 | 30.1 | 33.1 | 28.4 | 39.4 | 35.2 | 35.6 | 46.7 | 39 | 36 |
| 2009 | 27.5 | 28 | 16.2 | 28 | 25.4 | 20.3 | 22.4 | 27.6 | 24.3 |

Source: Deputy Director of Health Services, 2009.

The rate of IMR for the district has declined sharply and steadily from its peak level 58.5 in 2001-02 to 24 in 2008/09. Figure 3.2 provides the blockwise IMR from 2005 to 2009. In 2005, Morappur block recorded the highest IMR of 46.7 followed by Palacode (39.4) and Nallampalli (39). But the Morappur block has also witnessed a greater reduction of IMR during 2005-2009. The lowest IMR of 16.2 was recorded for Karimangalam in 2009.

Similarly, the birth rate has declined from 28 to 18 during the same period. The maternal death rate has also declined from 1.6 (2001/02) to 0.7 (2008/09). This improvement may be mainly due to the growth of PHCs in this district. PHC theatres provide critical support to the family welfare surgery of the poor people at the village who have no other access for their treatment.

### 3.5 CBR, CDR, and TFR

Table 3.2 provides the blockwise crude birth rate (CBR) and crude death rate (CDR). For the district, BR has recorded a marginal fall from 20.2 to 19.2 between 2005 and 2009.

Table 3.2: Crude Birth Rate and Crude Death Rate

| | CBR | | CDR | |
|---|---|---|---|---|
| Blocks | 2005 | 2009 | 2005 | 2009 |
| Dharmapuri | 19.5 | 17.8 | 4.1 | NA |
| Harur | 21.5 | 20.3 | 5.9 | NA |
| Karimangalam | 22.0 | 20.6 | 4.6 | NA |
| Palacode | 21.1 | 20.0 | 4.5 | NA |
| Pappireddipatti | 17.4 | 16.5 | 6.1 | NA |
| Pennagaram | 21.1 | 18.3 | 5.7 | NA |
| Morappur | 18.3 | 18.0 | 4.2 | NA |
| Nallampalli | 19.7 | 18.4 | 5.1 | NA |
| District | 20.2 | 19.2 | 5.1 | NA |

Source: Deputy Director of Health Services Dharmapuri.

Pennagaram has attained a greater reducation in BR from 21.1 (2005) to 18.3 (2009). Pappireddipatti has recorded the lowest BR of 16.5.

In 1997, Dharmapuri recorded a Total Fertility Rate (TFR) above 2.4 againt the state average of 2. As per the 2001 census, TFR was estimated at 2.6 (Gulmeto and Rajan, 2002) and that is relatively higher than the Eleventh Plan target of 1.8 for the state.

### 3.6 Institutional Deliveries

The main objective of the PHC is to provide the health services at the grassroots level. The people are accessing the services within the district at the village level. Figure 3.2 shows compostion and trend in the number of deliveries made during 2002-09 in Dharmapuri district. The number of deliveries made through institutions and PHC have increased. The PHC deliveries have increased to a greater extent from 12 to 45 during the period.

The following initiatives taken by the dsitrict adminstration have been effective in improving the PHC deliveries.

1. a). Regular inspection of PHCs, b). bimonthly review meeting of PHCs and c). infrastructure development in PHCs.
2. Further, special diet is given to AN mothers and food is offered for one attendant for ten days to encourage them for early hospitalisation and institutional deliveries.

**Box 3.1: Dr.Muthulakshmi Reddy Maternity Benefit Scheme**

The MRMBS was launched in 2006 mainly to compensate wage loss and to provide adequate nutritious food to pregnant mothers. The pregnant mothers living below poverty line are given Rs.3000 during antenatal period and Rs.3000 for post-natal period.

Final Progress and Achievements for the Years 2006/07-2008/09

| Year | Allotment in Rs | Benificiaries No | Fund Utilization % |
|---|---|---|---|
| 2006-2007 | 2,84,70,000 | 6,430 | 100 |
| 2007-2008 | 7,21,45,000 | 12,225 | 100 |
| 2008-2009 | 11,22,53,000 | 18,708 | 100 |

Source: Source: DDHS, 2009.

The District Collector of Dharmapuri has instructed that the cheque must be issued immediately after delivery in the Primary Health Centres and Government Hospitals for delivery of first child.

As a result of the efforts of the district administration,

1. Institutional deliveries reached 99.1 per cent.
2. Primary Health Centre deliveries increased from 24 per cent to 45 per cent.
3. Tubectomy performance (in Primary Health Centres) increased from 40 per cent to 60 per cent.
4. The MRMB Scheme is one of the principal reasons for the reduction in IMR and MMR in Dharmapuri District.

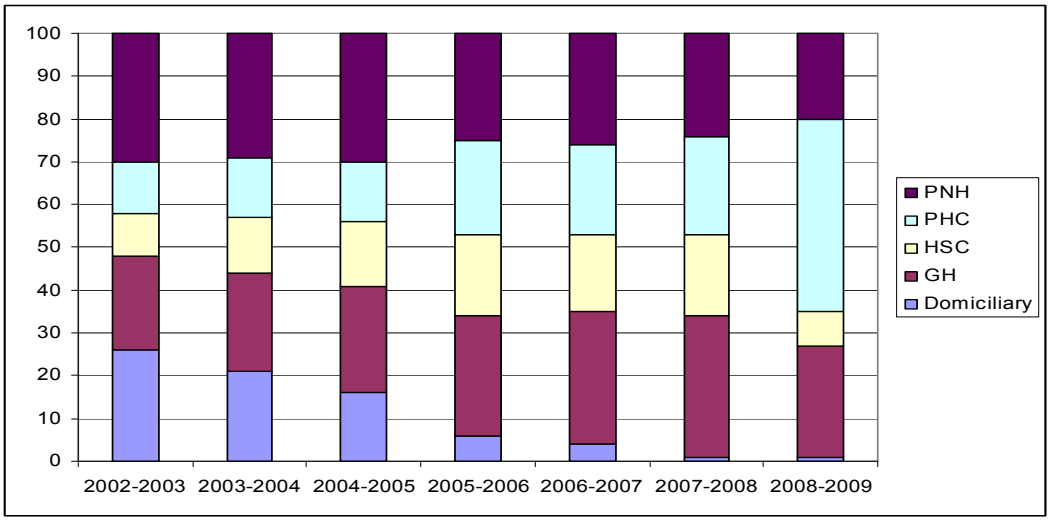
This is one of the main reasons for decreasing trend of infant mortality and maternal death rate in this district. These figures reveal that the district administration has been paying more attention to health services.

**Box No 3.2: "Motherly Care…"**

I am very happy. Valaikappu fuction is supposed to be done in my mother's house. My Primary Health Centre doctor and nurses arranged this function and invited me to participate. District Collector offered bangles, turmeric powder, *kum kum* and blouse piece. I am excited. I cannot forget this occasion and I will come to Primary Health Centre for delivering my child.

-Tmt. Ranganayagi from Kottapptty. (cited in DDA, 2009).

**Figure 3.3: Trend of Institutional Deliveries**




Source: Deputy Director of Health Services Dharmapuri.

Table 3.3 provides the blockwise figures for institutional and non-institutional deliveries. All the blocks have increased their institutional deliveries from 2005 to 2009. Similarly the non-institutional deliveries have declined to that extent. The district of Dharmapuri has made a rapid progress in increasing the number of institutional deliveries. Harur, Karimangalam, Palacode blocks have achieved higher level of institutional deliveries when compared with other blocks.

The trend of institutional deliveries given in Figure 3.3 shows marked improvement over the recent years. Correspondingly, the trend of IMR and MMR shown in Figure 3.1 shows a declining trend to a significant extent during the same period.

**Table 3.3 Institutional and Non- Institutional Deliveries by Blocks**

| Sl. No | Blocks | Institutional Deliveries % | | Non-Institutional Deliveries % | |
|---|---|---|---|---|---|
| | | 2005 | 2009 | 2005 | 2009 |
| 1 | Dharmapuri | 94.1 | 99.0 | 5.9 | 1.0 |
| 2 | Nallampalli | 92.3 | 98.3 | 7.7 | 1.7 |
| 3 | Harur | 89.7 | 99.5 | 10.3 | 0.5 |
| 4 | Morappur | 96.7 | 98.8 | 3.3 | 1.2 |
| 5 | Pappireddipatti | 92.4 | 98.6 | 7.6 | 1.4 |
| 6 | Pennagaram | 93.0 | 99 | 7.0 | 1.0 |
| 7 | Palacode | 97.9 | 99.5 | 2.1 | 0.5 |
| 8 | Karimangalam | 96.7 | 99.5 | 3.3 | 0.5 |
| | **District** | **94.6** | **99.1** | **6.0** | **0.9** |

Source: Deputy Director of Health Services Dharmapuri.

### 3.7 Maternal Mortality Rate (MMR)

Table 3.4 provides the blockwise maternal mortality rate in Dharmapuri district during 2005 and 2009. In 2005, Dharmapuri and Morappur blocks had recorded the MMR of 1.9 and 1.6 respectively. The MMR has increased in Pappireddipatti and Harur blocks between 2005 and 2009. Zero MMR was registered in the blocks of Pappireddipatti in 2005 and Karimangalam in 2009 while Harur block registered the highest MMR in 2009.

When the district average MMR is nearer to one, the occurrence of zero MMR at block level means that the occurrences are very negligible. MMR is computed per lakh births; whereas the number of births in a block may be in tens. Hence, the validity of the data regarding MMR has to be seen either over a longer period of time or across a larger geographical area.

**Table 3.4: Maternal Mortality Rate by Block**

| Blocks | 2005 | 2009 |
|---|---|---|
| Dharmapuri | 1.9 | 1.1 |
| Harur | 1.0 | 1.6 |
| Karimangalam | 1.2 | 0.0 |
| Palacode | 0.8 | 0.8 |
| Pappireddipatti | 0.0 | 1.3 |
| Pennagaram | 0.9 | 0.4 |
| Morappur | 1.6 | 1.3 |
| Nallampalli | 1.1 | 0.9 |
| District | 1.1 | 0.9 |

Source: Deputy Director of Health Services Dharmapuri.

Figure 3.1 shows the trend of IMR, BR, and MMR and Table 3.4 shows the status of Maternal Mortality Rate (MMR) by blocks in Dharmapuri district. The MMR rate of this district is comparatively lower than that of the average for Tamil Nadu. The frequency of maternal mortality rate is attributed to factors like burden of work and poor nutrition, absence of transport and communication facilities, delay in accessing proper health facilities, the lack and/or poor quality of essential and emergency obstetric services. Among the medical causes, blood loss accounted for nearly 40% of all maternal deaths in Tamil Nadu in 1996 (Vital Events Survey 1996).

A simple correlation analysis between institutional deliveries (ID) and IMR as well as (ID) and MMR for the years 2002-03 to 2008-09 is presented in Box 3.3.

**Box 3.3 Institutional Deliveries (ID), IMR and MMR**

| | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|---|---|---|---|---|---|---|---|
| ID | 77 | 79 | 84 | 95 | 96 | 99 | 99 |
| IMR | 52.6 | 49.2 | 42.2 | 39.5 | 38.6 | 31.5 | 24 |
| MMR | 1.2 | 1.3 | 1.1 | 1.2 | 1.1 | 1.1 | 0.7 |
| Correlation Co-efficient (r) | | | | | | | |
| Between ID and IMR = -0.905 | | | | | | | |
| Between ID and MMR = -0.601 | | | | | | | |

The correlation co-efficient between (ID) and IMR is -0.905 indicating a perfect inverse relationship between ID and IMR. That is when institutional deliveries increase, IMR would decline significantly. Similarly, the correlation co-efficient value of -0.601 also indicates inverse relation between ID and MMR.

### 3.8 Patients treated in Dharmapuri Government Hospital

The number of people treated for various diseases in Dharmapuri Government Hospital is on the decline. Table 3.5 shows number of patients treated for different diseases in Dharmapuri Government Hospital during 2007-09. The numbers of out-patients have declined from 802745 in 2007-08 to 663370 in 2008-09. Similarly the number of in-patients has also decreased from 137658 in 2007-08 to 21223 in 2008-09.

The declining number of out-patients and in-patients in the GH indicates an increase of government PHCs and Private Medical Centres in the blocks of the district. Yet another reason is that the number of out-patients and in-patients in the GH, Dharmapuri were included in the overall patients treated in the GH during 2008-09. During 2008-09, the GH, Dharmapuri was converted as Government Medical College Hospital. Hence, out-patients and in-patients treated during 2008-09 were not included in GH.

**Table 3.5: Diseasewise Patients Treated in GH (2007/08-2008/09)**

| Sl.No. | Disease | No. of patients Treated | |
|---|---|---|---|
| | | 2007/08 | 2008/09 |
| 1 | No. of out-Patients | 802745 | 663370 |
| 2 | No. of in-Patients | 137658 | 21223 |
| 3 | No. of Deliveries | 4411 | 1585 |
| 4 | Accident cases | 3211 | 8239 |
| 5 | Leprosy cases | 621 | 378 |
| 6 | Aids Cases seen | 136 | 202 |
| 7 | STD Cases seen | 1231 | 591 |
| 8 | Dental cases treated | 1485 | 12058 |
| 9 | Snake bite cases | 988 | 1023 |
| 10 | Dog bite cases | 1235 | 1586 |
| | Total | 953721 | 710255 |

Source: District Medical Office.

The improvement of heath care for STD and Leprosy cases has also helped in decreasing the incidence of those diseases from 2007-08 to 2008-09.

The increase in the number of dental cases by more than eight times during the reference period must be mainly due to the fluoride content of the water in the district. The government intervention in a big way has already been initiated to address this issue. Next to accident cases, the number of AIDS cases have increased from 136 to 202. The linkage between the increase of AIDS cases and migration from Dharmapuri needs to be examined thoroughly.

### 3.9 Population per Bed and Per Doctor Ratios

Population per bed ratio and population per doctor ratio are other indicators of public health infrastructural facilities. Table 3.6 shows the details of population per bed and population per doctor ratios in Dharmapuri district and Tamil Nadu during 2004-07. Total beds and doctors in public hospitals were 549 and 54 respectively in 2004-05 and these figures have increased to 555 and 66 in 2006-07. These figures indicate sizable progress in health care administration. Similar figures for the private hospitals show that more people depend on lesser number of doctors and beds than that of the public hospitals.

**Table 3.6: Population per Bed and Doctors Ratio**

| District / State | 2004/05 | | | | 2006-07 | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Number of | | Popula-tiion per Bed | Popula-tion per Doctor | Total number of | | Popula-tiion per Bed | Popula-tion per Doctor |
| | Beds | Doctors | | | Beds | Doctors | | |
| Dharmapuri (Public hospitals) | 549 | 54 | 2385 | 24252 | 555 | 66 | 2360 | 19842 |
| Dharmapuri (Private hospitals) | - | - | - | - | 495 | 57 | 2645 | 22971 |
| Dharmapuri (Public+Private) | | | | | 1050 | 123 | 1238 | 2783 |
| Tamil Nadu | 21049 | 2345 | 2965 | 26612 | 20862 | 2665 | 2783 | 21787 |

Source: Statistical Hand Book of Tamil Nadu, 2008 and District Administration, Dharmapuri.

### 3.10 Integrated Child Development Scheme in Dharmapuri District

One of the principal objectives of the ICDS is to provide adequate and nutritious food for the children of 6-36 months and pregnant women. Table 3.7 illustrates performance of the Integrated Child Development Scheme (ICDS) in this district in 2005 and 2008. The number of Anganwadi centres has increased from 959 in 2005 to 1305 in 2008. The data indicates that the number of centres has increased by 1.4 times in four years.

**Table3.7: Integrated Child Development Scheme in Dharmapuri and TN**

| District/State | As on March 2005 | | As on March 2010 | |
|---|---|---|---|---|
| | No. of Anganwadi Centers | No. of Children Covered (6-36months) | No. of Anganwadi Centers | No. of Children Covered (6-36months) |
| Dharmapuri | 959 | 13571 | 1305 | 23136 |
| Tamil Nadu | 42677 | 671548 | 50433 | 980277 |

Source: Statistical Hand Book of Tamil Nadu, 2005 and 2008

The number of children under the ICDS has increased from 13571 in 2005 to 23136 in 2008 in the district. At the state level, the number of children increased from 671548 in 2005 to 980277 in 2008.

### 3.11 Family Welfare Program

Family Welfare program was launched in India in 1951 and it is implemented in all the districts of Tamil Nadu. Table 3.8 shows the details of Family Welfare Program in the Dharmapuri district and Tamil Nadu in 2004-05 and 2007-08. The use of Sterilization, IUD and Oral pills in Dharmapuri district has recorded considerable increase from 2004-05 to 2007-08, whereas the state average for all the three programmes has recorded a declining trend between 2004-05 and 2007-08.

**Table 3.8: Family Welfare Program in Dharmapuri District**

| District/State | 2004-05 | | | 2007-08 | | |
|---|---|---|---|---|---|---|
| | Sterilization | IUD | Oral pills Users | Sterilization | IUD | Oral pills Users |
| Dharmapuri | 10977 | 7869 | 4119 | 11017 | 9617 | 4270 |
| Tamil Nadu | 416245 | 398704 | 152565 | 352856 | 353149 | 129515 |

Source: Statistical Hand Book of Tamil Nadu, 2005 and 2008

### 3.12 Low Birth Weight Babies and Child Nutrition

The World health Organisation has defined the term"Low birth weight" as birth weight less than 2500 gms. Infants with a birth weight of 2500 gms constitute about 33% of all live births in India. More than half of these newborns are born after full term of gestation. The average birth weight of Indian baby, born at full term is about 2800 gms, while in affluent countries, it is 3000 gms.

Low birth weight is one of the serious challenges in maternal and child health in both developed and developing countries. It is the single most important factor that determines the chances of child survival. Nearly 50% of the neonatal deaths occur among low birth weight infants. The survivors among them are at a high risk of developing malnutrition, recurrent infections and neuro-developmental handicaps.

Dharmapuri district has a relatively higher level of low birth weight babies than that of the state. Table 3.9 provides the comparative level of low birth weight babies in the district and in the state. The proportion of the low birth weight babies in the district is 16.5 as against state level of 10 percent in the year 2008-09.

**Table 3.9 Birth Weight of Babies 2008-09**

| S No | **District/State** | Live Births | B.WGD | % | BirthWt. <2.5 Kg | % | Average Birth Weight |
|---|---|---|---|---|---|---|---|
| 1 | Dharmapuri | 27351 | 27261 | 99.7 | 4488 | 16.5 | 2.81 |
| 2 | State | 1098425 | 1094845 | 99.7 | 105478 | 9.6 | 2.86 |

**Source:** Annual Public Health Administration Report, Government of Tamil Nadu.

**Box 3.4 Low Birth weight among newborns**

Low birth weight among newborns in Dharmapuri is due to many factors. Poverty combined with illiteracy has led to poor consumption of iron rich food, worm infestation & fluorosis among adolescent girls and women. The major source of drinking water is ground water, which has large quantities of fluoride, harmful to health. About 80% of antenatal mothers are anaemic, along with multi parity, short spacing and early marriage contribute to LBW children. High prevalence of LBW contributes to IMR.

LBW rate & IMR in Dharmapuri District:

| Year | LBW Rate | IMR |
|---|---|---|
| 2006-07 | 15.7% | 29.9 |
| 2007-08 | 15.9% | 27.5 |
| 2008-09 | 16.4% | 24.3 |
| 2009-10 | 14.8% | 20.6 |

**Interventions for reduction of LBW**

**A. Reduction of anemia among AN and PN mothers:**

1. Provision of nutritive and iron rich diet to all anaemic mothers, from second trimester till 6 months after delivery through ICDS centres (atleast lunch on all days).

Menu for lunch – Rice, Dhal, egg, green leafy vegetables, pulses, ghee etc.

2. The existing system of deworming and Iron supply concentrate to all antenatal mothers to be continued.

**B. Prevention of malnutrition among children**

1. Continuing the existing system of deworming, administration of Vit-A solution & iron supplementation to all children.

2. For all ICDS children the following food items may be provided.

Morning - milk 200ml
Noon - Dhal Kanjee, egg, ghee.
Evening- Pulses, (Bengal gram, horse gram, Sesame seeds with Jaggery, Groundnut with Jaggery which are rich in protein and iron.)

Source: District Administration, Dharmapuri

Table 3.10 provides the nutritional status of children in the age group of 0-36 months during 2008 in the district. The performance of the district on the nutritional front as indicated by Box 3.4 is just beow the state average.

**Table 3.10 Nutrional Status of Children in the Age group of 0-36 Months (2008)**

| S.No | District/State | Nutritional Status | | | | |
|---|---|---|---|---|---|---|
| | | **Weighted** | **Normal** | **Grade I** | **Grade II** | **Grade III & IV** |
| 1 | Dharmapuri | 63200 | 34569 | 26598 | 2008 | 25 |
| | In % | 100 | 54.7 | 42.1 | 3.2 | - |
| 2 | State | 2400277 | 1473108 | 874819 | 51465 | 885 |
| | In % | 100 | 61.4 | 36.4 | 2.1 | - |

Source**:** Department of Economics and Statistics, Government of Tamilnadu.

### 3.13 National Rural Health Mission (NRHM)

The National Rural Health Mission, a centrally sponsored scheme was launched in Tamil Nadu with an objective of providing effective rural healthcare to weaker sections by improving access to health services and strenthenging quality of public healthcare services. The specfic goals of NRHM are:

- Reduction in child and maternal mortality rates
- Universal access to public health services such as women health, child health, water sanitation and hygiene, immunization and nutrition.
- Prevention and control of communicable and non-communicable diseases
- Access to integrated comprehensive primary healthcare.
- Population stabilization, gender and demographic balance.
- Revitalize local health tradition and mainstream AYUSH
- Promotion of healthy lifestyle among the people.

The NRHM has allocated more funds for Dharmapuri district in 2009/10 for the purpose of patient welfare societies, annual maintenance grants for PHCs, and HSCs, untied fund to PHCs and sub-district hospitals, prevention and treatment of heart diseases, upgradation of the PHCs, strengthening of the dental services, infrastructure facilities to the PHCs and strengthening of Ayurvedic, Unani, Siddha and Homoeopathy (AYUSH).

Table 3.11 provides the distribution of NRHM funds for various schemes/activities. Out of Rs. 447 lakhs allotted for the year 2009-10, a major amount of Rs.74 lakhs was allocated to the infrastructure, upgradation and additional service demands in PHCS. It is followed by Rs.56 lakhs allotted for patient welfare societies and 29.4 lakh for village health and sanitation.

**Table 3.11: NRHM Budget** for **Dharmapuri (2009-10)**

| Sl.No | Budget Head | Rs in Lakhs) |
|---|---|---|
| 1 | Patient Welfare Societies (PWS) | 56 |
| 2 | Annual Maintenance Grants for PHCS/CHCS (AMG-PHC) | 22 |
| 3 | Annual Maintenance Gants to HSCS (AMG-PHC) | 18.6 |
| 4 | United Funds to PHCS/CHCS/District and Sub-District Hospitals | 15 |
| 5 | United Funds to HSCS | 21.8 |
| 6 | Village Health and Sanitation Committees | 29.4 |
| 7 | Health Mela | 8 |
| 8 | Prevention and Treatment of Rheumatic Heart Disease and Congenital Heart Disease | 11.25 |
| 9 | Bio-Medical Waste Management in Secondary Level Hospitals and Upgraded PHCS | 27.09 |
| 10 | Strengthening Dental Services in FRUs | 13.27 |
| 11 | Communication Facilities | 1.21 |
| 12 | Quality Certification of PHCs | 80 |
| 13 | Equipments to Upgraded PHCs | 30 |
| 14 | Infrastructure Upgradation in PHCS to cope up with Additional Services Demands | 74.4 |
| 15 | Strengthening of AYUSH | 14.02 |
| 16 | Mechanized Laundry to all Health Units in Districts | 25 |
| | **Grand Total** | **447.05** |

Source: District Administration, Dharmapuri.

