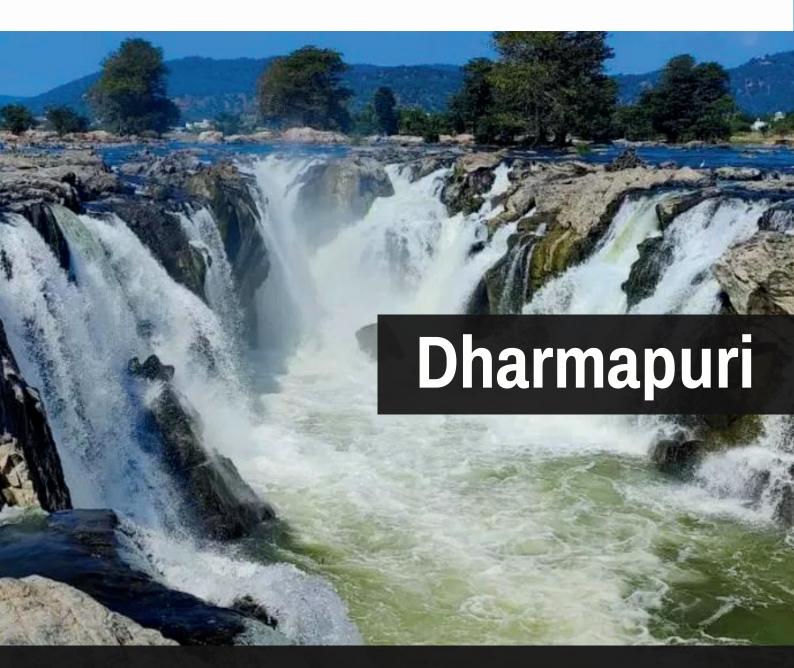
Department of Economics & Statistics









Tamil Nadu Household Panel Survey
Pre-Baseline District Report 2018-19





# Tamil Nadu Household Panel Survey (TNHPS) Pre-Baseline Survey (PBS) District Report 2018-19

# **Dharmapuri District**

February 2024

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In collaboration with the Department of Economics and Statistics,
Government of Tamil Nadu

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# **Summary of PBS Findings**

# Demographic Indicators

- Dharmapuri had a sample size was 6,245 households, among which 61