## 3.14 Fluoride

Fluoride is one of the important factors affecting the people. It exists in water sources and is derived from fluorine. Fluoride is thirtieth common element in earth's crust in the case of natural waters. The variation in the fluoride content from region to region is dependent upon factors such as the source of water, type of geological formation and the amount of rainfall.

Kumar et al. (2007) have examined the status of fluorosis in the North Western districts of Tamil Nadu using data generated by Tamil Nadu Water Supply

and Drainage Board (TWADB) during 1999-2000. The study collected the source of data from 5 contiguous North-Western districts namely Dharmapuri, Erode, Krishnagiri, Salem and Vellore. A total of 8700 individuals including 1745 children of 5-14 years of age group from 2800 households were examined from 13 villages of selected districts.

The study has found that majority of the people from selected 13 villages draw drinking water through community bore wells and these bore wells were 200-300 feet in depth and occasionally touching 700 feet. In 13 villages, 126 water samples were collected from different drinking water sources, the mean value of fluoride in drinking water ranged from 0.6 to 4.6 parts per million/mg per litre.

**BOX 3.5: Hogenakkal Water Supply Fluorosis Mitigation Project**

The project has been formulated to provide projected safe drinking water to the people of Dharmapuri and Krishnagiri districts. The State Government has approved the project at a cost of Rs. 1334 crores with loan assistance of Japan International Corporation Agency (JICA). Hon'ble Chief Minister of Tamil Nadu laid the foundation stone for the project at Dharmapuri on 26.02.2008. Total cost of the project has subsequently been revised at Rs. 1928 crores *in lieu* of additional infrastructures and cost escalation.

Under this project, 160 million liters of treated water will be provided every day by treating surface water of river Cauvery drawn at Hogenakkal to the people in the 3 Municipalities, 17 Town Panchayats and 6755 rural habitations in 18 Panchayat unions in Dharmapuri and Krishnagiri districts @ 90 lpcd, 70 lpcd and 40 lpcd respectively.

The project is targeted for completion and putting into beneficial use of the public in the year 2012. A total of 31.43 lakh people in both the districts will get benefited by this project. Total beneficiaries in the intermediate stage year (2021) and ultimate stage year (2036) would respectively be 34.75 lakhs and 40.41 lakhs.

Further water supply improvement scheme to Pennagaram Town Panchayat for Rs.499.00 lakhs has been completed and put into beneficial use on 18.07.2010.

Source: District Administration, Dharmapuri.

The dental mottling, among the total population of all age group, ranged from 13.4 % to 40.8 % in the above five districts. The value of the same is also high i.e., 27-41 % in the Dharmapuri district and 16-17 % is recorded in Vellore district. However, the prevalence of dental mottling in the groups of 5-14 years is more than 40 % in the districts of Dharmapuri, Krishnagiri and Salem. At the district level, Community Index for Dental Fluorosis (CIDF) is more than 42 % in the

Vellore district, 55-81 % in the districts of Dharmapuri, Krishnagiri and Salem while that of Erode is 30 %.

### 3.15 Staff and Vacancy Position

Vacancy position is one of the concerns in public helathcare system in the district. The sanctioned strength of staff under various categories amounts to 894 of which ony 732 i.e. 82 percent of the sanctioned strength is filled up and the remaining 18 percent is left vacant. Within this, 894 vacancies of field workers lab assistants, IH (PHC level) and staff nurses have higher level of vacancy position.

**Table 3.12: Staff and Vacancy Position: 2010**

| Designation | **Sanctioned** | **In Position** | **Vacant** |
|---|---|---|---|
| Junior Assistant | 13 | 9 | 4 |
| Medical Inspector | 3 | 0 | 3 |
| Medical Officer | 94 | 88 | 6 |
| Staff Nurses | 99 | 86 | 13 |
| HI (PHC Level) | 33 | 0 | 33 |
| SHN | 42 | 35 | 7 |
| HI (PHC Level) Grl, Grll & Gr IB | 72 | 53 | 19 |
| ANM | 42 | 39 | 3 |
| VHN | 218 | 210 | 8 |
| Lab-Assistant | 34 | 20 | 14 |
| Field Worker | 27 | 6 | 21 |
| Other | 217 | 195 | 22 |
| **Total** | **894** | **732** | **153** |
| Percentage | (100) | (82) | (18) |

Source: District Administration, Dharmapuri.

In the case of HI (PHC level), the entire sanctioned strength of 33 lies vacant. Efforts may be taken to fill up vacancy positions.

**Box 3.6 Child Marriages in Dharmapuri District**

According to child rights convention up to 18 years every male or female is considered as a child. The marriageable age fixed for girls by law is 18 years and boys 21 years. In many states in North India child marriage happens between a girl and boy who are both children and who are between 12 – 15 years of age. In Dharmapuri, child marriage is solemnized for girls below 18 years of age with men who are above 30 years. The marriage occurs without any formal registration and under civil religious or customary traditions and norms.

**Main Reasons for Child Marriage**: Poverty, illiteracy, gender inequality, insecurity, protecting family honour, girl child burden to family after puberty, control over sexuality and lower dowry when the age is less.

**Impact of Early marriage:**

- Child brides and child mother unable to handle family burden and family problems as they are not mentally and physically matured.
- Due to early motherhood, the children born are LBW babies or sometimes differently abled.
- Affecting education of girls. Girls drop out and do not continue secondary education.
- It is not officially registered and girls abandoned by the husbands do not get any maintenance or alimony.
- Do not get benefit from Government schemes for marriage assistance or protection of girl child scheme, as the age limit prescribed is 18 years.

Action by District Administration

- Awareness created at District level, Block level, and village level for all government department officials, local body representatives, SHGs and students
- School Headmasters are instructed to report if girl students do not attend school for 3- 5 days or dropout suddenly.
- Priority to Education is given by counselling parents and students in schools to reduce dropout ratio.
- Awareness created to prevent Early Marriage through SHG. NGO, Media like TV, by Conducting talk show and Press release etc.
- Marriage hall and Mandapam owners, HR & CE officers, Temple priests, village level presidents, VAO 's were trained and made responsible to and prevent child marriages in temples and kalayana mandapams.
- Joint effort to prevent child marriage through coordination between Revenue, Police, SHG, school dept and Social welfare.

### 3.16 Conclusion

The life expectancy at birth in Dharmapuri is relatively lower than that of the state. But the district has attained significant progress in terms of the other health indicators. IMR has recorded a sharp decline from 58.5 (2001-02) to 24 (2008-09) and MMR declined from 1.6 in 2001-02 to 0.7 in 2008-09. The increase in the

number of PHCs must be the main reason for this attainment. This is also reflected in the number of PHC deliveries which has increased in recent years coupled with sharp reduction in domiciliary deliveries.

The implementation of NRHM and many special initiatives by the district administration have contributed to a great extent for the above achievements.

The number of Anganvadi centers has increased from 959 (2005) to 1321 (2010).

# Chapter 4
# LITERACY AND EDUCATION

## 4.1 Introduction

Education plays a critical role in the socioeconomic development of any society. Being 'educated' or 'literate' is one of the important 'functionings' that expands the choices of the people in many ways. As education also has both instrumental as well as intrinsic value, it has become a major constituent of the Human Development Index.

Both at the national as well as at the state level, many interventions have been made to achieve universal literacy. Though, considerable progress has been made in that direction, a lot remains to be done. Tamil Nadu is one of the top ranking states in literacy attainment as well as in higher education. But in Dharmapuri district, a lot more has to be achieved to reach the state level performance.

## 4.2 Literacy Rate

As per 2001 census, 73 percent of the state's 6.24 crore people are literate. Among them, the literacy rate for males is even higher at 82 percent. But the relatively lower rate of 64 percent for females also indicates the gender gap. Another area of concern is the relatively lower literacy rate of 64 percent for SC and STs. Even within them, the literacy rate for females is lower at 53 percent against the male literacy rate of 74 percent. As a whole, the performance of the state is commendable. But within the state of Tamil Nadu, female literacy rate among the SC women is the lowest at 53 percent. But a greater concern is that the district of Dharmapuri as a whole has recorded even slightly lower level of literacy in 2001.

As per Census 2001, Dharmapuri district attained the lowest level of literacy rate of 52 percent against the state average of 73 percent. Literacy rate of males is 61 percent against state average of 82 percent. Female literacy rate is 43 percent against the state average of 64 which also indicates a higher gender gap of 30 percent between male and female literacy rate.

Taluk-wise literacy attainment shows that Pennagaram and Palacode have even lesser rate of literacy at 47-48. Pappireddipatti and Dharmapuri have the higher

level of literacy than the district average. The gender gap is also relatively high at Pappireddipatti. Pennagaram and Palacode taluk have also recorded the lowest female literacy rate of 38 percent and 39 percent respectively (Table 4.1).

The literacy rate in the SC/ST community is also at 48 percent (Table 4.1). In spite of many achievements made in the literacy front and school education, the overall literacy rate in the district continued lagging behind the rest of the state. It is not only the case of Dharmapuri but the neighbouring districts namely Salem, Erode, Kirishnagiri and Thiruvannamalai also have lower levels of literacy. This indicates that the entire region needs to be the focus of concerted public intervention particularly in improving adult literacy rate through special education/literacy programmes.

**Table 4.1: Taluk-wise Rate of Literacy by Gender in Dharmapuri**

| Taluk | Gender | SC | ST | SC/ST | Non-SC/ST | All |
|---|---|---|---|---|---|---|
| Dharmapuri | Male | 65 | 41 | 64 | 65 | 65 |
| | Female | 47 | 27 | 45 | 48 | 48 |
| | Total | 56 | 34 | 55 | 57 | 57 |
| | **Gender Gap in Literacy** | **19** | **14** | **18** | **17** | **17** |
| Harur | Male | 58 | 38 | 55 | 64 | 60 |
| | Female | 39 | 23 | 36 | 47 | 43 |
| | Total | 49 | 31 | 46 | 55 | 52 |
| | **Gender Gap in Literacy** | **19** | **15** | **18** | **17** | **17** |
| Palacode | Male | 56 | 18 | 54 | 57 | 56 |
| | Female | 37 | 15 | 36 | 39 | 39 |
| | Total | 47 | 16 | 45 | 48 | 48 |
| | **Gender Gap in Literacy** | **19** | **3** | **18** | **18** | **18** |
| Pappireddipatti | Male | 65 | 49 | 60 | 68 | 65 |
| | Female | 43 | 32 | 40 | 50 | 46 |
| | Total | 54 | 40 | 50 | 59 | 56 |
| | **Gender Gap in Literacy** | **21** | **17** | **20** | **18** | **19** |
| Pennagaram | Male | 54 | 50 | 53 | 56 | 56 |
| | Female | 35 | 34 | 35 | 38 | 38 |
| | Total | 45 | 42 | 45 | 48 | 47 |
| | **Gender Gap in Literacy** | **19** | **16** | **19** | **18** | **18** |
| **District** | Male | 60 | 44 | 58 | 62 | 61 |
| | Female | 41 | 28 | 39 | 44 | 43 |
| | Total | 51 | 37 | 48 | 53 | 52 |
| | **Gender Gap in Literacy** | **19** | **16** | **19** | **17** | **18** |

Source: Census of India 2001

### 4.3 Number of Schools in Dharmapuri District

Educational development primarily depends on the availability of basic enabling infrastructure such as schools, teachers and other amenities.

Table 4.2 provides the details of the distribution of public and private schools in Dharmapuri. In 2005-06, there were 1370 schools in the district, of which 88 percent were public schools, 2 percent were private schools with government aid and the remaining 10 percent were private schools.

**Table 4.2 Number of Schools by Category: 2005-2006**

| Type of Schools | Public | Private aided | Private | Total | Percent |
|---|---|---|---|---|---|
| Primary | 862 | 18 | 69 | 949 | 69 |
| Upper-Primary | 227 | 3 | 13 | 243 | 18 |
| High School | 51 | 5 | 26 | 82 | 6 |
| Higher Secondary | 70 | 3 | 23 | 96 | 7 |
| Total | 1210 | 29 | 131 | 1370 | 100 |
| Percent | 88 | 2 | 10 | 100 | |

Source: DISE 2005.

**Table 4.3: Number of New Schools Opened / Upgraded during 2007-2011**

| Type of Schools | 2007-08 | 2008-09 | 2009-10 | 2010-11 | Total |
|---|---|---|---|---|---|
| Primary | 40 | - | - | 11 | 51 |
| Upper-Primary | 50 | 40 | 54 | - | 144 |
| High School | 3 | 4 | 2 | 8 | 17 |
| Higher Secondary | 2 | 2 | 2 | 2 | 8 |
| Total | 95 | 46 | 58 | 21 | 220 |

Source: District Administration, Dharmapuri.

Within the total number of schools, 69 percent of them are primary, 18 percent are upper primary, 6 percent are high schools and 7 percent are higher secondary schools. Thus, the distribution shows the dominant presence of government in school education; it also shows that the presence of government is relatively lesser at the higher education level and higher secondary level. And considerable presence of private sector at the higher and higher secondary levels indicate the demand for education at those levels.

The district has succeeded in adding 220 new schools over the last four years (Table 4.3). Some of them are upgraded from lower to higher levels. Out of the 220, 144 are middle schools and 51 are primary schools.

Considering the demand for high school and higher secondary schools, efforts need to be made to open new public schools at high school and higher

secondary levels. These schools are the crucial links which can provide access to the rural children from school education to higher education.

**4.4 Net Enrolment**

Net Enrolment Ratio (NER) indicates the ratio of the students of a particular age group admitted for particular level of schooling to the total population of that age group. Table 4.4 provides NER for the primary and upper primary levels during the last five years. For the primary level, NER has increased from 97 percent to 99 percent during 2006 to 2009. But for the upper primary level, the NER has declined from 98.5 (2006) to 97 level during the next three yeras.

**Table 4.4: Net Enrolment Rate at Primary Level**

| Level | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Primary | 98 | 97.33 | 98.84 | 98.81 | 99.07 |
| Upper Primary | 97 | 98.52 | 97.18 | 97.31 | 97.40 |

Source: DISE & EER

In 2005-06, of the total 2.26 lakh children enrolled for the basic education of up to VIII standard, 1.42 lakh (63 percent) students are at primary level and 0.84 lakh (37 percent) are at the upper primary level. Thus, only just above half (59 percent) of the students enrolled at primary level move to upper primary level and the rest could not do so.

Across the blocks, 5 blocks viz. Dharmapuri, Pennagaram, Nallampally, Harur and Palacode have higher level of enrolment at both the levels whereas other three blocks Karimangalam, Morappur, Pappiraddipatti have relatively lower levels of enrolment at both the primary and upper primary levels. At both levels of education, the ratio of boys' enrolment is higher at 54 percent (1.2 lakhs) than that of the girls' at 46 percent (1lakh).

Of the total enrolment of 2.26 lakhs (2005-06), enrolment of SC students constitutes 18 percent whereas the enrolment ratio of the ST student is 0.92 percent. Among the SC/ST students, those who move to upper primary is only around 32 percent.

Table 4.5: Enrolment of Primary and Upper Primary in Dharmapuri District (2005–2006)

| | | Primary (nos.) | | | | | | | | | Primary (percentage to total) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ALL | | | SC | | | ST | | | ALL | | | SC | | | ST | | |
| | Blocks | B | G | T | B | G | T | B | G | T | B | G | T | B | G | T | B | G | T |
| 1 | Dharmapuri | 12696 | 10631 | 23327 | 1270 | 1221 | 2491 | 153 | 142 | 295 | 54 | 46 | 100 | 5 | 5 | 11 | 1 | 1 | 1 |
| 2 | Nallampalli | 10194 | 8391 | 18585 | 1406 | 1311 | 2717 | 80 | 77 | 157 | 55 | 45 | 100 | 8 | 7 | 15 | 0 | 0 | 1 |
| 3 | Pennagaram | 12962 | 9926 | 22888 | 1901 | 1536 | 3437 | 268 | 179 | 447 | 57 | 43 | 100 | 8 | 7 | 15 | 1 | 1 | 2 |
| 4 | Palacode | 9816 | 8202 | 18018 | 958 | 927 | 1885 | 116 | 102 | 218 | 54 | 46 | 100 | 5 | 5 | 10 | 1 | 1 | 1 |
| 5 | Karimangalam | 8069 | 6405 | 14474 | 1097 | 1031 | 2128 | 31 | 31 | 62 | 56 | 44 | 100 | 8 | 7 | 15 | 0 | 0 | 0 |
| 6 | Morappur | 7973 | 7006 | 14979 | 2628 | 2442 | 5070 | 145 | 116 | 261 | 53 | 47 | 100 | 18 | 16 | 34 | 1 | 1 | 2 |
| 7 | Pappireddipatti | 6013 | 5260 | 11273 | 1597 | 1810 | 3407 | 1017 | 857 | 1874 | 53 | 47 | 100 | 14 | 16 | 30 | 9 | 8 | 17 |
| 8 | Harur | 9677 | 8585 | 18262 | 3509 | 3448 | 6957 | 638 | 529 | 1167 | 53 | 47 | 100 | 19 | 19 | 38 | 3 | 3 | 6 |
| | **Total** | **77400** | **64406** | **141806** | **14366** | **13726** | **28092** | **2448** | **2033** | **4481** | **55** | **45** | **100** | **10** | **10** | **20** | **2** | **1** | **3** |
| Ratio of Primary | | 63 | 62 | 63 | 68 | 69 | 68 | 73 | 64 | 68 | | | | | | | | | |
| | | Upper-Primary (nos.) | | | | | | | | | Upper-Primary (percentage to total) | | | | | | | | |
| 1 | Dharmapuri | 8321 | 7030 | 15351 | 686 | 717 | 1403 | 44 | 52 | 96 | 54 | 46 | 100 | 4 | 5 | 9 | 0 | 0 | 1 |
| 2 | Nallampalli | 6390 | 5190 | 11580 | 785 | 615 | 1400 | 45 | 47 | 92 | 55 | 45 | 100 | 7 | 5 | 12 | 0 | 0 | 1 |
| 3 | Pennagaram | 7144 | 5753 | 12897 | 775 | 613 | 1388 | 32 | 70 | 102 | 55 | 45 | 100 | 6 | 5 | 11 | 0 | 1 | 1 |
| 4 | Palacode | 5509 | 4549 | 10058 | 310 | 372 | 682 | 34 | 58 | 92 | 55 | 45 | 100 | 3 | 4 | 7 | 0 | 1 | 1 |
| 5 | Karimangalam | 3633 | 3745 | 7378 | 401 | 512 | 913 | 10 | 6 | 16 | 49 | 51 | 100 | 5 | 7 | 12 | 0 | 0 | 0 |
| 6 | Morappur | 5108 | 4513 | 9621 | 1341 | 1214 | 2555 | 35 | 64 | 99 | 53 | 47 | 100 | 14 | 13 | 27 | 0 | 1 | 1 |
| 7 | Pappireddipatti | 3554 | 2975 | 6529 | 943 | 858 | 1801 | 422 | 490 | 912 | 54 | 46 | 100 | 14 | 13 | 28 | 6 | 8 | 14 |
| 8 | Harur | 5578 | 4971 | 10549 | 1641 | 1216 | 2857 | 304 | 376 | 680 | 53 | 47 | 100 | 16 | 12 | 27 | 3 | 4 | 6 |
| | **Total** | **45237** | **38726** | **83963** | **6882** | **6117** | **12999** | **926** | **1163** | **2089** | **54** | **46** | **100** | **8** | **7** | **15** | **1** | **1** | **2** |
| | Grand Total | **122637** | **103132** | **225769** | **21248** | **19843** | **41091** | **3374** | **3196** | **6570** | **54** | **46** | **100** | **9** | **9** | **18** | **1** | **1** | **3** |
| | Ratio of Upper Primary | **37** | **38** | **37** | **32** | **31** | **32** | **27** | **36** | **32** | | | | | | | | | |

Source: DISE, 2005-06. Note: G G- Girls; B - Boys; T – Total

Table 4.6 Enrolment of Primary and Upper Primary in Dharmapuri District (2009–2010)

| | | Primary (nos.) | | | | | | | | | Primary (percentage to total) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ALL | | | SC | | | ST | | | ALL | | | SC | | | ST | | |
| | Blocks | B | G | T | B | G | T | B | G | T | B | G | T | B | G | T | B | G | T |
| 1 | Dharmapuri | 12583 | 10799 | 23382 | 1238 | 1173 | 2411 | 132 | 135 | 267 | 54 | 46 | 100 | 5 | 5 | 10 | 1 | 1 | 1 |
| 2 | Nallampalli | 8998 | 8329 | 17327 | 1018 | 1051 | 2069 | 92 | 83 | 175 | 52 | 48 | 100 | 6 | 6 | 12 | 1 | 0 | 1 |
| 3 | Pennagaram | 11788 | 9546 | 21334 | 1438 | 1235 | 2673 | 214 | 205 | 419 | 55 | 45 | 100 | 7 | 6 | 13 | 1 | 1 | 2 |
| 4 | Palacode | 9213 | 8250 | 17463 | 698 | 725 | 1423 | 147 | 144 | 291 | 53 | 47 | 100 | 4 | 4 | 8 | 1 | 1 | 2 |
| 5 | Karimangalam | 7141 | 6241 | 13382 | 835 | 733 | 1568 | 27 | 26 | 53 | 53 | 47 | 100 | 6 | 5 | 12 | 0 | 0 | 0 |
| 6 | Morappur | 7696 | 6915 | 14611 | 2200 | 1991 | 4191 | 184 | 195 | 379 | 53 | 47 | 100 | 15 | 14 | 29 | 1 | 1 | 3 |
| 7 | Pappireddipatti | 5345 | 4918 | 10263 | 1496 | 1347 | 2843 | 1258 | 1203 | 2461 | 52 | 48 | 100 | 15 | 13 | 28 | 12 | 12 | 24 |
| 8 | Harur | 10131 | 8881 | 19012 | 3125 | 2984 | 6109 | 1183 | 1028 | 2211 | 53 | 47 | 100 | 16 | 16 | 32 | 6 | 5 | 12 |
| | **Total** | **72895** | **63879** | **136774** | **12048** | **11239** | **23287** | **3237** | **3019** | **6256** | **53** | **47** | **100** | **9** | **8** | **17** | **2** | **2** | **5** |
| Ratio of Primary | | 61 | 62 | 61 | 60 | 61 | 60 | 65 | 66 | 65 | | | | | | | | | |
| | | Upper-Primary (nos.) | | | | | | | | | Upper-Primary (percentage to total) | | | | | | | | |
| 1 | Dharmapuri | 7954 | 6718 | 14672 | 906 | 854 | 1760 | 83 | 63 | 146 | 54 | 46 | 100 | 6 | 6 | 12 | 1 | 0 | 1 |
| 2 | Nallampalli | 6397 | 4860 | 11257 | 768 | 690 | 1458 | 36 | 33 | 69 | 57 | 43 | 100 | 7 | 6 | 13 | 0 | 0 | 1 |
| 3 | Pennagaram | 7353 | 5958 | 13311 | 974 | 739 | 1713 | 99 | 80 | 179 | 55 | 45 | 100 | 7 | 6 | 13 | 1 | 1 | 1 |
| 4 | Palacode | 6092 | 5017 | 11109 | 453 | 399 | 852 | 63 | 70 | 133 | 55 | 45 | 100 | 4 | 4 | 8 | 1 | 1 | 1 |
| 5 | Karimangalam | 5152 | 4359 | 9511 | 546 | 476 | 1022 | 11 | 8 | 19 | 54 | 46 | 100 | 6 | 5 | 11 | 0 | 0 | 0 |
| 6 | Morappur | 5120 | 4394 | 9514 | 1487 | 1300 | 2787 | 84 | 91 | 175 | 54 | 46 | 100 | 16 | 14 | 29 | 1 | 1 | 2 |
| 7 | Pappireddipatti | 3579 | 3333 | 6912 | 1043 | 974 | 2017 | 777 | 707 | 1484 | 52 | 48 | 100 | 15 | 14 | 29 | 11 | 10 | 21 |
| 8 | Harur | 5802 | 4975 | 10777 | 2021 | 1774 | 3795 | 627 | 534 | 1161 | 54 | 46 | 100 | 19 | 16 | 35 | 6 | 5 | 11 |
| | **Total** | **47449** | **39614** | **87063** | **8198** | **7206** | **15404** | **1780** | **1586** | **3366** | **54** | **46** | **100** | **9** | **8** | **18** | **2** | **2** | **4** |
| **Grand Total** | | **120344** | **103493** | **223837** | **20246** | **18445** | **38691** | **5017** | **4605** | **9622** | **54** | **46** | **100** | **9** | **8** | **17** | **2** | **2** | **4** |
| **Ratio of Upper Primary** | | **39** | **38** | **39** | **40** | **39** | **40** | **35** | **34** | **35** | | | | | | | | | |

Source: DISE, 2005-06. Note: G G- Girls; B - Boys; T – Total

In 2009-10, total enrolment of students at primary and upper primary levels has slightly declined from 2.26 lakhs (2005-06) to 2.24 lakhs. The decline as a whole amounts to 1 percent. But the greater concern is that the fall in the enrolment of primary level is high at about 3.5 percent. However, the enrolment at the upper primary level has increased by 3.7 percent.

A glittering positive point is that, the district has witnessed deacreasing trend in dropouts. More than enrolment rates, it is the dropout rates that are a real expression of the nature and quality of education. There has been considerable fall in dropout rate both at primary and upper primary levels for boys and girls, including SC/STs, during the years 2006-07 to 2008-09.

**4.5 Dropout Rate**

Dropout rate is the percentatge of students who leave the system without completing the grade to the total number of students originally enrolled in the grade.

The dropout rates for the district both the primary level and upper primary level are higher than those of state average. And within the district, the dropout rate is higher for upper primary than that of the primary level. But the dropout rates at both levels have declined during the recent years; while the fall in dropout rate was considerable at primary level, the decline was sharp at the upper primay level.

Table 4.7 provides details of the dropout rate at primary level for all the blocks for the last five years. The dropout rate for the district has doubled from 2 (2005) to 4 (2006) initially and then it has declined steadily to 2.15 in 2009. Among the STs, the dropout rate was very high, but it has also recorded a sharp decline from 7 to 2.36 during the last five years. Dharmapuri, Morappur, Pappireddipatti, Nallampalli and Harur blocks have recorded significant decline in the dropout rate, whereas Palacode and Pennagaram have recorded an increase in the dropout rates in recent years. Morappur has the lowest dropout rate of less than one whereas Palacodu (3.72), Pennagaram (3.5) and Karimangalam (3.5) have very high dropout rates.

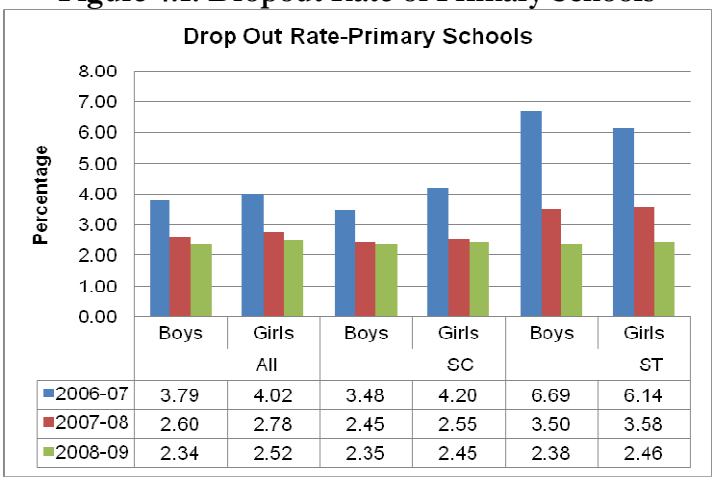
**Table 4.7: Dropout Rate in Primary Education (2005-2010)**

| S. No. | Blocks | | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|
| 1 | Dharmapuri | SC | 2 | 2.38 | 3 | 2.16 | 1.87 |
| | | ST | 6.2 | 0 | 2.78 | 0 | 0 |
| | | ALL | 3 | 2.75 | 1.48 | 1.76 | 1.56 |
| 2 | Nallampalli | SC | 3 | 4.25 | 2 | 2.33 | 2.03 |
| | | ST | 9 | 11.15 | 3 | 0 | 0 |
| | | ALL | 2 | 3.07 | 2.94 | 1.42 | 1.25 |
| 3 | Pennagaram | SC | 4 | 5.25 | 3 | 3.75 | 3.26 |
| | | ST | 11 | 9.25 | 4 | 4.38 | 4.27 |
| | | ALL | 3 | 6.25 | 3.28 | 3.93 | 3.48 |
| 4 | Palacode | SC | 5 | 4.15 | 2 | 2.77 | 2.4 |
| | | ST | 8.75 | 9.85 | 5 | 4.59 | 4.47 |
| | | ALL | 2 | 5.09 | 3.25 | 4.2 | 3.72 |
| 5 | Karimangalam | SC | 3 | 1.72 | 4 | 3.05 | 2.65 |
| | | ST | 3.75 | 2.58 | 3 | 4.41 | 4.29 |
| | | ALL | 1 | 2.51 | 1.52 | 3.89 | 3.45 |
| 6 | Morappur | SC | 2 | 2.35 | 2 | 0.43 | 0.37 |
| | | ST | 3.95 | 0 | 2.61 | 0 | 0 |
| | | ALL | 2 | 2.13 | 1.98 | 1.1 | 0.97 |
| 7 | Pappireddipatti | SC | 2 | 5.15 | 1.5 | 2.35 | 2.04 |
| | | ST | 8.76 | 7.72 | 3.98 | 3.4 | 3.31 |
| | | ALL | 1 | 6.07 | 4.39 | 1.43 | 1.26 |
| 8 | Harur | SC | 3 | 6.05 | 2.5 | 2.36 | 2.05 |
| | | ST | 4.56 | 6.48 | 4 | 2.62 | 2.55 |
| | | ALL | 2 | 3.52 | 2.56 | 1.71 | 1.51 |
| | **District Total** | SC | 3 | 3.81 | 2.5 | 2.4 | 2.09 |
| | | ST | 7 | 6.43 | 3.54 | 2.42 | 2.36 |
| | | ALL | 2 | 3.9 | 2.69 | 2.43 | 2.15 |

Source: Cohort Study

At the upper primary level, the dropout rate is relatively higher than that of the primary level. In 2005, the dropout rate of the district was very high at 13 percent but it has witnessed a drastic decline to 2.9 in 2007 and remained at that level. Karimangalam, Pennagaram and Palacode have recorded higher dropout rates of 15 to 19 in 2005. But, they have also declined to a greater extent to reach the level of 3.5 - 4 in 2009. Though the rate of decline is very high these three blocks have higher dropout rates than the rest of the district. The dropout rate is the lowest at 1.63 for Morappur block.

**Figure 4.1: Dropout Rate of Primary Schools**



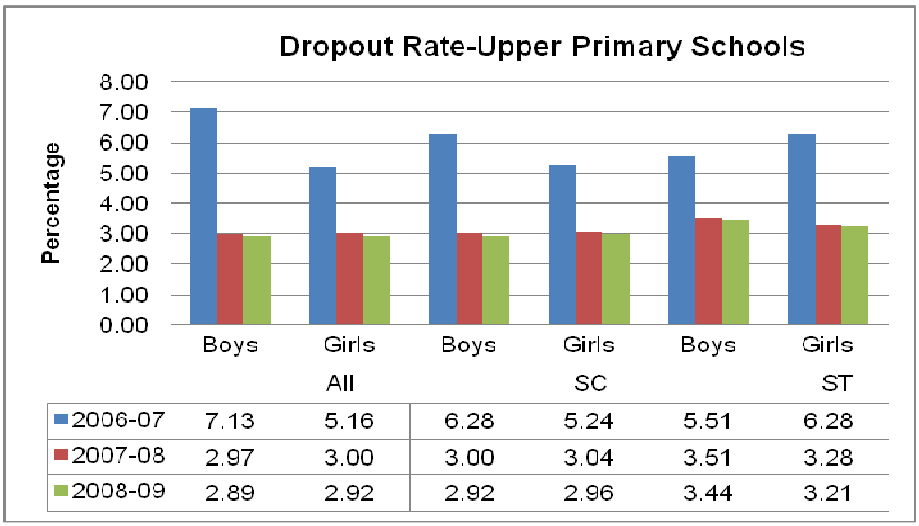

Source: DDA 2009a

**Table 4.8 Dropout Rate in Upper-Primary Education, (2005-10)**

| S. No. | Blocks | | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|
| 1 | Dharmapuri | SC | 12 | 8.07 | 3.95 | 2.38 | 2.37 |
| | | ST | 0 | 0 | 3.95 | 1.63 | 1.54 |
| | | ALL | 12 | 4.87 | 2.84 | 2.7 | 2.69 |
| 2 | Nallampalli | SC | 11 | 8.72 | 3.15 | 2.8 | 2.79 |
| | | ST | 12 | 0 | 2.94 | 2 | 1.89 |
| | | ALL | 11 | 4.35 | 2.65 | 2.87 | 2.85 |
| 3 | Pennagaram | SC | 15 | 13.8 | 3.15 | 3.95 | 3.94 |
| | | ST | 21 | 8 | 5.47 | 4.05 | 3.83 |
| | | ALL | 17 | 9.05 | 4.26 | 3.52 | 3.5 |
| 4 | Palacode | SC | 16 | 13.88 | 3.14 | 4 | 3.98 |
| | | ST | 31 | 14 | 3.14 | 4.3 | 4.07 |
| | | ALL | 19 | 7.22 | 3.51 | 3.81 | 3.79 |
| 5 | Karimangalam | SC | 14 | 4.9 | 3.11 | 3.41 | 3.4 |
| | | ST | 0 | 0 | 3.91 | 4 | 3.78 |
| | | ALL | 15 | 7.5 | 3.85 | 3.69 | 3.67 |
| 6 | Morappur | SC | 9 | 4.02 | 2.89 | 1.45 | 1.45 |
| | | ST | 8 | 0 | 2.89 | 3.41 | 3.23 |
| | | ALL | 9 | 2.93 | 1.98 | 1.64 | 1.63 |
| 7 | Pappireddipatti | SC | 11 | 7.53 | 2.56 | 2.57 | 2.56 |
| | | ST | 20 | 2 | 2.56 | 3.78 | 3.58 |
| | | ALL | 13 | 5.81 | 2.56 | 2.28 | 2.27 |
| 8 | Harur | SC | 8 | 4.09 | 2.23 | 2.94 | 2.93 |
| | | ST | 12 | 11 | 2.23 | 3.44 | 3.26 |
| | | ALL | 9 | 5.78 | 2.23 | 2.7 | 2.68 |
| | **Total** | SC | 12 | 5.7 | 3.02 | 2.94 | 2.93 |
| | | ST | 13 | 5.9 | 3.4 | 3.32 | 3.15 |
| | | ALL | 13 | 6.2 | 2.99 | 2.9 | 2.89 |

Source: Cohort Study

**Figure 4.2: Dropout Rate in Upper Primary**




Source: DDA 2009a

Earlier, one of the concerns was the relatively high dropout rate for girls and within them the drop out rate is even higher among the girls of SC/ST communities. But, as shown in Figures 4.1 and 4.2, significant success has been attained by reducing these rates by half both at the primary and upper primary levels in recent years. The greater achievement in the reduction in overall dropout rate during the last couple of years is attributed mainly to the implementation of Sarva Shiksha Abhiyan (SSA) and other schemes and incentives provided by the state government.

### 4.6 Pupil-Teacher Ratio

The quality of the available educational infrastrucutre like schools is the most important determinant of the educational attainment. One of the most essential requirements for the attainment of quality in education is the availability of teachers. The shortage of teachers would certainly reflect on the quality of educational attainment.

**Table 4.9: Pupil-Teacher Ratio in Primary and Upper Primary** Schools

| Blocks | Primary | | | | | Upper Primary | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Dharmapuri | 40 | 32 | 31 | 27 | 25 | 65 | 36 | 31 | 26 | 31 |
| Nallampalli | 45 | 30 | 28 | 27 | 27 | 66 | 31 | 28 | 26 | 36 |
| Pennagaram | 44 | 31 | 28 | 33 | 36 | 79 | 33 | 28 | 31 | 45 |
| Palacode | 42 | 30 | 26 | 29 | 33 | 76 | 32 | 26 | 27 | 33 |
| Karimangalam | 42 | 32 | 28 | 28 | 27 | 69 | 32 | 28 | 26 | 31 |
| Morappur | 45 | 31 | 27 | 28 | 25 | 70 | 36 | 27 | 26 | 28 |
| Pappireddipatti | 37 | 30 | 25 | 28 | 26 | 66 | 33 | 25 | 25 | 32 |
| Harur | 41 | 32 | 29 | 28 | 28 | 69 | 31 | 29 | 25 | 31 |
| **Total** | **42** | **31** | **28** | **28** | **28** | **70** | **33** | **28** | **26** | **33** |

*Source: DISE*

The pupil-teacher ratio is the indicator that shows the availability of adequate teachers. In Dharmapuri, this ratio for the primary level schools was 42 and for upper primary schools was 70 during 2005. However, the pupil-teacher ratio has declined gradually from such high levels to 28 and 33 respectively for primary and upper primary levels during 2009.

Still, these ratios are higher than the average in certain blocks. And across blocks, it is higher, particularly at upper primary level. The pupil-teacher ratio is 45 for Pennagaram and 36 for Nallampalli. Such higher ratios reflect the non-availability of adequate number of teachers.

Similar ratios computed for high schools and higher secondary schools reflect higer levels. It is 51 for the district as a whole, 51 for Pennagaram, 48 for Palacode, 58 for Karimangalam and 46 for Pappireddipatti. Thus, the conditions of High school and Higher Secondary Education in the district need lot of attention.

**4.7 Sarva Shiksha Abhiyan (SSA)**

The SSA, a centrally sponsored flagship scheme, with the aim of providing education to all, is being implemented in the district since 2002. Under this scheme, about Rs. 18-19 crores had been spent (2005-07) to provide education for all. The level of expenditure under this centrally sponsored scheme has significantly increased in recent years (2007-2010) to aroud Rs. 31-32 crores. This scheme has made a significant impact in the district. The trends of most

educational attainment indicators discussed above are the pointers to the progress made on several fronts like enrolment, dropout rate, number of new schools etc.

Completion Rate is the percentatge of students who complete the grade to the total number of students originally enrolled in the grade.

Repetition Rate is the percentage of students who repeat in the same grade in the next year to the total number of students enrolled in the original grade in the base year.

**Table 4.10 Completion Rate and Repetition Rate**

| Primary/Upper Primary | | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|
| Primary | Completion Rate | 72 | 80 | 92 | 94 | 97 |
| | Repetition Rate | 25 | 16 | 5 | 3 | 0.4 |
| Upper Primary | Completion Rate | 74 | 84 | 90 | 92 | 92 |
| | Repetition Rate | 13 | 10 | 7 | 5 | 5 |

Source: Cohort Study.

Table 4.12 provides similar evidence in terms of the trend in completion rate and repetition rate, both at the primary and uper primary levels. Completion Rate means the proportion of students who pass through a class whereas repetition rate referes to the proportion of students retained for failure. For primary education, the completion rate has increased from 72 to 97 and the repetition rate has declined from 25 to almost zero. Similar trend is found for upper primary level too.

Details of Completion, Repetition and Dropout rates at primary and upper primary levels for all and SC/ST classified by Boys and Girls compiled by SSA are given in the Appendix 4.1.

Thus, SSA has resulted in many positive changes and facilitated in attaining considerable progress in school education in the district. Still, the major areas of concern are higher pupil-teacher ratio indicating the absence of teachers. Then, there are 11 habitations, identified by one of the SSA performance reviews, without primary schools. The analysis also points out that some of these habitations have more children of migrated parents.

Given the gravity of the issue of migration, (discussed in detail in Chapter 5) and child labour, the question of establishing residential schools may be considered for the children of migrant families.

### 4.8 Out of School Children

The district has got sizable number of out of school children. In 2006-07, the district had 5365 out of school children and in the next year, the number decresead to 5180. 4.11 provides the number of such children during the last five years. It also shows the achievement of the district administration in enroling most of them in the school. The target achievement ratio (achievement/target) was 98.5 percent and and it declined to 63 percent in 2008-09. However, again the achievement target has increased to 86 percent during 2009-10

**Table 4.11: Enrolment of Out of School Children via. AIE Centres and NCLP**

| Year | Target | Achievement | Achievement/ Target Ratio(%) |
|---|---|---|---|
| 2005-06 | 6233 | 2655 | 42.6 |
| 2006-07 | 5505 | 5193 | 94.3 |
| 2007-08 | 5180 | 3313 | 63.9 |
| 2008-09 | 3888 | 2454 | 63.1 |
| 2009-10 | 2128 | 1827 | 85.8 |

Source: District Administration, Dharmapuri.

### 4.9 Education of Tribal Children

An overview of the problems and improvements made in the education of tribal children is given in Box 4.1.

**Box 4.1 Improvement of Education of Tribal Children in GTR**

In Dharmapuri district an effort through education sector is made to address a host of issues like healthcare, Economic Stability, Women empowerment, Social disparity.

| | Total population | Rural Tribal Population | Urban Tribal Population | Total Tribal |
|---|---|---|---|---|
| Dharmapuri | 2856300 | 57763 | 1786 | 59549 (2.08%) |
| | Literacy Rate | | | |
| | Total | General | SC | ST |
| | 61.4 | 62.5 | 57.9 | 39.7 |

In Tamil Nadu, 1058 Adi Dravidar Welfare (ADW) schools and 290 Govt. Tribal Residential (GTR) Schools are being run mainly for the benefit of these communities. About 2 lakh children are studying in ADW schools and about 36,624 children in GTR Schools. In Dharmapuri there are 31 ADW schools with 1302 students and 28 tribal residential schools with 2468 students. All the ADW schools are functioning in plain areas and the GTR schools are functioning in all areas.

| Taluk | Ele.Schools | Middle Schools | High Schools | HSS | Grand Total |
|---|---|---|---|---|---|
| Pennagaram | 1 | 0 | 0 | 0 | 1 |
| Harur | 3 | 0 | 1 | 0 | 4 |
| Pappireddipatty | 18 | 3 | 1 | 1 | 23 |
| Total | 22 | 3 | 2 | 1 | 28 |

To improve their social status of the tribal people on par with others the GTR Schools were approved by the Govt. The main objective of opening GTR schools is that all the tribal students should get good quality education closer to their place of residence. The parents of tribal students are mostly illiterate and cannot help the children with their studies and homework. The residential schools are situated close to their villages with facilities for boarding and lodging with the purpose of tribal students being guided by the teachers who also stay with them in the school. The Headmasters cum wardens (HMW) have to reside in the respective GTR Schools along with their supporting staff so that the tribal students can also reside in the schools and get the teachers coaching and guidance after the normal school hours. In Dharmapuri, out of 28 GTR Schools run by the Tribal Welfare Department, 23 GTR Schools are functioning in Pappiredipatti Taluk and four in Haluk in Harur Revenue Division and one GTR school in Pennagaram Taluk of Dharmapuri Division. I have visited more than 25 GTR schools over the last one year and found that the objectives for which the GTRs were established have not been met and the GTRs have added little value to the otherwise grim situation faced by the tribals in Dharmapuri dt. From my initial visits the findings are as under.

The main findings on the residential schools are as follows:

- The environment of the schools is far from satisfactory and in few cases inhuman
- In almost all schools the teachers were not staying in the quarters in the school premises or in the village were there are no quarters
- Due to lack of sufficient support staff like cook or watchman, the teachers/headmaster were carrying on the duties of purchase of provisions and liasoning with ST ADW office for funds.
- Most of the students failed in English, Maths and Science subjects. The teacher posts are vacant in certain schools. Further, the available single teacher/ headmaster is saddled with Warden duties due to which they are not in a position to devote full time on classroom activities in the school.
- It is observed that there are no proper testing methods i.e., quiz, objective type tests etc. there is no practice of issuing progress reports for the perusal of the parents.
- The GTR schools have good buildings in many cases, but there are no proper bedding material, cots, etc. The children find it difficult to sleep on the floor during rainy and winter season.
- The parents of most of the students are illiterate and never enquired about the studies of their children.
- There is little influence of the villagers on the schools.
- Lack of co-curricular activities and sports.
- There is no bonding between the teachers and students.
- Lack of motivation and commitment among teachers and support staff.
- Irregular attendance of teachers and cooks taking up to teaching in schools.
- Improper supervision and monitoring by supervisory officers at Taluk level.

The students living in and around the GTR school are admitted in these schools. But, almost all the tribal students studying in GTR schools take their food and return home for night stay. In fact the children are given dinner before 6.00pm and sent home and the children come back the next morning around 8.30 am and have breakfast. This is because most of the HMWs and Teachers are not residing in GTR schools. The GTR staff turns for night stay in schools where children have nowhere to go as they are from far away villages and mostly it is the cook/watchman who is available at night. Mostly the HMW is busy buying provisions and submitting bills/vouchers. They find one reason or the other for not attending school. Since almost all Tribal students are living in their hill villages, which lie in remote areas, they have no chance to learn from other students in plains and are quite unaware of the happenings in the other parts of the district or state. The tribal students selected for the higher education scheme in private schools by Government have to struggle very hard to rise up to the standard in these private schools. The standard and quality of education in GTR schools is poor compared to that in other elementary and middle schools. A Diagnostic test was conducted for all fifth and eighth standard students in Dharmapuri in April 2009 and the results of students for GTR schools were poor. During the month of February, March and April 2009 various officers from Education Department took up surprise visits of all

GTR schools. They have noticed various kinds of defects(report enclosed). These inspections have not gone well with the GTR teachers and staff.

In my view the present system of GTR schools with insufficient and uncommitted teachers and without proper infrastructure facilities will defeat the very purpose of starting these schools to provide education to tribals in backward areas across the state. The teachers recruited for GTR schools just while away the time and wait for an opportunity to move to the plains as teachers or as hostel wardens which is better in many ways! Most of the current vacancies are in remote GTR schools as the teachers move out to better posts or closer to home due to the counseling system. In the whole scheme of things, the losers are tribals and tribal children. The students who still make it to the 10th or 12th or complete teacher training (many attempts) against all odds, follow the footsteps of their teachers and move to the plains. The most disturbing aspect is even the persons recruited from these tribal villages and appointed in their same panchayat or neighbouring panchayat do not want to work there. Infact a few people turned down appointment as teachers in GTR schools, saying that they would wait for their appointment in education department schools.

In these circumstances, I would like to put forth the following suggestions:

1. Teachers working in tribal areas should be given allowances, residential quarters, and transport allowance and also out of turn promotion if they serve in tribal areas for three years and impart good education to children.
2. Newly recruited teachers for GTR schools should not be considered for transfer atleast for two years. (this is followed in Dharmapuri.)
3. The Monitoring and Supervision of GTRs are weak. The special Tahsildars and DADWO are too busy with other activities and schemes that they do not find time to visit and inspect GTR and ADW schools nor have the capacity to review education activities. The officers of Education Department should be authorized to visit GTRs and inspect the ADW Schools in order to improve the standard of Education. The report can be sent to DADWO for necessary action. (This system is followed in Dharmapuri.)
4. The GTRs do not have basic facilities like Drinking water, Fans, Grinders, mats etc. The DADWO says no funds received. The District administration has provided for Grinders, mats and water facilities in some GTR schools in Dharmapuri through local support and NNT. The Government can allot a corpus of Rs.5-10 lakhs every year to the collector to take immediate action for repairing and maintaining basic facilities in GTR and ADW schools. The wardens make good the money from other funds to repair a motor or replace a tube light affecting the quality of food provided to the children and misuse of funds.

The above suggestions are to improve existing GTRs. A radical change can take place when we can start Model Residential schools in Tribal areas with the state of art facilities and committed full time teachers. One suggestion is, instead of having large number of GTR schools spread over many tribal villages just for the sake of proximity, (at the cost of quality education) we can have two or three GTR High Schools or High secondary schools in a centrally located tribal panchayat with all teachers and non teaching staff pooled in from the existing GTRs and with adequate infrastructural facilities. This will function like the Ekalaivya Tribal residential Schools supported by Government of India. The quality of education will be better due to more teachers engaged in teaching activities, than managing procurement of provisions and submission of bills/ vouchers. Monitoring and supervision will also be better and improve the standard of education. We can also include 10% children from plain areas belonging to SC or BC/ MBC in these schools to forge better interaction among students of various social groups. This school will be a model residential school run on the lines of the Ekalaivya Tribal residential school and the SSA KGBV residential school, catering to all tribal students in the district.

Source: Tmt.P. Amudha, I.A.S., Collector,Dharmapuri District

### 4.10 Enrolment at High Schools and Higher Secondary Schools

The total enrolment at the high schools and higher secodary schools for the district as a whole is 129645. Thus, it includess students admitted at the ninth standard to twelfth standard. Hence, if we equally divide them among the four classes, the enrolment for each class comes to 32411.

**Table 4.12 No of Pupils and Teachers in High and Hr. Sec Schools -2010-11**

| | No.. of Schools | Boys | Girls | Total | Teachers | PTR | Students per school | Teachers per school |
|---|---|---|---|---|---|---|---|---|
| Dharmapuri | 17 | 9573 | 10723 | 20296 | 338 | 60 | 1194 | 20 |
| Nallampalli | 20 | 10035 | 8584 | 18619 | 402 | 46 | 931 | 20 |
| Karimangalam | 12 | 7583 | 6120 | 13703 | 236 | 58 | 1142 | 20 |
| Palacode | 11 | 8886 | 7223 | 16109 | 333 | 48 | 1464 | 30 |
| Pennagaram | 26 | 9736 | 8514 | 18250 | 357 | 51 | 702 | 14 |
| Morappur | 22 | 7268 | 7132 | 14400 | 308 | 47 | 655 | 14 |
| Pappireddipatti | 15 | 6469 | 5696 | 12165 | 262 | 46 | 811 | 17 |
| Harur | 22 | 8326 | 7777 | 16103 | 326 | 49 | 732 | 15 |
| Total | 145 | 67876 | 61769 | 129645 | 2562 | 51 | 894 | 18 |

Source: Chief Educational Officer, Dharmapuri.

The level of student-teacher ratio for the district is 51 and it is as high as 60 for Dharmapuri and 58 for Karimangalam during 2010-11. Students per school as well as teachers per school are relatively high in Dharmapuri, Palacode and Karimangalam, whereas they are low in Morappur, Pennagaram and Harur.

The number of students passing through the tenth standard and the plus two courses during 2006-07 was high at 78 percent respectively and this has increased further to 80-81 percent in 2008-09. Such high level of pass percentage, particularly at the plus two levels indicates the demand for more higher educational institutions in the district.

### 4.11 Enrolment at Colleges

It is encouraging to see more demand for higher education in Dharmapuri. Higher education in Dahrmapuri is mostly dominated by private sector. Table 4.13 provides the details of the number of higher educational institutions, staff and students in the district. There are ten institutions, out of which only two are government institutions and the rest are private institutions. Out of two public institutions, one is the Arts college and the other one is the newly opened Medical college. Among the remaining 8 private institutions, 6 are Arts and Science colleges and two are professional colleges. Two more Arts Colleges are allocated to Dharmapuri District in recent times

Of the total students, 64 percent (11939) are boys and the rest (36 percent) are girls. In the arts and sciences colleges and college of education, the gender

disparity is relatively lesser. But, in professional and teacher training Institutions, the gender disparity is sharper; in professional institutions, the enrolment of boys are more with 88 per cent whereas 71 per cent of the enrolment in teacher training institutes are by girls.

All these institutions enrol 18590 students out of which 7697 (41 percent) are enrolled in arts and science courses and the remaining 59 percent (10893) are admitted in professional courses.

Most of these 18590 students would probably have spent most of their family assets for meeting out their expenses in the private college. Out of the total of 7697 enrolled in arts and science courses, 62 percent are in private institutions whereas the rest (38 percent) are enrolled in one goverment college. Efforts are taken to open new arts and science colleges, engineering college, polytechnic and teacher training institute.

**4.12 Infrastructure**

Another area of focus is infrastructure, particularly appointment of lecturers. For instance, for the 2898 students of the Government Arts College, there are only 48 teachers resulting in the student-teacher raatio of 60, whereas, in all the private arts colleges together the ratio is around 20, i.e there are 244 teachers for 4799 students. College-wise 'student-teacher ratio' given in the last column of Table 4.13 clearly shows the divide between the Government Arts College and other private colleges. Hence, steps may be taken to fill up vacancies in the government college.

The number of students enrolled in plus two as estimated above is roughly about 23000, and out of which if we assuume 20000 pass the +2 examination, the lone government college could accomodate only ten percent of them. In this context, the decision of the government to start a government college at Pennagaram is a welcome step.

**Table 4.13 Enrolment & Teachers in Colleges (2008-09)**

| S.No | Institution | Students | | | Teachers | Student Teacher Ratio |
|---|---|---|---|---|---|---|
| | | Boys | Girls | Total | | |
| **I** | **Arts & Science Colleges** | | | | | |
| 1 | Government Arts College, Dharmapuri | 1505 | 1393 | 2898 | 48 | 60 |
| 2 | P.M.P Arts & Science College, Thokkampatti | 725 | 757 | 1482 | 48 | 31 |
| 3 | Muthu Arts & Science College for Women, Harur | 200 | 170 | 370 | 50 | 7 |
| 4 | PEE.GEE. Arts and Science College, Periyanahalli | 532 | 198 | 730 | 45 | 16 |
| 5 | Kamadhenu Arts and Science College, Dharmapuri | 702 | 238 | 940 | 47 | 20 |
| 6 | Don Bosco Arts and Science College, Dharmapuri | 426 | 288 | 714 | 30 | 24 |
| 7 | Pachamuthu College of Arts and Science, Dhrmapuri (Women) | - | 563 | 563 | 24 | 23 |
| | Total | 4090 | 3607 | 7697 | 292 | 13 |
| | Per centage | 53 | 47 | 100 | | |
| **II** | **Professional Institutions** | | | | | |
| 1 | Engineering Colleges - 7 | 6319 | 883 | 7201 | 483 | 15 |
| | % | 88 | 12 | 100 | | |
| 2 | Government Medical College - 1 | | | | | |
| 3 | College of Education 21 | 1105 | 1113 | 2218 | 206 | 11 |
| | % | 29 | 71 | 100 | | |
| 4 | Teacher Training Institutions -16 | 425 | 1049 | 1474 | 142 | 10 |
| | % | 29 | 71 | 100 | | |
| | **Grand Total 52** | **11939** | **6652** | **18590** | | **17** |
| | As percentage | 64 | 36 | 100 | | |

Source: District Statistical Handbook

### Box 4.2: Opportunities for higher education for school pass out

Dharmapuri district has been a backward district due to low literacy levels combined with host of other factors like lack of teachers in elementary and middle schools, lack of access to high and higher secondary schools, lack of colleges for higher education. Every year about 14000 children pass out of schools. Now, with increased awareness many of the students want to pursue college education. Till last year the only government Arts College was catering to the entire district. In 2010 the government had sanctioned another Arts college near papparapatti with three courses and 200 student strength. The Table below shows the details of government and private colleges in Dharmapuri. Many students are from poor economic background and prefer to join Government College at Dharmapuri. They are unable to pay fees prescribed by private colleges. Moreover, the parents of girl students send them to Government College if they get admission, otherwise the girls are kept at home or married off!! The table below shows clearly the need for more government colleges in Dharmapuri.

GOVERNMENT ARTS COLLEGE, DHARMAPURI

| Acade-mic Year | UNDER GRADUATE | | | | POST GRADUATE | | | |
|---|---|---|---|---|---|---|---|---|
| | Appn. Sold | Appn. Received | Admitted (Sanctioned Strength) | Left Out | Appn. Sold | Appn. Recei -ved | Admitted (Sanctioned Strength) | Left Out |
| 2007 -08 | 7823 | 6403 | 978 | 5425 | 400 | 380 | 210 | 170 |
| 2008 -09 | 7798 | 6475 | 978 | 5497 | 416 | 386 | 210 | 176 |
| 2009 -10 | 8791 | 6731 | 978 | 5753 | 424 | 400 | 212 | 188 |
| 2010 -11 | 8947 | 6998 | 978 | 6020 | 893 | 860 | 210 | 650 |

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| Year | Application Received | | | Total Student Admitted | | | Left out |
|---|---|---|---|---|---|---|---|
| | B.A. | B.Sc. | B.Com/ B.B.A. | B.A. | B.Sc. | B.Com / B.B.A. | |
| 2007 – 08 | 729 | 3589 | 1921 | 130 | 468 | 380 | 5261 |
| 2008 – 09 | 764 | 3614 | 1947 | 130 | 468 | 380 | 5347 |
| 2009 – 10 | 671 | 5429 | 2194 | 130 | 468 | 380 | 7361 |
| Year | Girl students | | | | | | |
| | Appn. received | Admitted | Left out | | | | |
| 2007 – 08 | 3426 | 453 | 2973 | | | | |
| 2008 – 09 | 3792 | 511 | 3281 | | | | |
| 2009 – 10 | 4130 | 487 | 3643 | | | | |

Source: District Administration, Dharmapuri

**4.13 Conclusion**

Tamil Nadu is one of the top ranking states in literacy attainment as well as in higher education. But in Dharmapuri district, a lot more has to be achieved to reach the state level performance. Efforts must be made to open new public schools at high school and higher secondary levels. These schools are the crucial links which can help the rural children gain access to higher education. Higher education in Dharmapuri is mostly dominated by private sector. The presence of government in higher education is minimal.

The pupil-teacher ratios computed for high schools and higher secondary schools reflect high levels. Such high levels reflect the poor quality and will affect the educational attainment. Hence, all the existing vacancies may be filled up.

Dropout rates for the district both at the primary level and upper primary level was initially higher than that of state's average. But they have declined during the recent years; while the fall in dropout rate was considerable at primary level, the decline was sharp at the upper primay level. The other indicators like NER at the primary and upper primary level has also recorded significant improvements in recent years. These achievements are attributed mainly to the implementation of Sarva Shiksha Abhiyan (SSA) and other schemes and incentives provided by the state government and the effort made by the district administration.

But, the literacy attainment of the district as a whole as per 2001 census was the lowest. Within that, the gender gap is the highest and the literacy rate in SC/ST community is lower than the district average.

Though commendable progress has been made in the last few years at the primary and upper primary level, the high school and higher secondary level and collegiate level need special attention and more investment.

# Appendix 4.1

## Completion, Repetition and Dropout Rates: Primary/Upper Primary/ALL, SC/ST:2009-10

Table A 4.1 gives details of the Completion Rate of All Children and SC/ST children at primary level, classified by gender during 2009-10.

**Table A4.1: Completion Rate (CR) –Primary, 2009-10**

| Blocks | ALL | | | SC | | | ST | | |
|---|---|---|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Dharmapuri | 98.35 | 98.02 | 98.19 | 95.18 | 99.11 | 97.14 | 94.85 | 94.10 | 94.48 |
| Nallampalli | 98.05 | 97.80 | 97.93 | 94.08 | 97.55 | 95.82 | 94.60 | 93.95 | 94.28 |
| Pennagaram | 96.82 | 96.45 | 96.64 | 91.50 | 95.01 | 93.25 | 88.45 | 86.96 | 87.71 |
| Palacode | 96.97 | 96.31 | 96.64 | 92.36 | 95.63 | 94.00 | 88.10 | 87.00 | 87.55 |
| Karimangalam | 97.08 | 96.65 | 96.87 | 91.99 | 95.55 | 93.77 | 88.21 | 86.80 | 87.51 |
| Morappur | 97.67 | 97.35 | 97.51 | 95.91 | 99.76 | 97.83 | 94.23 | 93.89 | 94.06 |
| Pappireddipatti | 98.01 | 97.79 | 97.90 | 94.22 | 97.33 | 95.77 | 94.45 | 93.65 | 94.05 |
| Harur | 97.95 | 97.60 | 97.78 | 94.75 | 97.74 | 96.25 | 94.02 | 93.63 | 93.83 |
| Total | 97.61 | 97.25 | 97.43 | 93.75 | 97.21 | 95.48 | 92.11 | 91.25 | 91.68 |

*Source: Cohort Study 2009*

SSA in Dharmapuri District made a great progress in the Completion rate by its indefatigable efforts. It paid exclusive attention to the downtrodden categories. As a result, now the district's completion rate in all categories at Primary level is 97.43. Among this the completion rate of boys is 97.61 and that of girls is 97.25 respectively.

The CR of SC and ST are 95.48 and 91.68 respectively. District average completion rate (97.43%) for all categories is higher than that of Pennagaram, Palacode and Karimangalam blocks. To achieve 100% completion rate, interventions for repeaters and dropouts are planned in the proposed Annual Work plan and budget 2010-11. 11 AIE centres are proposed to upgrade into new primary schools. The introduction of Activity-Based Learning System (ABL) which is child-centered at primary level enables the children to attend school without break. This in turn has increased the completion rate of children.

**Table A4.2: Completion Rate (CR) –Upper Primary, 2009-10**

| Blocks | ALL | | | SC | | | ST | | |
|---|---|---|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Dharmapuri | 92.68 | 92.93 | 92.80 | 85.79 | 88.70 | 87.24 | 91.84 | 94.37 | 93.11 |
| Nallampalli | 91.52 | 91.96 | 91.74 | 84.01 | 88.23 | 86.11 | 91.61 | 96.26 | 93.94 |
| Pennagaram | 90.23 | 90.83 | 90.53 | 81.16 | 86.08 | 83.61 | 82.74 | 96.31 | 89.53 |
| Palacode | 90.82 | 90.94 | 90.88 | 81.27 | 86.96 | 84.11 | 84.05 | 96.21 | 90.13 |
| Karimangalam | 89.90 | 90.53 | 90.21 | 82.20 | 88.23 | 85.21 | 97.54 | 76.37 | 86.95 |
| Morappur | 92.98 | 93.53 | 93.25 | 83.10 | 90.22 | 86.66 | 77.67 | 97.11 | 87.39 |
| Pappireddipatti | 93.60 | 93.68 | 93.64 | 82.37 | 89.25 | 85.80 | 84.01 | 90.93 | 87.47 |
| Harur | 93.20 | 93.10 | 93.15 | 81.63 | 89.38 | 85.50 | 83.40 | 88.52 | 85.96 |
| Total | 91.87 | 92.19 | 92.03 | 82.69 | 88.38 | 85.53 | 86.61 | 92.01 | 89.31 |

*Source: Cohort Study 2009*

Table A4.2 reveals completion rate at upper primary level in the district for all and SC/ST children classified by gender during 2009-10. The district's Completion Rate for all categories at Upper Primary level is 92.03%. Among this, the completion rate of boys is at 91.87 % and girls 92.19%. The CR of SC and ST are 85.53 and 89.31respectively.

Table A4.3 gives the details of repetition rate (RR) at primary level for all and SC/ST Children classified by gender during 2009-10.

**Table A4.3 Repetition Rate (RR): Primary, 2009-10**

| **Blocks** | **ALL** | | | **SC** | | | **ST** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Boys** | **Girls** | **Total** | **Boys** | **Girls** | **Total** | **Boys** | **Girls** | **Total** |
| Dharmapuri | 0.24 | 0.25 | 0.24 | 3.43 | 0.66 | 1.42 | 6.38 | 0.00 | 3.25 |
| Nallampalli | 0.32 | 0.32 | 0.32 | 3.75 | 0.84 | 1.88 | 0.00 | 0.00 | 0.00 |
| Pennagaram | 0.48 | 0.50 | 0.49 | 4.57 | 0.89 | 2.84 | 8.15 | 9.98 | 9.07 |
| Palacode | 0.44 | 0.56 | 0.49 | 4.52 | 0.96 | 2.84 | 8.30 | 9.44 | 8.88 |
| Karimangalam | 0.53 | 0.52 | 0.52 | 4.48 | 0.96 | 3.03 | 7.62 | 15.04 | 11.29 |
| Morappur | 0.49 | 0.36 | 0.44 | 3.89 | 0.80 | 2.56 | 0.00 | 0.00 | 0.00 |
| Pappireddipatti | 0.44 | 0.39 | 0.42 | 3.99 | 0.79 | 2.43 | 6.74 | 8.16 | 7.45 |
| Harur | 0.47 | 0.38 | 0.43 | 3.70 | 0.74 | 2.49 | 7.09 | 8.50 | 7.79 |
| **Total** | **0.43** | **0.41** | **0.42** | **4.04** | **0.83** | **2.44** | **5.53** | **6.39** | **5.96** |

*Source: Cohort Study 2009*

SSA's profoundness in implementing innovative ideas has resulted in the decrease of Repetition rate in the district. The Repetition Rate of all categories at the Primary level is 0.42%. Karimangalam block has the highest percentage of repetition rate of 0.52% and Dharmapuri block has the lowest percentage of 0.24%. In the SC & ST categories it is 2.44% and 5.96% respectively during 2009-10.

The details of Repetition Rate of All, SC/ST children across boys and gilrs at Upper Primary level are given in Table A4.4.

**Table A 4.4**: **Repetition Rate (RR): Upper Primary, 2009-10**

| Blocks | ALL | | | SC | | | ST | | |
|---|---|---|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Dharmapuri | 4.74 | 4.29 | 4.51 | 12.13 | 8.65 | 10.40 | 6.46 | 5.80 | 6.13 |
| Nallampalli | 5.64 | 5.17 | 5.40 | 13.08 | 9.10 | 11.09 | 0.00 | 0.00 | 0.00 |
| Pennagaram | 6.24 | 5.67 | 5.95 | 14.88 | 9.98 | 12.43 | 14.45 | 0.00 | 7.20 |
| Palacode | 5.47 | 5.18 | 5.33 | 15.06 | 8.73 | 11.90 | 12.76 | 0.00 | 6.36 |
| Karimangalam | 6.36 | 5.85 | 6.10 | 14.31 | 8.46 | 11.39 | 0.00 | 19.72 | 9.90 |
| Morappur | 5.36 | 4.87 | 5.12 | 15.35 | 8.44 | 11.90 | 19.86 | 0.00 | 9.90 |
| Pappireddipatti | 4.00 | 4.20 | 4.10 | 14.78 | 8.48 | 11.63 | 13.43 | 5.59 | 9.50 |
| Harur | 4.28 | 4.07 | 4.18 | 15.62 | 7.53 | 11.57 | 14.08 | 8.58 | 11.33 |
| Total | 5.27 | 4.91 | 5.09 | 14.40 | 8.67 | 11.54 | 10.13 | 4.96 | 7.55 |

*Source: Cohort Study 2009*

Table A 4.4 shows the status of the Repetition Rate at the Upper Primary level in the district. The Repetition Rate of all categories at the Upper Primary level is 5.09%. Karimangalam block has the highest percentage of repetition rate of 6.10 and Pappireddipatti block has the lowest percentage of 4.10%.

In the SC & ST categories it is 11.54% and 7.55% respectively during 2009-10. Repetition rate and Dropout rate are higher in Pennagaram, Palacode and Karimangalam blocks at primary level than that of district average RR and DR. To reduce the Repetition rate and Dropout rate new primary schools are to be opened in these blocks.

Dropout Rates of All, SC/ST children at primary level classified by boys and girls are given in Table A 4.5.

**Table A4.5: Dropout Rate (DR) – Primary – 2009-10**

| Blocks | ALL | | | SC | | | ST | | |
|---|---|---|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Dharmapuri | 1.45 | 1.66 | 1.56 | 2.06 | 1.70 | 1.87 | 0.00 | 0.00 | 0.00 |
| Nallampalli | 1.11 | 1.39 | 1.25 | 2.43 | 1.67 | 2.03 | 0.00 | 0.00 | 0.00 |
| Pennagaram | 3.10 | 3.86 | 3.48 | 3.29 | 3.20 | 3.26 | 4.28 | 4.26 | 4.27 |
| Palacode | 3.39 | 4.05 | 3.72 | 2.59 | 2.23 | 2.40 | 4.48 | 4.45 | 4.47 |
| Karimangalam | 3.19 | 3.69 | 3.45 | 3.01 | 2.32 | 2.65 | 4.12 | 4.46 | 4.29 |
| Morappur | 0.88 | 1.07 | 0.97 | 0.52 | 0.24 | 0.37 | 0.00 | 0.00 | 0.00 |
| Pappireddipatti | 1.10 | 1.43 | 1.26 | 1.87 | 2.17 | 2.04 | 3.24 | 3.37 | 3.31 |
| Harur | 1.46 | 1.56 | 1.51 | 1.91 | 2.15 | 2.05 | 2.76 | 2.35 | 2.55 |
| **Total** | **1.96** | **2.34** | **2.15** | **2.21** | **1.96** | **2.09** | **2.36** | **2.36** | **2.36** |

*Source: Cohort Study 2009*

SSA's spirited efforts in reducing dropout rate in the district fetched fruitful results over the years. By the valiant attempts made by the SSA personnel, officials and teachers, the dropout rates of the district have been considerably reduced.

Table A4.5 depicts the Dropout Rate of the district during 2009-10. The Dropout Rate of all categories in the Primary level is 2.15%. Morappur block has the lowest Dropout rate of 0.97% and Palacode block has the highest percentage of 3.72%.

In the SC category it was 2.09% during 2009-10 . The DR of girls (1.96%) is lower than the DR of boys (2.21 %) in the SC category. In ST category the Dropout rate was 2.36% in the same year. The Dropout percentage of boys and girls in the ST category is the same 2.36%. Steps have been taken to bring down the dropout rates to 0 % in the district.

Dropout Rate for All, SC and ST children at Upper Primary level classified by boys and girls are given in Table A4.6.

**Table A4.6: Dropout Rate (DR) : Upper Primary, 2009-10**

| Blocks | ALL | | | SC | | | ST | | |
|---|---|---|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Dharmapuri | 2.58 | 2.78 | 2.69 | 2.09 | 2.65 | 2.37 | 3.08 | 0.00 | 1.54 |
| Nallampalli | 2.83 | 2.86 | 2.85 | 2.92 | 2.66 | 2.79 | 0.00 | 3.78 | 1.89 |
| Pennagaram | 3.52 | 3.48 | 3.50 | 3.96 | 3.91 | 3.94 | 3.92 | 3.73 | 3.83 |
| Palacode | 3.69 | 3.87 | 3.79 | 3.66 | 4.30 | 3.98 | 4.31 | 3.82 | 4.07 |
| Karimangalam | 3.72 | 3.60 | 3.67 | 3.49 | 3.31 | 3.40 | 3.93 | 3.62 | 3.78 |
| Morappur | 1.66 | 1.60 | 1.63 | 1.55 | 1.34 | 1.45 | 3.48 | 2.97 | 3.23 |
| Pappireddipatti | 2.40 | 2.13 | 2.27 | 2.85 | 2.27 | 2.56 | 3.71 | 3.44 | 3.58 |
| Harur | 2.52 | 2.83 | 2.68 | 2.74 | 3.11 | 2.93 | 3.66 | 2.85 | 3.26 |
| **State** | **2.87** | **2.90** | **2.89** | **2.91** | **2.95** | **2.93** | **3.26** | **3.03** | **3.15** |

*Source: Cohort Study 2009*

The Dropout Rate of all categories in the Upper Primary level is 2.89%. Morappur block has the lowest Dropout rate of 1.63% and Palacode block has the highest percentage of dropouts at 3.79 %.

In the SC category it is 2.93% and the percentage for boys and girls are 2.91 and 2.95 respectively. In ST category the Dropout rate is 3.15 and the percentage for boys and girls are 3.26 and 3.03 respectively. Summer camps, Non-residential and residential bridge courses are planned to further bring down the dropouts.

(Source: SSA, Dharmapuri)

# Chapter 5
# LIVELIHOODS

## 5.1 Introduction

Livelihood comprises the capabilities, assets and activities required for a means of living. Livelihood is defined as ' the sum of ways in which households obtain the things necessery for life, both in good years and in bad' (FAO, 2006; FAO,2008). Food, water, shelter, clothing, healthcare and basic education are considered to be the 'necessities'. Livelihood chances differ from rural to urban areas and across regions and countries. The rural livelihood activities mostly include crop and livestock production, fishing, hunting, gathering and other non -farm income -generating activities.

Dharmapuri is a rural district with 85 percent of rural population. Hence, access to livelihood could be captured by examining the rural livelihood pattern, workforce structure, farm and non-farm activities and agricultural productivity, access to land, level of poverty, its composition, public intervention and its effects.

## 5.2 Occupational Structures and its Transformation

Occupational structure and its transformation indicate the overall economic transformation of the society and the nature and extent of livelihood opportunities for the people. According to development economists, structural shift of workforce from primary sector to secondary and tertiary sector is considered to be a precondition for growth and development (Kindlelberger and Bruce, 1977; Kumar, 1983). The structure and the transformation of workforce in Dharmapuri district are analysed from the results of Population Census 1991 and 2001.

Workforce refers to the persons employed in economic activities such as self-employed and salary/wage paid. This includes agricultural and non-agricultural activities, seasonal and perennial, regular and casual employment. A majority of the workforce in Dharmapuri district is engaged in agricultural and its allied sectors like horticulture, floriculture, animal husbandry, aquaculture, cultivation of vegetables and services related to agro and allied sectors.

**Table 5.1: Industrial Classification of Workers** (1991)

| Categories | Dharmapuri | Harur | Palacode | Pennagaram | District | TN |
|---|---|---|---|---|---|---|
| 1.Cultivators | 38 | 38 | 43 | 46 | 40 | 23 |
| 2.Agricultural Labourers | 28 | 42 | 37 | 35 | 36 | 33 |
| 3. Industrial workers | 6 | 2 | 4 | 3 | 4 | 13 |
| 4. Other Workers | 21 | 11 | 10 | 11 | 13 | 25 |
| A. Main workers (1+2+3+4) | 93 | 93 | 94 | 96 | 94 | 94 |
| B. Marginal workers | 7 | 7 | 6 | 4 | 6 | 6 |
| Total Workers (A+B) | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers | 45 | 51 | 49 | 48 | 48 | 43 |
| Non-workers | 55 | 49 | 51 | 52 | 52 | 57 |
| Total Population | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Census 1991.

Over the last two Census (1991 and 2001), the participation of workers in the labour market, that is in paid work, has increased from 48 percent to 51 percent of the total population of Dharmapuri district. Still, almost half of the population continued to be non-workers. This is an indication of the level of unemployment in the district.

**Table 5.2: Industrial Classification of Workers (2001)**

| Categories | Dharmapuri | Harur | Palakkoddu | Pennagaram | Pappireddipatti | District | Tamil Nadu |
|---|---|---|---|---|---|---|---|
| 1.Cultivators | 30.4 | 39.8 | 39.6 | 32.3 | 43.6 | 36.5 | 17 |
| 2.Agricultural Labourers | 16.3 | 27.8 | 25.4 | 29 | 20.2 | 23.1 | 22 |
| 3. Industrial workers | 2.4 | 1.4 | 1.5 | 1.4 | 1.6 | 1.7 | 5 |

| Categories | Dharmapuri | Harur | Palakkoddu | Pennagaram | Pappireddipatti | District | Tamil Nadu |
|---|---|---|---|---|---|---|---|
| 4. Other Workers | 35 | 19.7 | 17.6 | 18.5 | 19.9 | 23.2 | 42 |
| A. Main workers (1+2+3+4) | 84 | 88.9 | 84.2 | 81.1 | 85.3 | 84.6 | 85 |
| B. Marginal workers | 16 | 11.1 | 14.8 | 18.9 | 14.7 | 15.4 | 15 |
| Total Workers (A+B) | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers | 48 | 52 | 52 | 53 | 52 | 51 | 45 |
| Non-workers | 52 | 48 | 48 | 47 | 48 | 49 | 55 |
| Total Population | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Census 2001.

Table 5. 3: Occupational Structure and Growth

| | 1991 | | | 2001 | | | Growth Rates | | |
|---|---|---|---|---|---|---|---|---|---|
| Categories | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Cultivators | 49 | 28 | 40 | 38 | 34 | 37 | -0.9 | 5 | 1 |
| Agricultural Labourers | 28 | 49 | 36 | 20 | 28 | 23 | -2.0 | -3 | -2 |
| Industrial Workers | 5 | 2 | 4 | 2 | 2 | 2 | -10 | 3.1 | -5 |
| Other Workers | 18 | 6 | 13 | 31 | 12 | 23 | 6.8 | 9.8 | 7.4 |
| Main Workers | 100 | 84 | 94 | 91 | 76 | 86 | 0.6 | 1.5 | 0.9 |
| Marginal Workers | 0.3 | 16 | 6.4 | 9 | 24 | 15 | 35 | 6.7 | 11 |
| Total Workers | 57 | 39 | 48 | 57 | 44 | 51 | 1.5 | 2.6 | 1.9 |
| Non-Workers | 43 | 61 | 52 | 43 | 56 | 49 | 1.3 | 0.6 | 0.9 |
| Population | 100 | 100 | 100 | 100 | 100 | 100 | | | |

Source: Census of India 1991 and 2001

But the catergory of 'other workers' has recorded a sharp increase from 13 percent in 1991 to 23 percent in 2001. This is an indication of the informalization of the workforce in the district. It may also be noted that the share of mariginal

workers (those who can get employment for less than six months) has also more than doubled from 6 percent to 15.2 percent. The highest marginalization of 19 percent (2001) from 4 percent (1991) took place in Pennagaram taluk. Such fivefold increase in marginalisation of the workforce has taken place in a block that already shelters a large number of BPL families.

Table 5.3 provides the structure and compound growth rate of workforce for the Dharmapuri district. According to the population census, Dharmapuri district had a total workforce of 5.4 lakhs accounting for 48 per cent in 1991 which rose to 6.6 lakhs accounting for 51 per cent in 2001. The district population has recorded an annual growth rate of 1.76 percent between 1991 and 2001 census periods (see Table 1.4). The workforce has grown more than this. The decadal workforce growth rate for the district is 2 per cent during the decade of 1991-2001, whereas the state's growth is 1.4 per cent for the above corresponding period. A similar growth of variation in workforce is found for the main and marginal workers at the district and state levels. A negative workforce is registered in the case of agricultural labourers and household industry workers at the district as well as the state level. Table 5.2 also reports a similar growth of variation in the case of non-workforce both at the district and the state levels.

**5.3 Female Workforce Participation**

In recent decades, women's participation in paid work has increased in most parts of the country as well as at the world level. Women's participation rate in the world has increased from 54 percent in 1950 to 67 percent in 1996 and it was expeceted to climb to 70 percent by 2010 (ILO, 1996). Studies have shown that the long-term economic development was mainly responsible for such development. But the very low level of female work participation rate in Dharmapuri could be another indication for the absence of such development.

**Table 5.4 Female Work Participation Rate (FWPR)**

| | Dharmapuri | Harur | Palacode | Pappiredipatti | Pennagram | District |
|---|---|---|---|---|---|---|
| i) Cultivation | 28 | 38 | 36 | 29 | 42 | 34 |
| ii) Agricultural Labourers | 22 | 33 | 29 | 32 | 25 | 28 |
| iii) Industrial Workers | 3 | 2 | 2 | 1 | 2 | 2 |
| iv) Others | 20 | 10 | 8 | 8 | 10 | 12 |
| Main Workers ( i to iv ) | 73 | 82 | 75 | 71 | 78 | 76 |
| Marginal | 27 | 18 | 23 | 29 | 22 | 24 |
| Total Female Workers | 100 | 100 | 100 | 100 | 100 | 100 |
| Female Workers | 39 | 46 | 45 | 47 | 48 | 44 |
| Female Non-workers | 61 | 54 | 55 | 53 | 52 | 56 |
| Total Female Population | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Census 2001

The FWPR of Dharmapuri district was 39 percent in 1991. Across the taluks, the FWPR was even much lower at 34 perccent for the Dharmapuri Taluk whereas the Harur taluk recorded a higher rate of 44 percent.

In 2001, the FWPR for the district has increased from 39 percent to 44 percent. In the total workforce, women constitue 39 percent in Dharmapuri Block. Pennagaram, Pappiredipatti and Harur taluk have higher female work participation of 42 percent and Dharmapuri has recorded the lowest share of work participating women (39 percent). Agriculture is the only sector where women participation is half of the men. The ratio of female main workers is rather low in comparison with males in other sectors. The disturbing trend is seen in the composition of the workforce. The share of marginal workers is 24 and the share of main workers is 76. The marginal workers share among the women is higher than that of the men.

### 5.4 Social Composition of the Workforce

Half of SC and ST population are workers and the other half are non-workers. Almost one fifth of the total workforce in Dharmapuri district are socially weaker sections. Out of the total workforce of 6.6 lakh, 19 per cent (2.4 lahks ) belong to SC & ST communities as per the Census 2001.

**Table 5. 5: Occupational Structure of SC/ST Workers (2001)**

| Categories | Community | Dharmapuri | Harur | Palacode | Pappireddipatti | Pennagaram | District |
|---|---|---|---|---|---|---|---|
| Cultivators | SC/ST | 2.2 | 9.5 | 1.6 | 9.2 | 3.6 | 4.7 |
| | Non-SC/ST | 34 | 35.4 | 45.5 | 30.6 | 47.5 | 38.5 |
| | Total | 36.2 | 44.8 | 47.1 | 39.8 | 51.1 | 43.1 |
| Agricultural Labourers | SC/ST | 3.4 | 18.3 | 5 | 18.9 | 5.2 | 9.2 |
| | Non-SC/ST | 16 | 13 | 25.2 | 16.8 | 18.4 | 18.1 |
| | Total | 19.4 | 31.3 | 30.2 | 35.7 | 23.6 | 27.3 |
| Industrial workers | SC/ST | 0.2 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 |
| | Non-SC/ST | 2.6 | 1.3 | 1.7 | 1.5 | 1.6 | 1.8 |
| | Total | 2.8 | 1.6 | 1.8 | 1.7 | 1.8 | 2.1 |
| Others | SC/ST | 3.7 | 6.1 | 1.9 | 5.1 | 2.6 | 3 |
| | Non-SC/ST | 37.9 | 16.1 | 19.1 | 17.6 | 20.8 | 24.4 |
| | Total | 41.6 | 22.2 | 20.9 | 22.8 | 23.4 | 27.5 |
| Main | SC/ST | 9.5 | 34.3 | 8.6 | 33.5 | 11.7 | 17.9 |
| | Non-SC/ST | 90.5 | 65.7 | 91.4 | 66.5 | 88.3 | 82.1 |
| | Total | 84 | 88.9 | 84.2 | 81.1 | 85.3 | 84.6 |
| Marginal | SC/ST | 1.8 | 4.4 | 2.1 | 8.9 | 2.2 | 3.6 |
| | Non-SC/ST | 14.1 | 6.8 | 12.7 | 10 | 12.5 | 11.6 |
| | Total | 16 | 11.1 | 14.8 | 18.9 | 14.7 | 15.2 |
| Workers | SC/ST | 9.8 | 34.8 | 9.3 | 36.1 | 12.2 | 18.7 |
| | Non-SC/ST | 90.2 | 65.2 | 90.7 | 63.9 | 87.8 | 81.3 |
| | Total | 48.1 | 52.3 | 51.6 | 52.7 | 52.3 | 51 |
| Non-workers | SC/ST | 5.9 | 16.5 | 4.8 | 16.7 | 6.3 | 9.2 |
| | Non-SC/ST | 46 | 31.1 | 43.6 | 30.5 | 41.4 | 39.8 |
| | Total | 51.9 | 47.7 | 48.4 | 47.3 | 47.7 | 49 |

Source: Census 2001

Among the total SC/ST workers, 85 percent are main workers and the rest are marginal workers. While 70 percent of the main workers of SC and ST population are dependent on agricultural sector and its allied activities for their livelihood, a mere 2 percent depend on industries, and the rest 27 percent are engaged in other sectors. A major share of the workforce is in Harur and Pappireddipatti taluks.

Further, it may be noted that the district as a whole has 15 percent of the

workforce as marginal workers. But among the SC/STs, the ratio of marginal workers is relatively higher at 19 percent of the total workforce. Across the taluks, Harur and Pappireddipatti have even higher rate of 35/36 percent of marginal workers.

**5.5 Industries**

Dharmapuri district is mostly an agrarian society and the share of industries is just around one–fifth of the GDDP.

The district is also previously known for naxalism and that was one of the prohibiting factors for any heavy industrialisation. The Economic Census has recorded the number of working industrial units and the number of workers employed in the unorganised sector for the last two censuses for years 2001 and 2007.

The number of units have increased from 2903 to 3853 recording an increase of 33 percent between 2001 and 2007 but this has not increased the employment opportunities; on the other hand it reduced it by one percent. Thus, the industrialisation is relatively less and that too it could not provide adequate employment to the people.

Table 5.6 Industrial Units and Employment in Dharmapuri District

| Block | Number of Working Units | | | | | Number of Empolyment | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | | 2007 | | Growth | 2001 | | 2007 | | Growth |
| | Nos. | Percent | Nos. | Percent | Rate | Nos. | Percent | Nos. | Percent | Rate |
| Dharmapuri | 1113 | 38 | 1216 | 32 | 9 | 4452 | 34 | 3130 | 24 | -30 |
| Nallampalli | 374 | 13 | 429 | 11 | 15 | 1870 | 14 | 1716 | 13 | -8 |
| Pennagaram | 276 | 10 | 392 | 10 | 42 | 828 | 6 | 1352 | 10 | 63 |
| Morappur | 172 | 6 | 282 | 7 | 64 | 1032 | 8 | 1128 | 9 | 9 |
| Harur | 329 | 11 | 515 | 13 | 57 | 1974 | 15 | 1545 | 12 | -22 |
| Karimangalam | 71 | 2 | 199 | 5 | 180 | 355 | 3 | 1194 | 9 | 236 |
| Pappreddripatti | 279 | 10 | 345 | 9 | 24 | 1116 | 9 | 1035 | 8 | -7 |
| Palacode | 289 | 10 | 475 | 12 | 64 | 1445 | 11 | 1900 | 15 | 31 |
| District Total | 2903 | 100 | 3853 | 100 | 33 | 13072 | 100 | 13000 | 100 | -1 |

Source: Economic Census, 2001 & 2007

**Box: 5.1 Incentives and Concessions for SSI in Dharmapuri District**

Dharmapuri district people have been dependent on primary sector as the main source of income and livelihood. Rain fed agriculture with animal husbandry has provided employment to the large rural population of this district. The secondary sector is prominently missing in this district barring a few small-scale industrial units. Most of the small-scale units are in and around the Dharmapuri town, the only municipality and urban centre. The units have come up in Dharmapuri block due to the town being situated on the national highway NH 7, piped water supply from Panjapalli dam, uninterrupted power supply, availability of skilled and semi skilled workers, SIDCO industrial estate and DIC.

In the MSME Policy 2008, a package of Incentives and concessions are provided for the Development of Industrial activities and to create employment opportunities.

**Details of small scale industries in Dharmapuri district**

| No | Classification | Details of Classification | Units (nos) |
|---|---|---|---|
| 1. | Food | Floor Milling, Vermicilli etc., | 1838 |
| 2. | Chemical | Stone-jelly, Agarbathi etc., | 218 |
| 3. | Plastic & Rubber | P.V.C. pipes, Rubber goods etc., | 93 |
| 4. | Electrical & Electronics | Lamps, Starters.T.T.Antena etc., | 696 |
| 5. | Forest based | Wood Furnitures etc., | 477 |
| 6. | Engineering | Engineering | 1026 |
| 7. | Textile | Powerloom, Silk reeling,Tailoring units, etc., | 2216 |
| 8 | Others | Beauty parlor,Paper , printing non-metal | 1185 |

Most of the concessions are provided only for entrepreneurs who start industry in backward blocks. Dharmapuri district has eight development blocks. Out of the eight blocks, except the head quarters block of Dharmapuri all other seven blocks have been classified as industrially backward.

An e*ntrepreneur who wants to start small & Medium Industry in Dharmapuri block which is most conducive for starting industries is not eligible to avail incentives offered by the Tamilnadu Government as per the MSME Policy 2008.*

Dharmapuri block, if declared as backward block, many entrepreneurs will come forward to start Small and Medium Industries in and around Dharmapuri block, which will lead to starting of new Industries and generation of employment opportunities for people of Dharmapuri.

Source: District Administration, Dharmapuri.

Across the blocks, Dharmapuri block has the highest share (38 percent) of the units as well as the employment opportunities (34 percent) followed by Harur during 2001. But in 2007, it witnessed a sharp fall in the proportion of units as well as share of employment opportunities.

Between the two census, the number of employment oppurtunities declined to the extent of 30 percent in Dharmapuri block and 22 percent in Harur Block. Karimangalam and Moroppur had the least share of 2 percent and 6 percent respectively, whereas the other blocks had a share of around 10 percent of the units. In spite of such a gloomy environment, Palacode, Pennagaram and Karimangalam appear to be emerging as industrial centres. All these three blocks have relatively lesser share but their growth in terms of both the units as well as employment shows promising potential for policy intervention.

### 5.6 Access to Land

In Dharmapuri district, a significant portion of the land is covered by forest. Of the total reported area, more than one third (36.5 percent) of the land is covered by forest. The gross cropped area is just 40 percent and the net sown area is just about one third (35 percent) of the total area reported (Table 5.7).

**Table 5.7 Land Utililization (2007-08)**

(in Ha)

| Block | Forest | Unclutivated | Others | Net Sown | Cropped (Gross) | Total |
|---|---|---|---|---|---|---|
| Dharmapuri | 13920 (8%) | 6036 (8%) | 4078 (8%) | 13070 (8%) | 15926 (10%) | 371 |
| Nallampalli | 9034 (6%) | 6254 (9%) | 5220 (13%) | 20839 (13%) | 23426 (15%) | 41347 (11%) |
| Pennagaram | 63128 (38%) | 17871 (25%) | 6338 (16%) | 25690 (16%) | 28049 (18%) | 64485 (18%) |
| Harur | 26248 (16%) | 14763 (21%) | 21658 (16%) | 25414 (16%) | 15926 (10%) | 88083 (24%) |
| Morappur | 19193 (12%) | 3863 (5%) | 6777 (17%) | 26365 (17%) | 30072 (19%) | 56198 (15%) |
| Pappireddipatti | 15798 (10%) | 5082 (7%) | 7296 (8%) | 12575 (8%) | 13265 (8%) | 40751 (11%) |
| Palacode | 12249 (7%) | 8694 (12%) | 1505 (10%) | 15989 (10%) | 13265 (8%) | 38436 (11%) |
| Karimangalam | 4607 (3%) | 8497 (12%) | 3242 (12%) | 18446 (12%) | 20148 (13%) | 34831 (10%) |
| District | 164177 (45%) | 71060 (19%) | 56114 (15%) | 158387 (43%) | 160079 (44%) | 364502 (100%) |
| Source: Statistical Handbook, 2007-08 | | | | | | |

The distribution of these lands is another concern. Table 5.8 provides the details about the size of land holdings and its distribution. The land holdings of SC/STs are relatively lesser than that of the land holdings of others.

Table 5.8 Land: Size and Distribution

| | SC | | ST | | Others | | Total | |
|---|---|---|---|---|---|---|---|---|
| Category | No | Area | No | Area | No | Area | No | Area |
| Marginal | 12338 | 5517 | 5198 | 2393 | 152954 | 67028 | 170744 | 75080 |
| Per cent to total | 7.2 | 7.3 | 3.0 | 3.2 | 89.6 | 89.3 | | |
| Small | 2572 | 3538 | 1285 | 1870 | 39894 | 55957 | 43820 | 61467 |
| Per cent to total | 5.9 | 5.8 | 2.9 | 3.0 | 91.0 | 91.0 | | |
| Semi-medium | 614 | 1580 | 424 | 1110 | 15620 | 41831 | 16715 | 44678 |
| Per cent to total | 3.7 | 3.5 | 2.5 | 2.5 | 93.4 | 93.6 | | |
| Medium | 77 | 398 | 52 | 271 | 3693 | 20136 | 3843 | 20932 |
| Per cent to total | 2.0 | 1.9 | 1.4 | 1.3 | 96.1 | 96.2 | | |
| Large | 2 | 22 | 0 | 0 | 200 | 2724 | 212 | 2992 |
| Per cent to total | 0.9 | 0.7 | 0.0 | 0.0 | 94.3 | 91.0 | | |
| Total | 15622 | 11074 | 6969 | 5654 | 212731 | 188046 | 235733 | 205548 |
| Per cent to total | 6.6 | 5.4 | 3.0 | 2.8 | 90.2 | 91.5 | | |

Source: District Statistical Report, Dharmapuri.
*Excluding Institutional holdings
Note : Below 0.5 and 1 and 0.5 to 1.00 ha - Marginal, 1.00 ha to 2.00 ha – Small, 2.00 - 3.00 and 3.00 - 4.00 - Semi-medium, 4.00 - 5.00, 5.00- 7.50 – Medium, 10.00 - 20.00 and above - Large

In the case of marginal holdings (less than 2 hectares), SC/STs hold only ten percent both in terms of the number of holdings and the share of area. When the size of holdings is more than two hectares, the share of SC/STs is less at a meagre six percent in number of holdings and just five percent in terms of area held. Thus, the larger share of land (95 per cent) is under the control of non-SC/STs.

Lack of assets, particularly land, would normally reduce the livelihood oppurtunities and that may be one of the reasons why most of the deprived sections work either in the fields of others or migrate in search of opportunities elsewhere.

In Dharmapuri district, as the distribution of land is skewed, the extent of landlessness is very high. As per the last BPL census, 66356 families, that is 71 percent of the BPL families have no access to land. Harur, Morappur, Nallampalli and Palacode have more number of landless BPL families. These blocks also have more number of poor people.

**Table 5. 9 Access to Land**

| Blocks | Rural Families | BPL Families | | Landless BPL Families | |
|---|---|---|---|---|---|
| | | Nos. | Percentage | Nos. | Percentage |
| Dharmapuri | 34347 | 9747 | 28 | 6902 | 71 |
| Harur | 44054 | 15160 | 34 | 11688 | 77 |
| Karimangalam | 36931 | 12490 | 34 | 8363 | 67 |
| Morappur | 39089 | 14438 | 37 | 10285 | 71 |
| Nallampalli | 41277 | 13901 | 34 | 9357 | 67 |
| Palacode | 34892 | 10726 | 31 | 8069 | 75 |
| Pappireddipatti | 21892 | 7471 | 34 | 5855 | 78 |
| Pennagaram | 38177 | 10057 | 26 | 66356 | 58 |
| District | 290659 | 93990 | | | |

Source: BPL Census.,2002

### 5.7 Livelihood Opportunities in Agriculture

Dharmapuri is mostly an agrarian district with the major workforce depending on this sector. But the performance of the agriculture is slowly improving. Table 5.8 provides a summary overview as well as the relative performance of agricultural sector in the district. Area, production, productivity and growth rates of major food and non-food crops have been estimated for the district and the state for the years 2004-05 and 2007-08 to have a comparative perspective.

The total area under cultivation of the food grains has recorded negative growth rates both for the State as well as the district. But the extent of decline is higher for the district at minus 19 percent against the state's growth of minus 6 percent. Area under pulses has declined to a greater extent of minus 36 percent and the area under cereals has recorded a negative growth of 14 percent.

The district has 3.1 percent of the state's area under the cultivation of foodgrains but its share of production was just 1.9 percent in 2004-05; in 2007-008, though the share of area declined to 2.7 percent, the foodgrain production has increased to around 5 percent of the state's production.

This indicates a higher productivity. Productivity of cereals increased from 1.44 ton per hectare in 2004-05 to 2.24 ton per hectare in 2007-08. Productivity of the pulses also increased considerably. The productivity of foodgrains as a whole increased from 1.18 ton/hectare to 1.9 ton/hectare during the reference period.

Thus, the declining area of cultivation coupled with increasing productivity points to the growth potential available on the agrarian front of the district. Planned public investment in irrigation and agricultural credit will certainly bring more areas under cultivation which will help the district on many fronts.

**Table 5.10: Growth, Share of Sown Area and Production of Major Crops in Dharmapuri and Tamil Nadu**

| Area/ Production | Productivity (in Tones) | | | | | | | | Area (in Hectares) | | | | Production (in Tonness) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | District | | | | State | | | | % of Area to Sate | | Growth | | % of Production to State | | Growth | |
| | 2004/2005 | | 2007/2008 | | 2004/2005 | | 2007/2008 | | | | | | | | | |
| Major Food and Non-Food Crops | Per –Hectare | Per -Acre | Per Hectare | Per –Acre | Per -Hectare | Per –Acre | Per -Hectare | Per –Acre | 2004/05 | 2007/08 | District | State | 2004/05 | 2007/08 | District | State |
| Paddy | 2.77 | 1.15 | 3.74 | 1.55 | 2.70 | 1.12 | 2.82 | 1.17 | 0.7 | 1.1 | 35.1 | -4.5 | 0.8 | 1.4 | 82.5 | -0.4 |
| Cholam | 1.16 | 0.48 | 1.32 | 0.55 | 0.67 | 0.28 | 0.87 | 0.36 | 5.7 | 4.7 | -20.0 | -24.7 | 9.9 | 9.1 | -9.5 | -1.7 |
| Cumbu | 1.13 | 0.47 | 1.60 | 0.66 | 1.27 | 0.53 | 1.44 | 0.59 | 1.9 | 1.3 | -51.8 | -38.7 | 1.6 | 1.6 | -31.8 | -30.9 |
| Ragi | 1.45 | 0.60 | 2.23 | 0.92 | 1.42 | 0.59 | 1.88 | 0.78 | 16.4 | 19.1 | -4.3 | -13.9 | 16.7 | 21.6 | 47.3 | 14.2 |
| Other | 0.87 | 0.36 | 1.17 | 0.48 | 0.85 | 0.35 | 0.97 | 0.40 | 42.6 | 31.3 | -44.3 | -24.3 | 43.7 | 25 | -24.9 | -13.4 |
| **Total Cereals** | 1.44 | 0.59 | 2.24 | 0.92 | 2.20 | 0.91 | 2.57 | 1.06 | 2.8 | 2.7 | -13.8 | -7.7 | 1.9 | 1.9 | 34.1 | 7.9 |
| **Total Pulses** | 0.37 | 0.16 | 0.53 | 0.22 | 0.37 | 0.15 | 0.30 | 0.13 | 4.2 | 2.6 | -35.9 | 3.3 | 4.3 | 4.6 | -9.4 | -14.6 |
| **Total Food grains** | 1.18 | 0.49 | 1.90 | 0.79 | 1.87 | 0.77 | 2.12 | 0.88 | 3.1 | 2.7 | -19.2 | -5.8 | 1.9 | 2.4 | 30.7 | 7.1 |
| Sugarcane | 79.7 | 33.0 | 107.7 | 44.5 | 110.0 | 45.5 | 107 | 44.4 | 4.4 | 4.9 | 76.1 | 59.3 | 3.2 | 4.4 | 137 | 55.7 |
| Cotton | 1.47 | 0.61 | 2.21 | 0.91 | 1.44 | 0.59 | 2.02 | 0.84 | 5.6 | 4.9 | -32.7 | -23.2 | 5.8 | 6.1 | 0.9 | 7.9 |
| Groundnut | 1.62 | 0.67 | 2.28 | 0.94 | 1.63 | 0.68 | 1.96 | 0.81 | 2.5 | 2.6 | -8.6 | -13.1 | 2.4 | 3.0 | 28.9 | 4.2 |
| Gingili | 0.45 | 0.19 | 0.26 | 0.11 | 0.47 | 0.19 | 0.37 | 0.15 | 0.5 | 0.3 | -33.1 | 2.3 | 0.5 | 0.2 | -62.0 | -19.3 |

Source: Department of Economics and Statistics, Chennai-600 006

### 5.8 Profile of the Poor

The district has 2.9 lakh rural families; out of which 32.3 percent (93990) are identified as poor by the BPL Census (Table 5.9). Out of the rural poor families, almost one fourth of them belong to SC community, 5 percent are STs and 42 percent are OBCs. Thus, the weaker sections viz. SC/ST and OBCs together constitute 71 percent of the rural poor families.

The spatial distribution of poor shows that Harur (34%), Morappur (37%), Nallamppalli (34%), and Karimangalam (34%) have more number of BPL families than that of the others blocks.

**Table 5.11 Profile of the Poor in Dharmapuri**

| Block Name | Rural Families | Rural Population | BPL Population | BPL Families | Community-Details | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | SC | ST | OBC | Others | Total |
| Dharmapuri | 34347 | 174086 | 46422 | 9747 | 1311 | 58 | 2191 | 1918 | 5478 |
| | | | | (28) | (13) | (1) | (22) | (20) | (56) |
| Harur | 44054 | 161034 | 52041 | 15160 | 5908 | 1603 | 3217 | 2509 | 13237 |
| | | | | (34) | (39) | (11) | (21) | (17) | (87) |
| Karimangalam | 36931 | 151725 | 40676 | 12490 | 2678 | 150 | 901 | 7911 | 11640 |
| | | | | (34) | (21) | (1) | (7) | (63) | (93) |
| Morappur | 39089 | 153468 | 52259 | 14438 | 5047 | 371 | 5167 | 2859 | 13444 |
| | | | | (37) | (35) | (3) | (36) | (20) | (93) |
| Nallampalli | 41277 | 194488 | 66559 | 13901 | 2199 | 64 | 9682 | 1743 | 13688 |
| | | | | (34) | (16) | (0) | (70) | (13) | (98) |
| Palacode | 34892 | 390332 | 104623 | 10726 | 1364 | 189 | 7787 | 1016 | 10356 |
| | | | | (31) | (13) | (2) | (73) | (9) | (97) |
| Pappireddipatti | 21892 | 86190 | 26608 | 7471 | 2074 | 1863 | 2892 | 83 | 6912 |
| | | | | (34) | (28) | (25) | (39) | (1) | (93) |
| Pennagaram | 38177 | 151612 | 37774 | 10057 | 1432 | 193 | 7286 | 60 | 8971 |
| | | | | (26) | (14) | (2) | (72) | (1) | (89) |
| District | 290659 | 1462935 | 426962 | 93990 | 22178 | 4533 | 39391 | 18241 | 84343 |
| | | | | (32) | (24) | (5) | (42) | (19) | (90) |

Source: BPL Census.

Note: Figures given in parenthesis are percentage share

## 5.9 Migration

The level of non-workers, increasing marginalisation and informalization of the workforce indicate the lack of employment opportunities in the district. A significant impact of these trends is the migration of families from the district. The BPL census has identified the extent of such migration.

Many BPL families have migrated in search of livelihood opportunities to neighbouring districts in Tamil Nadu, Kerala and Karnataka.

Absence of large scale economic transformation, lack of employment opportunities, increasing marginalisation and informalization of the workforce, poor

capabilities, landlessness, and chronic poverty have narrowed down the livelihood chances for the poor in Dharmapuri district.

**Table 5.12 Reason for Migration from BPL Families**

| Blocks | Casual Work | Seasonal Employment | Other Forms Of Livelihood | Non-Migrant | Other Purposes | Total |
|---|---|---|---|---|---|---|
| Morappur | 5584 | 1545 | 445 | 4252 | 87 | 11913 |
| Harur | 8473 | 1673 | 272 | 3405 | 36 | 13859 |
| Pappireddipatty | 3056 | 521 | 166 | 2991 | 29 | 6763 |
| Palacode | 3246 | 932 | 243 | 3909 | 41 | 8371 |
| Karimangalam | 2833 | 694 | 330 | 4195 | 69 | 8121 |
| Pennagaram | 3745 | 1097 | 461 | 3499 | 46 | 8848 |
| Nallampalli | 6153 | 1105 | 456 | 4741 | 64 | 12519 |
| Dharmapuri | 4258 | 1031 | 515 | 3645 | 84 | 9533 |
| Distirct | 37348 | 8598 | 2888 | 30637 | 456 | 7992 |

Source: BPL Census.

As a result, the workforce migrates to nearby districts and neighbouring states mostly in search of casual and seasonal work opportunities.

Table 5.12 shows the various reasons for migration from BPL families of which many have migrated for casual work and seasonal employment.

Across the blocks, Harur block has witnessed the higher migration. It may be noted that this block has more number of BPL families than other blocks. Nallampalli and Morappur have also witnessed sizable migration and Karimangalam recorded the lowest rate of migration (Table 5.12).

**5.10 Migration and Human Development**

Discussions with villagers as well as officials helped to understand the impact of migration on the families of migrants. There are reports that male migrants develop new families in their destination. There are also reports of migrants transmitting the dreadful disease AIDS from their destination to their origin. All these have a telling effect on the women and children of the migrants' families**.** The health of the women and the education of the children are mainly at stake.

The state of Kerala has witnessed a large scale migration of their people for years in search of better opportunities and this has depleted their workforce. This**,** in turn**,** has led to increase in wage rates and more immigration in search of manual

and semi-skilled work in construction and farm sectors for want of better wage rates elsewhere**.** Our state has to develop a clear policy framework to address the issues of both the migrants and the immigrants.

The migration from Dharmapuri is mostly distress migration and seasonal migration. And there is not much of immigration to the district. Hence, a clear policy direction is needed to mitigate distress migration and to protect the migrants at their destination as well. Towards that end, issues like causes and consequences of migration from Dharmapuri district need to be probed thoroughly by a detailed study to arrive at relevant policy- making**.**

**Box 5.2 Migration : Impact on Education and Society**

Many people migrate from Dharmapuri district to other parts of the State or other states in search of work. They work in stone quarries, rice mills, garment units etc as unskilled or skilled labourers and stay there. They leave their children with their aged parents or in relatives' houses. Migration problem is very serious in Pennagaram Taluk A study of a few schools reveals the prevalence of large scale migration. (Table B).The study shows that only 56% of school age children are living with their parents. This affects the growth and development of children. Physical, mental and emotional development suffers due to lack of parental care.During the year 2009-10, only 56% & 72% of children passed SSLC & HSC Exam respectively in the these schools (Table A). Lack of individual care and disciplining by teachers, failure to monitor school attendance, poor diet, falling prey to bad habits, indiscipline, and lack of awareness on health, hygiene, child marriages, child labour and issues of broken families affecting students can be attributed in one or more ways to the problem of migration.The issues of migration have its linkage with literacy rates and other social problems of the children of migrant families. Hence, there is need for more residential schools for the children of the migrant families in Pennagaram, Palacode and Pappireddipatti. Creating industrial estates and SIPCOT for starting of industries to provide employment opportunities to local people is the need of the hour to arrest migration of families.

Table A: Year-wise Percentage of Children passed in Public Exams

| School | 2007-08 | | 2008-09 | | 2009-10 | |
|---|---|---|---|---|---|---|
| | SSLC | HSC | SSLC | HSC | SSLC | HSC |
| GHSS, Eriyur | 54 | 41 | 55 | 65 | 73 | 87 |
| GHSS, Neruppur | 53 | 56 | 56 | 73 | 41 | 70 |
| GHSS, Sellamudi | 65 | 38 | 56 | 27% | 53 | 58 |
| Average % | 57 | 45 | 56 | 55 | 56 | 72 |

TableB : Details of Students Staying with Different Care Takers

| | School | | GHSS Eriyur | GHSS Neruppur | GHSS Sellamudi | **Total** | Average |
|---|---|---|---|---|---|---|---|
| Children Living with | No.of children enrolled | B | 815 | 351 | 380 | 1546 | |
| | | G | 649 | 270 | 307 | 1226 | |
| | | T | 1464 | 621 | 687 | 2772 | |
| | Parent | B | 343 | 298 | 297 | 938 | |
| | | G | 198 | 177 | 239 | 614 | |
| | | T | 541 | 475 | 536 | 1552 | 56% |
| | Mother | B | 48 | 21 | 15 | 84 | |
| | | G | 46 | 9 | 12 | 67 | |
| | | T | 94 | 30 | 27 | 151 | 5% |
| | Father | B | 11 | 8 | 9 | 28 | |
| | | G | 11 | 5 | 7 | 23 | |
| | | T | 22 | 13 | 16 | 51 | 2% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grand Parents | B | 306 | 11 | 45 | 362 | | |
| | G | 296 | 3 | 22 | 321 | | |
| | T | 602 | 14 | 67 | 683 | 25% | |
| Relation Home | B | 5 | 6 | 4 | 15 | | |
| | G | 4 | 0 | 4 | 8 | | |
| | T | 9 | 6 | 8 | 23 | 1% | |
| Alone | B | 1 | 0 | 9 | 10 | | |
| | G | 0 | 1 | 9 | 10 | | |
| | T | 1 | 1 | 18 | 20 | 1% | |
| Pvt. Home | B | 79 | 0 | 0 | 79 | | |
| | G | 63 | 0 | 0 | 63 | | |
| | T | 142 | 0 | 0 | 142 | 5% | |
| Govt. Hostel | B | 0 | 0 | 0 | 0 | | |
| | G | 26 | 41 | 13 | 80 | | |
| | T | 26 | 41 | 13 | 80 | 3% | |

Source: District Administration, Dharmapuri.

### 5.11 Child Labour

According to 2001 census, Dharmapuri district had 22759 child workers. The district administration of Dharmapuri has identified the current level of child labour mainly through SSA and NCLP (National Child Labour Project). Table 5.13 provides three different estimates in Dharmapuri district during last five years. The considerble variation among them is mainly due to the methodological difference. However, the summary figures indicate the quantum of child labour and its declining trends. The number of child labour has declined from 1519 to 537 between 2005-06 and 2009-10. The declining trend in the child labour is attributed mainly to the efforts of SSA and NCLP to enrol these children in the school.

**Table 5.13: Trends of Child Labour in Dharmapuri District**

| **Particulars** | **2005-06** | **2006-07** | **2007-08** | **2008-09** | **2009-10** |
|---|---|---|---|---|---|
| SSA Survey | 683 | 649 | 253 | 162 | 120 |
| NCLP | 751 | 694 | 644 | 514 | 415 |
| Joint Inspection | 85 | 4 | 13 | 8 | 2 |
| **Total** | **1519** | **1347** | **910** | **684** | **537** |

Source: District Administration, Dharmapuri.

### 5.12 Public Intervention to reduce Poverty

The district has been implementing various schemes funded by the state and the union government to provide employment opportunities and to alleviate poverty. As noted earlier, the state as such is known for many innovative social sector schemes targeting the select groups of disadvantaged or deprived sections.

Probably, the most important initiative of the state government has been the supply of basic necessities, viz. rice, wheat, sugar and kerosene at subsidised prices through PDS. The level of this subsidy may relatively be higher in Tamil Nadu but the scheme promotes human development by helping the poor in a big way becasue they spend more than 80 percent of their income on food. Providing rice at Rs. 1 per k.g. would certainly enhance their real income to a greater extent. One of the largest initiatives by the Union government towards poverty reduction is the enactment of the National Rural Employment Guarantee Act in August 2005.

**5.13 National Rural Employment Guarantee Scheme**

Based on the National Rural Employment Guarantee Act, the National Rural Employment Guarantee Scheme (NREGS) was first launched in ten districts of Tamil Nadu on 02.02.2006. Later, the scheme has been extended to the remaining twenty districts of the State including Dharmapuri on 1.4.2008. The scheme promises 100 days of employment in a year to rural households. Further, the scheme also aims at providing the economic and social infrastructure in rural areas. The cost of the scheme is shared between the Union and the State in the ratio of 90:10. In terms of cost and coverage, NREGS is the largest scheme of this type. The scheme has been recently redesignated as Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS).

In Dharmapuri, the field works taken include formation and renovation of ponds, desilting of channels, strengthening the bunds of irrigation tanks, laying of roads, etc. The initial reaction gathered from the public and officials could be the pointers to promote and strengthen the scheme particularly in a way that addresses some of the district specific issues like migration.

The details of the economic impact of MNREGS on women and initiatives taken by the district administration are given in Box 5.3.

**Box 5.3 MNREGS and its Impact on Migration of Women**

The MNREG Scheme was launched in April 2008 under the III Phase. Out of the Total households of 2.638 lakhs, 1.246 lakhs of families registered (job card issued). Thus, 47.23% of families have registered under MNREGS. The number of persons registered (job card issued) is 1.730 lakhs; of which Male is 0.897 lakhs and Female is 0.833 lakhs. Thus, 48.03 % of persons registered are female. The number of persons working under NREGS is 0.831 lakhs. Total allocation made since the inception of scheme is Rs. 67.874 crores.

| | | |
|---|---|---|
| Total Expenditure | - | 62.216 crores |
| 2008-09 | - | 12.428 crores |
| 2009-10 | - | 25.992 crores |
| 2010-11(23.8.10) | - | 23.796 crores |

| | | | | |
|---|---|---|---|---|
| Total Mandays created | - | 96.495 lakh days | Women | - 86% |
| 2008-09 | - | 19.726 | SC | - 57% |
| 2009-10 | - | 45.083 | ST | - 2% |
| 2010-11(23.8.10) | - | 31.686 | Others | - 41% |

1) **Economic Impact on women**

**Equity in wages**. Large number of women workers benefited under MNREGS. Rural wages for women agricultural labourers have increased. Bargaining power of women workers improved. The average number of persons paid wages in a week is 49969 of which women workers constitute 44922 (i.e. 90 percent). Income for the women has resulted in building of social capital and investment in health and education of children.

2) **Reduction in Migration:** The scheme has reduced the migration of women workers to Bangalore as construction labourers. During festivals like Pongal, Aadi and Dipawali less number of women passengers commute to Bangalore as compared two years back.

3) Unemployed educated boys, girls and college students during vacation also join MNREGS work and earn for their studies / fees.

4) **Physically challenged Persons Benefitted:** Especially orthopedics, dumb/deaf and partially blind get local employment. (around 156 persons benefitted last year).

**Initiatives of the District Administration**

1. Awareness campaigns have been conducted in all Panchayats to avoid migration.
2. NGOs and SHGs are trained about the benefits of MNREGS and equal wages to men and women.
3. During Collector's Mass contact programme, Grievance day meeting & Agricultural Grievance day awareness given on MNREGS and minimum wages of Rs 100 for specific out turn to prevent migration.
4. Awareness through Grama Sabha meeting played a major role for the improvement of MNREGS in this district.
5. Under MNREGS, the conveyance allowance given to those who came beyond 5 Kms to the worksite has increased number of workers to MNREGS and reduced migration.
6. Due to the reduction of migration and the attendance of large number of rural women workers, the expenditure of this district has been raised to Rs. 2534.40 lakhs (up to 2.9.2010) under NREGS during the year 2010-11.

Source: District Administration, Dharmapuri.

Table 5.14 shows the blockwise expenditure incurred towards the wage payments for unskilled work rendered by the poor under the MNREGS for the year 2009-10. The maximum share of expenditure is incurred in Pappireddipatti block.

Other blocks which have availed of the scheme include Dharmapuri, Karimangalam and Pennagaram.

Table 5.14: Mapping Poverty, Migration and MNREGS in Dharmapuri

| Blocks | Expenditure on Unskilled Wages (Rs. in Lakhs) | Expenditure Share of Blocks | Share of BPL Families | % of Migrants to total |
|---|---|---|---|---|
| Dharmapuri | 224.8 | 15.5 | 28 | 14.90 |
| Harur | 171.1 | 11.8 | 34 | 17.34 |
| Karimangalam | 216.8 | 14.9 | 34 | 8.46 |
| Morappur | 112.3 | 7.7 | 37 | 10.47 |
| Nallampalli | 158.8 | 10.9 | 34 | 10.16 |
| Pappireddipatti | 281.4 | 19.4 | 34 | 11.07 |
| Palacode | 89.7 | 6.2 | 31 | 15.66 |
| Pennagaram | 198.8 | 13.7 | 26 | 11.93 |
| District | 1453.7 | 100 | 32 | 100.00 |

Source (i) District Administration, Dharmapuri (ii) BPL Census.

Karimangalam is the block that has witnessed high level of migration. The blocks Palacode, Morappur and Harur have more BPL families and high migration levels but has availed of the scheme relativeley to a lesser extent. Efforts may be taken to promote more registration in these blocks.

Further, it appears that mostly women and aged people are availing this scheme whereas, the middle aged people, semi-skilled and more capable people continue to migrate. The main reason is the wage differentials. Those who migrate can get Rs. 350-450 per day in the construction sector of Kerala or Erode and a slightly higher wage in the nearby Bangalore city. The differnce between the MNREGS wage rate of Rs. 100 for 100 days and what the migrant would earn at their destination is very high.

As discussed earlier, migration is the district specific issue that has a bearing on human development in Dharmapuri but not in a postive way as perceived by standard literature. The causes and consequences of the migration in this district need an in-depth study.

As the migration taking place in Dharmapuri is due to lack of livelihood opportunities and its consequences on human development at the origin, particularly on the health of women and the education of children are serious, it needs to be contained. This can be done by creating adequate livelihood opportunities in the district by strenghthening the agriculture sector, by increasing more public investments in irrigation and other rural infrastructure.

Besides such long term efforts, as an immediate step, the district may be treated as a special case to strenghthen the MNREGS scheme by adding a state component. The state component may either be of an addition of another 100 rupees to the wage rate, or it may be of an additional 100 days of employment or a combination of both. Such an approach could certainly discourage the incentive to migrate and could mitigate the consequneces of such distress migration.

**5.14 Self-Help Groups**

The Self-Help Group (SHG) comes under the informal credit delivery sytem which aims for financial inclusion of the excluded and empowerment of the weaker sections. The scheme has emrged as the most successful model to provide micro finance for a large number of poor people both at the rural and urban areas with minimal risk and transaction cost. The SHG concept aims to promote thrift, credit, insurance and empowerment.

It could be taken note that the scheme was started first in Dharmapuri in 1989. Now the SHG movement is very vibrant across all districts of the state with nearly 59 lakh women as members.

Table 5.15 Number of SHGs Credit Linked in Dharmapuri

| Year | No of Groups Credit linked | Bank Loan | Per group average loan (lakhs) |
|---|---|---|---|
| 2006-07 | 6495 | 10030.89 | 1.544 |
| 2007-08 | 7504 | 13043.96 | 1.738 |
| 2008-09 | 9228 | 14189.04 | 1.573 |
| 2009-10 | 651 | 1813.54 | 2.785 |

Source: NABARD 2010

Dharmapuri district has 14739 SHGs and all of them are credit and savings linked. To support them, there are 80 bank branches and 42 NGOs engaged in the linkage programmes. Table 5.15 provides the details about the number of SHGs credit linked over the years.

Most of the women members of the SHGs are engaged in mat designing industry, producing various types of colour mats. They also produce food products. Thus, these women have got their livelihood opportunities through this scheme. The SHGs have been benefiting more than one hundred thousand women in various villages in the district. About 1,27,481 women are getting the benefits of this scheme. Mahalir Thittam is also implemented in partnership with NGOs who help in formation of SHGs, provide training and monitor them. NABARD (2010) has suggested the following means for the expansion and sustenance of linkage programme.

- Expanding the outreach of the existing NGOs and induction of NGOs in Harur and Morappur blocks.
- Indian Bank has opened Microsat branch at Dharmapuri and there is a scope for similar branches in each taluk of the district.
- In lieu of the rising trend of NPA loans, a study needs to be conducted to indentify reasons for default and effective measures to control frauds.

**5.15 Conclusion**

The level of unemployment is high in Dharmapuri as half of its population continues to be non-workers since 1991. A majority of the workforce is engaged in agriculture and share of industry (including household industries) is just 2 percent. The district has an industrial share of one-fifth of the GDDP that too without much of employment opportunities.

Between the last two censuses, though the rate of work participation has recorded marginal increase, the proportion of main workers has declined from 94 percent to 84.6 percent and the share of marginal workers has increased by 35 percent for males. The share of other workers has also almost doubled. These figures point to the marginalization and informalisation of the workforce in the district. The rate of marginalization is even higher among SC/ST workforce.

The total area under cultivation of the foodgrains in the district has recorded negative growth rate of minus 19 percent against the state's growth of minus 6 percent. However the productivity has shown an increase. The declining area of cultivation coupled with increasing productivity points to the growth potential available on the agrarian front of the district. Planned public investment in

irrigation and agricultural credit will certainly bring more areas under cultivation which will help the district on many fronts.

The district has 93990 (32.3 percent) poor families as identified by the BPL Census. 24% of the poor are SCs, 42% of the poor are OBCs and 5% of of the poor are STs. Harur and Morappur have more concentration of poor SC families. The concentration of poor STs is more in Pappireddipatti and Harur.

Absence of economic transformation in a big way, lack of employment opportunities, marginalisation and informalization of the workforce, poor capabilities, landlessness, and poverty have narrowed down the livelihood chances for the poor in Dharmapuri district and these conditions have ultimately pushed the workforce to migrate to nearby districts and neighbouring states mostly in search of casual and seasonal work oppurtunities. Forty percent (115055) of rural families have migrated. This distress migration had a serious effect on the migrant families, particularly on the health of women and education of children.

MNREGS is mostly availed of by women and aged people whereas, the middle aged people, semi-skilled and more capable people continue to migrate in lieu of high wage differentials.

# Chapter 6

# ENVIRONMENT

## 6.1. Introduction

In the last few decades, environmental concerns have drawn the attention of not only experts but also people at large. Population explosion, industrialization, urbanization have resulted in vast increase in consumption and production activities, which in turn have badly affected the fundamental functions of the environment, namely the supply of renewable and non- renewable resources and assimilation of waste. The over-exploitation of resources poses a challenge to sustainable development. Sustainable development refers to a development path that meets the needs of the present generation without compromising the needs of the future generation. Not only that, the wastes that are produced are beyond the assimilative capacity of the environment. They are caused by activities of people as consumers and producers and end with the people as victims. The earth today has become a spaceship. It cannot take more than a certain load. Environmental problems are basically economic problems.

Pollution is the introduction of contaminants into a natural environment that causes instability, harm or discomfort to the ecosystem. The three types of pollution are Water, Air and Noise pollutions. Environmental economics deals with issues relating to resource depletion and pollution. Both resource depletion and pollution affect sustainable development and quality of life.

The starting point of the economic theory of pollution control policy is optimum pollution. It refers to the level to which pollution has to be reduced. The major objective of pollution control policy is not to have zero pollution. That would mean zero production. The main aim is to contain pollution within the assimilative capacity of the environment taking into consideration the costs to the firm and the society in achieving this.

### 6.2. Impact of Agricultural Subsidies on Environment

The government plays a major role in controlling pollution by following command and control policies and/by providing incentives to reduce pollution by means of subsidization.

There is no doubt that subsidies are an important means of raising the consumption of a commodity or service which will improve the welfare of the people. But the environment, sometimes, may be badly affected by excessive subsidization. For example, excessive use of a subsidized product like fertilizers may do long-term damage to the fertility of the soil. Similarly, subsidy-induced excessive use of water affects the fertility of land due to soil erosion and salinity. Environmentally perverse subsidies are common in India as well as in other countries. The environmental policy must address the question of adverse subsidy regime in any meaningful discussion on environmental concerns.

This is not to say that all subsidies are bad and they cannot serve any useful purpose. There are many cases where subsidies can benefit the environment. For instance, we have subsidies for reforestation projects, farming techniques or crops which raise soil fertility. Similarily, expenditure on wetland protection, subsidies to encourage environment-friendly technologies, subsidies to promote windmill farms and subsidies for the promotion of public transportation and to reduce the use of private cars are some of the examples of subsidies beneficial to environment (Pandey et al. 2010).

Subsidies that emanate from government budgets have a dual impact. Some subsidies benefit some aspect of environment (e.g. subsidization of afforestation programme). Some subsidies (e.g fertilizers) while they promote economic objective (e.g, increase in agricultural output) may have adverse impact in the long run on the fertility of the soil and on environment. In the context of environment, subsidies can be divided into two groups: environment–promoting subsidies and environment–degrading subsidies. Although the volume of environmentally detrimental subsidies is large, environmental degrading impact remains unrecognized, unmeasured and uncontrolled.

Among the environmentally perverse subsidies, three agricultural inputs- power, irrigation and fertilizers- stand out as primary examples. Examples of

environmentally friendly subsidies that emanate from government budgets are: soil and water conservation, forest conservation, development and regeneration, afforestation and ecology development, flood control, anti-sea erosion projects, drainage, non-conventional sources of energy, environmental research, prevention and control of pollution and sanitation.

### 6.3. Environmental Profile of Dharmapuri District

*6.3.1. Background Information*: The Department of Environment (DOE) is the nodal department for dealing with the environmental management of the district. The report prepared by the AIMS Research (A Joint Venture of TCW/ ICICI, IDBI and ICICI), a leading consultancy and research organization formed the basis for developing *District Level Environmental Management Plan.*

Cauvery and South Pennar are the two major rivers flowing through the district. Only 16 per cent of net sown area is irrigated in the district as against the state average of 43.2 per cent, that too, through the seasonal rivers in the district, which remain dry for most part of the year.

Paddy and millets are two important crops grown in the district. Mangoes, bananas, grapes and tamarind are widely grown. And sizable land is under mulberry cultivation. There are many fruit processing industries in the district and there is further scope for the setting up of fruit-processing units and cotton and silk based industries.

Sizable quantities of chemical fertilizers are used in the district. In 1995-96, it was estimated by AIMS that out of about 34988 metric tonnes of chemical fertilizes used in 1995-96, nitrogen fertilizers constituted more than 50 per cent. There was an intensive use of pesticides in the district in that year. Soil and water conservation programs are being undertaken in all the blocks of the district by the construction of new wells for irrigation, check dams/stop dams and soil conservation works of cropping area.

Sheep-rearing has been one of the successful ventures in the district. By enhancing veterinary facilities, a further fillip to the occupation can be given. The district authorities have recognized the importance of biodiversity in their scheme for conservation of biological resources and protection of wild life and rare/

threatened species of flora and fauna. The infrastructure services and environmental status are discussed in the following sections.

## 6.4. Water

Water, which is the source of life on earth, is a resource without a substitute and it is unitary in nature. That is, interventions in any part of the hydrological cycle have an impact on the quantity and quality of water elsewhere in the cycle. This feature makes water pollution an invasive problem. Rising demand for water and the increasing shortage of water are imposing difficult choices for the administrators all over the world, especially in the developing countries. By 2025, it is estimated that more than 35 per cent of the world population will face severe water crisis (US Geological Survey, 2007).

The International Bank for Reconstruction and Development (IBRD), popularly known as the World Bank, has warned that lack of fresh water would be one of the major factors limiting economic development in the decades to come. "The rising demand for fresh water due to increasing pollution levels caused by untreated or partially treated municipal sewage, toxic industrial wastes and harmful chemicals from agricultural activities leached into surface and groundwater" (Karpagam, 2008).

There is an informed view from a majority of experts in the field of environmental economics that industrial water pollution is the most serious source of water pollution. It may be significant to note that unlike the neighbouring Krishnagiri district, and not so distant Erode district, there has been no discharge of industrial effluents in water bodies in Dharmapuri district.

The water problem of Dharmapuri district is in the area of drinking water. India is one of the countries where hydrofluorosis is a major public health problem affecting many states. Tamil Nadu is one of the southern states having ten of the 31 districts affected with fluorosis. Dharmapuri district is one of them. Fluorosis is caused by the ingestion of excess fluoride mainly through drinking water contamination. The data generated by Tamil Nadu Water and Drainage Board (TWADB) indicated that more than 50 per cent of the ground water sources have fluoride levels of more than 1.0 ppm in the districts of Vellore, Krishnagiri, Dharmapuri and Salem. The Hiognekkal drinking water and fluorosis mitigation

project serves ass an answer to the flurosis problem of Dharmapuri and Krishnagiri district as well.

### 6.5. Effect of Fluoride on Human Health

Fluoride is the most exclusive bone seeking anion and owing to its affinity for calcium phosphate, upto 99 per cent of the burden of Fluoride is found in bone. Long-term intake of water with excessive concentration of fluoride in the range of 5 to 10 mg/L will cause skeletal fluorosis, in which the bone structure will be affected causing bone deformation and crippling.

As per W.H.O standards, 0.6 mg/L fluoride ingestion is useful for bone and teeth development, but excessive ingestion will cause fluorosis. Children in the age group 0-12 years are more prone to fluorosis than others. Fluorosis, today, has become endemic. In the past it was considered a problem relating to teeth only causing dental fluorosis but today it has become a health hazard affecting bones and causing joint pain and muscular pain.

Fluoride distribution has been classified into three categories based on its concentration. Good category has a fluoride value of less than 1.00mg/L; moderate category has fluoride value between 1.00 and 1.50mg/L; and poor category has a fluoride value greater than 1.50mg/L.

Contrary to popular belief, the water in Dharmapuri district does not come under the poor category. While the five districts, Erode, Karur, Krishnagiri, Vellore and Virudhunagar come under the poor quality water with fluoride value above 1.50mg/L in open dug wells, Dharmapuri district comes under moderate quality water with fluoride value of 1 to 1.50mg/L in open dug wells and piezometers (bore wells), according to a study on Incidence of Fluoride in Tamil Nadu (as on January2008) conducted by the Water Resources Department of the Government of Tamil Nadu. There is also the problem of acute shortage of potable water in some blocks of the district. In fact, in the recent by-election to the Assembly from Pennagaram constituency, during the election campaign, water became an electoral issue.

Table: 6.1: Type of Water Pumps

| Type of Pump | Year | **Harur** | **Kadathur** | **Karimangalam** | **Palacode** | **Paparapatti** | **Pappireddipatti** | **Pennagaram** | **Marandahalli** | **Kambainallur** | **B.Mallapuram** | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hand Pump | 2005 | 77 | 46 | 55 | 86 | 77 | 51 | 95 | 26 | 72 | 49 | 634 |
| | 2006 | 81 | 46 | 56 | 80 | 77 | 51 | 108 | 27 | 72 | 49 | 647 |
| | 2007 | 81 | 46 | 56 | 64 | 77 | 51 | 108 | 27 | 72 | 58 | 640 |
| | 2008 | 81 | 50 | 56 | 50 | 73 | 51 | 110 | 32 | 72 | 58 | 633 |
| | 2009 | 81 | 51 | 64 | 47 | 68 | 58 | 115 | 32 | 80 | 58 | 654 |
| | 2010 | 81 | 51 | 64 | 50 | 72 | 60 | 118 | 35 | 82 | 62 | 675 |
| ElectricPump | 2005 | 32 | 17 | 2 | | 7 | 16 | 11 | 10 | 3 | | 98 |
| | 2006 | 32 | 17 | 4 | | 7 | 16 | 12 | 10 | 4 | | 102 |
| | 2007 | 32 | 17 | 4 | | 7 | 2 | 12 | 10 | 5 | | 89 |
| | 2008 | 32 | 17 | 4 | | 7 | 18 | 12 | 10 | 7 | | 107 |
| | 2009 | 32 | 17 | 4 | 2 | 7 | 18 | 12 | 10 | 8 | 10 | 120 |
| | 2010 | 32 | 17 | 4 | 2 | 7 | 18 | 12 | 10 | 9 | 12 | 123 |
| Mini Pump | 2005 | 6 | 4 | 18 | 2 | 15 | 3 | 15 | 22 | 2 | 7 | 94 |
| | 2006 | 9 | 6 | 18 | 8 | 15 | 3 | 20 | 22 | 2 | 8 | 130 |
| | 2007 | 9 | 6 | 18 | 22 | 15 | 3 | 22 | 25 | 2 | 8 | 130 |
| | 2008 | 9 | 6 | 19 | 42 | 19 | 3 | 24 | 35 | 2 | 8 | 167 |
| | 2009 | 9 | 6 | 22 | 45 | 25 | 3 | 30 | 40 | 2 | 8 | 190 |
| | 2010 | 9 | 6 | 26 | 52 | 26 | 3 | 32 | 40 | 3 | 9 | 206 |

Source: Deputy Director of Town panchyats, Dharmapuri.

**Table 6.2 Types of Water Pumps in Village Panchayats**

| Type of Pump | Year | Dharmapuri | Nallampalli | Pennagaram | Harur | Morappur | Pappireddiapati | Karimangalam | Palacode | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Hand Pump | 2005 | 1154 | 1292 | 1629 | 966 | 1152 | 590 | 900 | 927 | 8610 |
| | 2006 | 1201 | 1356 | 1629 | 966 | 1210 | 617 | 868 | 927 | 8774 |
| | 2007 | 1253 | 1356 | 1638 | 1042 | 1210 | 631 | 935 | 930 | 8995 |
| | 2008 | 1253 | 1356 | 1638 | 1042 | 1210 | 631 | 935 | 930 | 8995 |
| | 2009 | 1277 | 1502 | 1784 | 1062 | 1210 | 678 | 942 | 1017 | 9472 |
| Power Pump | 2005 | 220 | 288 | 265 | 275 | 274 | 175 | 257 | 249 | 2003 |
| | 2006 | 220 | 288 | 265 | 275 | 274 | 175 | 276 | 249 | 2022 |
| | 2007 | 302 | 346 | 265 | 275 | 301 | 171 | 346 | 310 | 2316 |
| | 2008 | 302 | 346 | 265 | 275 | 301 | 171 | 346 | 310 | 2316 |
| | 2009 | 316 | 420 | 265 | 474 | 311 | 194 | 311 | 332 | 2623 |
| Mini Power Pump | 2005 | 221 | 124 | 163 | 252 | 166 | 151 | 226 | 250 | 1553 |
| | 2006 | 220 | 125 | 169 | 252 | 166 | 142 | 260 | 250 | 1584 |
| | 2007 | 259 | 186 | 169 | 258 | 197 | 144 | 265 | 268 | 1746 |
| | 2008 | 259 | 186 | 169 | 258 | 197 | 144 | 265 | 268 | 1746 |
| | 2009 | 271 | 185 | 169 | 306 | 273 | 151 | 273 | 288 | 1916 |

Steps are being taken by the district administration to provide water facilities in areas hitherto lacking areas, by various sources such as utilising water from reservoir, ground water.

### 6.6. Forestry and Wasteland Management

6.6.1. Introduction: "The total forest cover and the tree cover in the state is 27634 sq.kms, which is 21.25 % of the geographical area of Tamil Nadu. This proportion is very much below the National Forest Policy stipulation of 25% by 2007 and 33.33% by 2012 and it is also above the national average of 21.16%. … In terms of per capita measure of forest land, the figure for Tamil Nadu is 0.04 hectare as against the national average of 0.08 hectare. These basic indicators of forest estimates clearly highlight the scarcity of forest resources in the state" (Eleventh Five Year Plan, Tamil Nadu, 2007-2012). The present status of forestry in Dharmapuri is given in Table 6.3.

**Table 6.3: Present Status of Forestry in Dharmapuri District (in hectares)**

| Geographic area | Total Forest Cover | Non-Forest Area | Cultivable Wastelands | % forest cover to total area |
|---|---|---|---|---|
| 449777 | 164177 | 394951 | 13953 | 36.50 |

Source: State of Forest Report, FSI State Forest Dept, 2009

The forest and tree cover in Dharmapuri district is encouraging, nevertheless, various steps are being taken to increase the green cover. The potrntial to utilise the wastelands in the district for development under farm forestry, fodder development and for production of medicinal plants is being studied. The convergence between the MNREGA and the National Afforestation Programme planned by the union government during 2010-11 in its budget would help in increasing the vegetative cover, checkup soil erosion and may accelerate the afforestation programme. There is a need for strengthening infrastructure and support services related to forestry and wasteland development.

It is a good idea to set up a government nursery in the district. Morever, initiatives are being taken to promote at least 2 to 3 centralized/ decentralized nurseries through SHG members/ SHG Federations/ farmers clubs to achieve the goal of National Forest Policy to bring 33% of the land area under forestry to maintain the ecological balance. The traditional activity under agro-forestry is

cultivation of forest species. Of late, the cultivation of thornless bamboo, sandalwood, *malaivembu* and Australian teak in patta lands has become emerging activity in the district.

By taking the unit costs (in lakhs) and the physical units into account, the Potential Linked Plan (PLP) 2010/11 of NABARD for Dharmapuri district has projected the requirement of a financial outlay of Rs.1235.55 lakh (for which a bank loan of Rs. 1112.00 lakh would be available) for the development of forestry, wasteland development, forest nursery, bamboo nursery, bamboo plantation, jatropha nursery, jatropha plantation and jatropha processing. The details are given in Table 6.4.

The following is the action plan for improving the environment listed out in the PLF 2010-11 Report.

- Banks may finance for the commercially viable tree species namely Neem, Casuarina, Teak, Jatropha, Pongamia, Forest Nursery, Eucalyptes and Subabul , etc. and avail NABARD 100% refinance.
- Farmers may be educated on the type of species that can be taken up on different types of wastelands, source of availability of good quality seedlings, age of maturity of trees, average return per hectare (ha) and cultural operations (scientific management).
- The State Forest Department may bring in some policy changes regarding relaxing the restrictions for the Farm Forestry/Agro-Forestry from the farmers' fields in the Forest Act itself to promote large scale plantation in the non- forest areas.
- Based on the PLP 2010-11 projections, a medium term plan for 5 years (2012-2017) coinciding with the Twelfth Five Year Plan, (Tamil Nadu) may be prepared for Forestry and Wasteland development and it may require a financial outlay of Rs. 6500 lakhs for a five year period, of which, the bank loan would be Rs. 5560 lakhs.

**Table 6.4: Physical and Financial projections for Forestry and WastelandDevelopment for 2009/10 and 2010-11**

(Rs. in lakh)

| Activity | PLP-2009-10 | | | | | PLP-2010-11 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Unit | Unit cost | Phy. Unit | Fin. Outlay | Bank Loan | Unit cost | Phy. Unit | Fin. Outlay | Bank Loan |
| Forest | Ha | 0.4 | 225 | 90 | 81 | 0.46 | 250 | 115 | 103.5 |
| Waste land Development | Ha | 0.87 | 1320 | 1148.4 | 1033.8 | 0.4 | 2050 | 820 | 738 |
| Forest Nursery | No | 1.25 | 6 | 7.5 | 6.6 | 1.25 | 13 | 16.25 | 14.64 |
| Bomboo Nursery | No | 2.5 | 2 | 5 | 4.6 | 2.5 | 2 | 5 | 4.5 |
| Bomboo Plantation | Ha | 0.4 | 380 | 152 | 136.8 | 0.48 | 380 | 182.4 | 164.16 |

| Activity | PLP-2009-10 | | | | | PLP-2010-11 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Unit | Unit cost | Phy. Unit | Fin. Outlay | Bank Loan | Unit cost | Phy. Unit | Fin. Outlay | Bank Loan |
| Jatropha Nursery | No | 1.5 | 3 | 4.5 | 4.2 | 1.5 | 3 | 4.5 | 4.05 |
| Jatropha Plantation | Ha | 0.3 | 220 | 66 | 59.6 | 0.42 | 220 | 92.4 | 83.16 |
| Jatropha Precessing | No | 1 | 5 | 5 | 4.5 | | | | |
| | | | | 1478.4 | 1331.1 | | | 1235.6 | 1112.01 |

Source: Potential Linked Credit Plan 2010-11, Dharmapuri district, NABARD, Tamil Nadu District Officer, Chennai.

*6.6.2. "Trees outside the Forests"* Project: The Forest Division and the Social Forestry Division of Tamil Nadu government have been implementing the project called "Tree Cultivation in Private Lands". This project is also called "Trees outside the Forests". Tamil Nadu is a pioneer state in implementing the project.

During 2009-10, about 91 lakh Casuarinas, teak and other seedlings were planted in the farm lands by the Forest Department of Tamil Nadu. According to the Forest Survey of India 2009 Report, the tree cover outside the forest area in Tamil Nadu is 3.82 per cent of the geographical area and the national average is 2.82 per cent.

Many farmers have even opted for drip irrigation for the teak plantations which are grown as intercrop agro forestry model. These trees over a period would help in keeping the environment clean, increase the income of the farmers and also increase the area under the tree cover (*The Hindu*, February 8, 2010). The progress made in the Tamil Nadu Afforestation Project (TAP) and Tree Cultivation in Private Lands (TCPL) project in Dharmapuri district for the period from 2007-08 to 2009-10 (as on 15-03-2010) is given in Table 6.5

**Table: 6.5 Financial and Physical Targets of Tamil Nadu Afforestation Project and Tree Cultivation in Private Lands**

| Scheme\ Year | Financial (in lakh) | | | Physical (in No) | | |
|---|---|---|---|---|---|---|
| | Target | Achievement | % | Target | Achievement | % |
| TAP | | | | | | |
| 2007-08 | 81.99 | 81.99 | 100 | 750 | 750 | 100 |
| 2008-09 | 54.33 | 54.33 | 100 | 500 | 500 | 100 |
| 2009-10 | 33.54 | 30.52 | 91 | 121000 | 121000 | 100 |
| Sub-Total | 169.86 | 166.84 | | 122250 | 122250 | 100 |
| TCPL | | | | | | |
| 2007-08 | 22.82 | 22.82 | 100 | 250000 | 250000 | 100 |
| 2008-09 | 23.3 | 26.3 | 100 | 275000 | 275000 | 100 |
| 2009-10 | 33.12 | 32.12 | 97 | 265000 | 265000 | 100 |
| Grand Total | 79.24 | 81.24 | 99 | 790000 | 790000 | 100 |

Source: Interface Forestry Division, Krishnagiri. TAP - Tamil Nadu Afforestation Project
TCPL - Tree cultivation in Private Lands

Under the "Trees outside the Forests" scheme, seedlings are being supplied to government schools and aided schools so that there will be green cover. Not only that, during summer months, classes can be conducted for children under the trees in the open air in a natural environment.

A look at Table 6.5 reveals that most of the financial and physical targets for the period from 2007-08 to 2009-10 (as on March 15, 2010) in the TAP and TCPL have been fulfilled. As both the projects are of immense economic and environmental value, the excellent track record may be maintained in future and more funds may be obtained for the two projects from the State government as well as the Union government. Under Bamboo Mission, a sum of Rs.4.758 lakhs was utilized for training, publicity and developing bamboo plantation in 72.5 ha. during the year 2008-09 (PLP 2010-11, Dharmapuri district).

## 6.7. Environmental Health

> Focusing on clinical services while neglecting services that reduce exposure to disease is like mopping up the floor continuously while leaving the tap running. - (Paraphrased from Laurie Garret, *Betrayal of Trust: The Collapse of Global Public Health)*

*6.7.1. Introduction: Environmental sanitation* is known nowadays as environmental health. Health systems have three major sets of services of which the first two constitute public health services: (i) population wide preventive services to reduce exposure to disease through measures such as implementing health and sanitary regulations to ensure environmental health, monitoring health conditions, acting to avert potential health threats and controlling outbreak if they occur; (ii) clinical preventive services provided to individuals such as screening and vaccination for maternal and child health; and (iii) medical services to care for and treat individuals with injuries and disease. The first two of these services together are referred to as public health "while the first alone is called "environmental health" (Monica Das Gupta et al. 2010).

Essentials of environmental health services include water and sanitation, solid waste management and drainage, food safety and occupational health and safety (Cairncross et al. 2003).

Public health services in general, environmental services in particular, constitute a pure public good, and form a basic part of a country's developmental

infrastructure. Public health and sanitation are primarily the responsibility of the government. Sanitary infrastructure needs to be developed, as the Urban Renewal Mission did, and aslo their *maintenance* must be monitored for compliance with health standards.

Departments of Medical Services and Public Health provide for cost-effective and efficient public health system in Tamil Nadu.

**Table 6.6 Health Spending (by Directorate), TN Health Department 2008-09.**

| Particulars | % share |
|---|---|
| Directorate of Public Health | 38.8 |
| Directorate of Medical Service | 23.1 |
| Directorate of Medical Education | 38.1 |
| Total | 100 |

Source: Monica Das Gupta et al. -op cit, p.47.

Note**:** 1**.** The Directorate of Public Health's budget includes the entire public health workforce down to subcentres, and all the single issue programmes except TB and leprosy.

2. The Directorate of Medical Education budget includes teaching hospitals and attached institutions. 3. Excludes cash subsidies to pregnant,/ lactating mothers.

*6.7.2. Sanitation***:** Sanitation is the science of safeguarding health. The World Health Organisation (WHO) defined environmental sanitation as the control of all those factors in man's physical environment which excercise or may excercise a deleterious effect on his physical development, health and survival.

*6.7.3 Education and Toilets*: What stand between rural girls and a good education is often basic facilities like transport and proper toilets.

**Table : 6.7 Facilities in Schools**

| | | Std I-IV/V | | | Std V-VII/VIII | | |
|---|---|---|---|---|---|---|---|
| | % Schools with | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 |
| Water | No facility | 23.4 | 15.4 | 12 | 16.4 | 12.6 | 9.8 |
| | Facility but water not available | 10.8 | 5.3 | 6.4 | 8.5 | 5 | 6.4 |
| | Available | 65.8 | 79.2 | 81.6 | 75.1 | 82.4 | 83.8 |
| Toilet | No facility | 27.8 | 20.1 | 16.5 | 20.6 | 13.7 | 11.6 |
| | Facility but toilet not usable | 14.1 | 31.7 | 30.4 | 14.3 | 15.1 | 30.5 |
| | Usable | 58.1 | 48.2 | 53.1 | 65.1 | 71.2 | 57.9 |
| Midday meal served on day of visit | | 83.7 | 79.8 | 97.2 | 85.7 | 79.1 | 99.6 |

Source: Annual Survey of Education Report, (ASER), 2009.

The Annual Status of Education Report (ASER) 2009 facilitated by the NGO *Pratham* based on a comprehensive survey of government and private schools in 575 out of 583 districts in India revealed that only 50 per cent of government

schools have toilets and that four out of 10 government schools did not have separate toilets for girls (The Hindu, 24-1-2010).

The trends over time in school facilities in rural Tamil Nadu as reported by ASER, 2009 are given in Table 6.7.

Table: 6.7reveals that drinking water is not available in nearly 20 percent of the schools. It further reveals that nearly 50 % of primary schools do not have toilets or have facility but not usable. For middle schools, the percentage is 42.

Table 6.8 reveals that in nearly 30 percent of rural primary schools and 22 percent of elementary schools in rural Tamil Nadu, there is no separate provision of toilets for girls. Even in schools, where there are separate toilets for girls, only 43 per cent of toilets in primary schools and 52 per cent of toilets in elementary schools. The other toilets are either locked or not usable.

**Table 6.8: Girls Toilets in 2009**

| Toilets | Std I-IV/V | Std V-VII/VIII |
|---|---|---|
| No of Schools visited | 281 | 227 |
| % Schools with no separate Provision for girls toilets | 29.5 | 21.6 |
| Of schools where there are separate girls toilets, % schools where: | | |
| Toilet locked | 13.2 | 11 |
| Toilet not usable | 14.2 | 15.4 |
| Usable | 43.1 | 52 |

Source: ASER, 2009.

Though most state governmnets were on course to achieve the drinking water supply targets under Millennium Development Goal 7 (MDG7) by 2011, they were nowhere near reaching the sanitary milestones. Though Tamil Nadu had almost cent per cent coverage of drinking water, only 69 per cent of the population had access to sanitation (*The Hindu*, 28-01-2010).

Tamil Nadu had bagged 1474 Nirmal Gram Panchayat awards in 2007-08 but many award wining panchayats had been unable to sustain "open defecation–free" status. A recent study had revealed that 33 per cent of the households of awardee panchayats had slipped back to open defecation practices. Nearly 35 percent of toilets constructed under the Total Sanitation Campaign were not in use.

As per the above survey, 1794 out of 2258 toilets units were not existing. That means, nearly 80 percent of toilet units were not existing.

Toilet facilities were provided in 419 schools between total sanitation date and survey date. Of these, 383 were constructed under TSC Scheme and 36 toilets were constructed under other schemes.

### 6.7.4: Household Sanitation

Table 6.9 gives details of sanitation facilities in households as per the Baseline Survey conducted in May 2004.

**Table : 6.9: Sanitation Facilites in Households**

| Name of the Block | Total Households as per survey | | | Sanctioned Coverage as per Survey | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | APL | | | BPL | | |
| | APL | BPL | Total | With Toilet | Without Toilet | Total | With Toilet | Without Toilet | Total |
| Dharmapuri | 19354 | 13040 | 32394 | 9246 | 10108 | 19354 | 2172 | 10868 | 13040 |
| Nallampalli | 14011 | 22113 | 36124 | 3834 | 10177 | 14011 | 5553 | 16560 | 22113 |
| Pennagaram | 14338 | 17140 | 31478 | 1562 | 12776 | 14338 | 2265 | 14875 | 17140 |
| Harur | 9460 | 20700 | 30160 | 2401 | 7059 | 9460 | 3558 | 17142 | 20700 |
| Morappur | 1766 | 34301 | 36067 | 926 | 840 | 1766 | 4615 | 29686 | 34301 |
| Pappireddipatti | 9008 | 12729 | 21737 | 4725 | 4283 | 9008 | 5032 | 7697 | 12729 |
| Karimangalam | 5569 | 21253 | 26822 | 807 | 4762 | 5569 | 3723 | 17530 | 21253 |
| Palacode | 12135 | 20491 | 32626 | 1937 | 10198 | 12135 | 4858 | 15633 | 20491 |
| Total | 85641 | 161767 | 247408 | 25438 | 60203 | 85641 | 31776 | 129991 | 161767 |
| Percentage | 34.4 | 65.6 | 100 | 29.7 | 70.3 | 100 | 19.6 | 80.4 | 100 |

Source: District administration, Dharmapuri.

An analysis of Table 6.9 reveals that out of 2,47,408 households, only 85,641 households (35 per cent) were above poverty line (APL) and 1,61,767 households (65 per cent) were below poverty line (BPL). That means 70 per cent of the APL households and 80 percent of BPL households did not have toilets at home in 2004. This shows that irrespective of the income level, most of the households in the district had recourse to open defecation as per the Baseline Survey during May 2004.

There is need for creating environemntal health awareness among the people and the Total Sanitation Campaign scheme has to be widened and more funds are to be allocated. Environmental sanitation with hygienic practices at household level will go a long way in preventing diseases of gastro-intestinal system.

### 6.8. Toilet facilities in Anganwadi Centres

According to the Baseline Re-survey conducted in November 2003, before the implementation of the Total Sanitation Campaign, none of the anganwadis functioning in government buildings and private buildings had toilet facilities. With the implementation of the TSC, toilets were constructed in 533 government buildings housing anganwadis. And 165 new anganwadi centres have been started after the Baseline Survey. The total number of centres functioning comes to 1321 centres. Out of this, 802 centres in government buildings and 120 centres in private buildings are provided with toilet facilities. Toilets are to be provided in 399 centres.

### 6.9. Sanitation at Bus Stands

Table 6.10 gives minimum sanitation facilities required for bus stands as per Indian Standards Code.

Table 6.10: Minimum Sanitary Facilities Required for Bus Stands as IS Code

| Sl. No | Place | W.C.S. for Males | W.C.S. for Females | Urinals for Males |
|---|---|---|---|---|
| 1 | Bus stands | Three for first 1000 persons and one for every Subsequent 1000 persons or a part there of | Four for first 1000 and one for every additional1000 persons or a part there of | Four for first 1000 and one for every additional1000 persons or a part there of |
| 2 | Bus Terminals | --Do-- | --Do-- | --Do-- |

Source: *Public Health and Environmental Sanitation in Road Transport*, Motisa Publications Thanjavur, Study by Malathy, (2008).

It has been estimated (Malathi, 2008) that if about 2,000 persons use a bus stand daily, the annual recurring expenditure (cost of labour charges, cost of cleaning materials and any other expenditures) would come to Rs. 1,31,500 and non-recurring expenditures (buildings and equipment) would come to Rs. 3,50,000. Keeping these figures in mind as tentative estimates, the facilities at Dharmapuri bus stand may be improved.

Besides the construction and proper maintenance of latrines, creation of green belt, enforcement of prevention of Smoking Act, maintaining cleanliness and hygiene in the waiting halls, installation of more lighting facilities, supply of treated drinking water, forbiding animals (stray dogs, etc) and installation of more spittoons would promote envirnmental health at bus stands.

### 6.10. Solid Waste Management

The Municipal Administration has been evincing keen interest in the solid waste managment in Dharmapuri Municipality. Dharmapuri Municipality has 33 wards. About 32 metric tonnes of solid waste is generated daily in the above wards. The solid waste is removed and stored in 20 godowns. The Disctrict Collector allotted 11.08 acres of land at a village and infrastructure is being built for the conservation of the solid waste into fertilzer. By proper solid waste management, the dump yards can be converted into money spinners.

### 6.11 Underground Drainage Scheme

Open drainage has been the bane of many towns and cities in Tamil Nadu. It is now the declared policy of the State to have underground drainage facilities throughout the state in a phased manner. The review details of the progress of the Dharmapuri Municipality underground drainage scheme are given in Table: 6.11.

**Table 6.11 Underground Drainage Scheme in Dharmapuri Municipality**

| Description | Reply | |
|---|---|---|
| Physical & Financial Progress | Manholes | 965 Nos |
| | Sewer line | 21051 m |
| | HSC | 3079 Nos |
| | Road restoration | 13298 m |
| | Expenditure | Rs.599 lakhs |
| Details of Payments made to TWAD | Action Taken By Municipality | |
| | 28-08-08 | Rs.100 lakhs |
| | 24-10-08 | Rs.34 lakhs |
| | 23-10-09 | Rs.90 lakhs |
| | 29-04-09 | Rs.40 lakhs |
| | 25-06-09 | Rs.121 lakhs |
| | 22-07-09 | Rs.40 l akhs |
| | 20-11-09 | Rs.100 lakhs |
| | 1/3/2010 | Rs.74 lakhs |
| | Total | Rs.599 lakhs |
| Details of SOE received from TWAD Board | Up to 1/2010 Rs.482.99 lakhs | |
| Pending issues related to finalization of land for pumping station & STP | Nil | |
| Status of obtaining consent to establish from TNPCB for STP | Consent letter obtained on 6.1.10 | |
| Status of clearance for environmental impact assessment report from TNUIFSL for STP | To be received from TNUIFSL | |
| Public Deposit mobilized as on date with reference to the Target as per the G.O | | |
| Plan of action for achieving the collection of entire public deposit envisaged in the project | | |
| Status of obtaining general and final approval for the By law for effecting house service connection | Bye- law for house service connection sent to Govt. Gazette for notification | |

Source: Commissioner of Dharmapuri Municipality

### 6.12. Free Distribution of Cycles to School Students

The free distribution of cycles for school students, besides improving the enrolment ratio, and reducing the dropout rate, will have the effect of keeping the environment clean and there will be less of air pollution on roads as cycles come under the category of non-motorized transport.

### 6.13. Free LPG Connection and Gas Stove Scheme

Under the Free LPG Connection and Gas Stove Scheme, during 2006-07, gas connections and gas stoves were given in Dharmapuri (1400), Pennagaram (1247), Palacode (1245), Harur (1245), and Morappur (1245) Assembly constituencies. The total number of beneficiaries was 6432.

During 2007-08, the number of free LPG connections given in Dharmapuri taluk was 2905, Harur 2402, Palacode 4660, Pappireddipatti 4663 and Pennagaram 4662. The total number of connections given in the above taluks during 2007-08 came to 19,292. During 2008-09, 14,470 households were benefited by LPG Connection and Gas Stove Scheme in the district.

During 2009-10, 16800 households were benefited by LPG Connection and Gas Stove Scheme. This will go a long way in reducing air pollution and make cooking less strenuous for the women and it will promote environmental health.

Anganwadi centres have been provided with gas stoves and LPG connections by district administration and through *Namakku Naame Thittam* and sponsors.

All hostels for BC and MBC students and Adi Dravida hostels shifting to gas stoves from firewood in a phased manner.

### 6.14 Plastic

Steps are being taken by the district administration to reduce plastic usage. The first focus area has been identified as Hognekkal due to the quantum of usage at a single spot and the mass reduction is possible in quick time due to proper initiatives.

# Chapter 7

# SUMMARY

## Summary

The capability approach concentrates on human well-being more than the growth or income dimension. And such well-being always depends on the attainment of basic human needs in general as well as the need-based priorities of the weaker sections or backward regions in particular. Deprivation is the result when access to the basic needs are not ensured. It may have different dimensions viz., unemployment, illiteracy, ill-health, income poverty, gender disparity, etc.

The district of Dharmapuri witnesses a combination of all these dimensions. The general environment of the district is backward more on the social sphere than in the economic sphere.The neighbouring districts too suffer from similar social backwardness which indicates the relevance of an integrateded policy approach for the region as a whole.

Still, the level of deprivation varies across space (blocks/taluks) within the district and among communities defined by gender and social groups. The Human Development Index computed at state/national levels would have concealed the variations across the social groups and smaller spatial regions.

But this district level analysis has facilitated to bring out a lot of extremities that otherwise would have got concealed under averages**.** It is evident that the levels of deprivation are high among the weaker sections viz**.**, women and SC/ST communities. In terms of regional spread within the district, Karimangalam, Morappur and Palacode are some of the relatively backward blocks by many indicators.

It is obvious that public intervention plays a crucial role in promoting human development in the backward region like Dharmapuri. But it is found that though there are significant levels of interventions and excellent performance in the public health administration, greater heights are yet to be attained by increased public expenditure on education and rural infrastrucutre.

## Suggestions

The following are the overview and some of the specific suggestions that emanate from the analysis to improve the human development further in Dharmapuri district.

The narration of the geographical and development profile provides the district-context for public intervention policies for human development. Unfavourable natural endowments, topography and the consequent underdevelopment are the major causes for the backwardness of Dharmapuri district.

With 85 % of the population being rural and 75 % of the workforce being in the agricultural sector, the failure of the primary sector in the district coupled with a stagnant secondary sector is a cause for concern and a reason for more public expenditure in this district.

Fiscal Policy plays a critical role in Tamil Nadu's development strategy. The Dravidian movement, during the first half of the 20th century, has played a significant role in shaping the social development policy of the state. Thus, public expenditure in Tamil Nadu is used to directly facilitate and promote human development which is the 'means as well as the end' of the development strategy of the state due to both histrorical as well as ideological reasons.

The Dharmapuri district administration has accorded the highest priority for human development. It has spent large amount of money to promote human development, but still additional fund flow would facilitate further human development in Dharmapuri. The priority areas include education and rural infrastructure.

The life expectancy at birth in Dharmapuri is relatively lower than that of the state. But the district has attained significant progress in terms of the other health indicators. IMR has recorded a sharp decline from 58.5 (2001-02) to 24 (2008-09) and MMR declined in recent years. The increase in the number of PHCs must be the main reason for this attainment. This is also reflected in the number of PHC deliveries which has increased about four times in recent years coupled with sharp reduction in domiciliary deliveries. The implementation of NRHM and many special

initiatives by the district administration have contributed to a greater extent for the above attainments. The number of Anganwadi centres has also increased.

One of the concerns is the existing vacany positions in government hospitals. Efforts may be taken to fill up the vacancy positions.

Another concern is the availability as well as the quality of the drinking water and its impact on public health. The increase in the number of dental cases during the reference period is mainly due to the fluoride content of the water in the district. The Hogenakkal Integerated Drinking Water project is already initiated to address this issue and the present government has avowed to speed up its implementation. But, until then some immediate iniatives may be taken.

Like Metro water in Chennai, safe drinking water may be distributed to the extent possible through tanker lorries as a contingency measure in areas where there is acute shortage of drinking water.

Migrant-transmitted AIDS is another emerging concern of public health. Linkages between migration and AIDS, and health of the women in the migrant families need to be examined by commissioning a study to arrive at specific strategies of intervention.

Tamil Nadu is one of the top ranking states in literacy attainment as well as in higher education. But Dharmapuri district is yet to attain the same. Efforts may be taken to open new public schools at high school and higher secondary levels. These schools are the crucial links which can help the rural children to gain access to higher education. Higher education in Dharmapuri is predominantly private. The presence of government in higher education may be strengthened further.

The pupil-teacher ratio computed for high schools and higher secondary schools reflect slightly higher levels. As pupil-teacher ratios reflect the quality and will affect the educational attainment, the existing vacancies may be filled up.

Dropout rates for the district both at the primary level and upper primary level were initially higher than that of state's average. But they have declined during the recent years; while the fall in dropout rate was considerable at primary level, the decline was sharp at the upper primary level. The other indicators like NER at the primary and upper primary levels have also recorded significant improvement in recent years. These achievements are attributed mainly to the implementation of

Sarva Shiksha Abhiyan (SSA) and other schemes and incentives provided by the state government.

But, the literacy attainment of the district as a whole as per 2001 census was the lowest. The district also has sizable number of out of school children. Though commendable progress has been made in the last few years at the primary and upper primary level, the high school and higher secondary level and collegiate level need special attention and more investment.

The issue of migration also has its linkage with the literacy rates and dropout rates of the children of migrant families. Hence, residential schools for the children of the migrant families may be provided**.** This will also address the issue of child labour to some extent.

One suggestion is, instead of having large number of GTR schools spread over many tribal villages for the sake of proximity, we can have two or three GTR High Schools or Higher secondary schools in a centrally located tribal panchayat with all teachers and non-teaching staff pooled in from the existing GTRs and with adequate infrastructural facilities. This will function like the Ekalaivya Tribal residential Schools supported by Government of India. The quality of education will be better due to more teachers engaged in teaching activities, than managing procurement of provisions and submission of bills/ vouchers. Monitoring and supervision will also be better and improve the standard of education. We can also include 10% children from plains belonging to SC or BC/ MBC in these schools to forge better interaction among students of various social groups. This school will be a model residential school run on the lines of the Ekalaivya Tribal Residential School and the SSA KGBV residential school, catering to all tribal students in the district. An effort to connect the schools in remote villages through internet is successfully started.

The level of unemployment is high in Dharmapuri as half of its population continues to be non-workers since 1991. A majority of the workforce is engaged in agriculture and share of industrial (including household industries) is just 2 percent. The district has an industrial share of one-fifth of the GDDP.

Between the 1991 and 2001 census, though the rate of work participation has recorded marginal increase, the proportion of main workers has declined from 94 percent to 84.6 percent and the share of marginal workers has increased by 35 percent for males. The share of other workers has also almost doubled. These figures indicate the marginalization and informalisation of the workforce in the district. The rate of marginalization is even higher among SC/ST workforce.

The declining area of cultivation coupled with increasing productivity points to the growth potential available on the agrarian front of the district. Planned public investment in irrigation, agricultural credit will certainly bring more areas under cultivation which will help the district on many fronts.

The district has 93990 (32.3 percent) poor people as identified by the BPL Census. 34% of the poor are SCs, 42% of the poor are OBCs and 5% of the poor are STs. Harur and Morappur have more concentration of poor SC families. The concentration of poor STs are more in Pappireddipatti and Harur. This kind of focus area approach is a positive trend visible in the Government intervention.

An entrepreneur who wants to start small & Medium Industry in Dharmapuri block which is most conducive for starting industries could not avail incentives offered by the Tamil Nadu Government as per the MSME Policy 2008. An amendment may make it possible for Dharmapuri to beome a favourable destination.

Dharmapuri block, if declared as backward block, many entrepreneurs will come forward to start small and medium industries in and around Dharmapuri block, which will lead to starting of new Industries and generation of employment opportunities for people of Dharmapuri.

In te past, absence of large scale economic transformation, lack of work opportunities, increasing marginalisation and informalization of the workforce, poor capabilities, landlessness, and chronic poverty have narrowed down the livelihood

chances for the poor in Dharmapuri district and these conditions have led the workforce to migrate to nearby districts and neighbouring states mostly in search of casual and seasonal work opportunities. This distress migration had a serious effect on the migrant families, particularly on the health of women and education of children.

The MNREGS is mostly availed of by women and aged people whereas, the middle aged people, semi-skilled and more capable people continue to migrate in lieu of sizable wage difference.

Public investments may be made to promote irrigation and rural infrastructure like roads. This will go a long way in creating livelihood opportunities.

Hence, there is need for more residential schools for the children of the migrant families in Pennagaram, Palacode and Pappireddipatti. Creating industrial estates and SIPCOT for starting of industries to provide employment opportunities to local people is the need of the hour to arrest migration of families.

A detailed study may be commissioned to thouroughly examine the quantum of employment seeking migration from the district, its nature, causes and consequences, particularly on the health of the women and education of the children.

The findings of such study should form the basis for a clear policy approach which needs to be framed. The state of Tamil Nadu is known for many innovative social sector schemes. As the employment oriented distress migration from Dharmapuri district has a multiple bearing on the human development of the people in this region, it may influence the whole economy of the region also. Hence, the state can frame a clear policy for migrants as it may be followed by many other states like Kerala, Punjab and Bihar.

In the green front Dharmapuri district is in the first league with 35% forest cover. The post harvest technology is a promising scope in agriculture front. There is a great scope for the setting up of fruit-processing units and cotton and silk based industries.

The available uncultivated expanse of land in the district can be used for development under farm forestry, fodder development and for production of medicinal plants. The convergence between the MNREGA and the National

Afforestation Programme planned by the union government during 2010-11 in its budget may help in increasing the vegetative cover to check soil erosion and may accelerate the already strong afforestation programme. There is need for more focus on strengthening infrastructure and support services related to forestry and wasteland development.

There is an urgent need to promote at least 2 to 3 centralized/ decentralized nurseries through SHG members/ SHG Federations/ farmers clubs to achieve the goal of National Forest Policy to bring 33% of the land area under forestry to maintain the ecological balance. A support price mechanism by the state government for the forest produce (casuarinas, eucalyptus, subabul, pongamia seeds, etc) may be formulated as in the case of Andhra Pradesh.

Banks may finance the commercially viable tree species namely Neem, Casuarina, Teak, Jatropha, Pongamia, Forest Nursery, Eucalyptes and Subabul , etc. and avail NABARD 100% refinance.

Based on the PLP 2010-11 projections, a medium term plan for 5 years (2012-2017) coinciding with the Twelfth Five Year Plan, (Tamil Nadu) may be prepared for Forestry and Wasteland development and it may require a financial outlay of Rs. 6500 lakhs for a five year period, of which, the bank loan would be Rs. 5560 lakhs.

Toilet facilities are to be provided in all schools, with separate toilets for girls and they should be maintained in a usable condition with required supply of water.

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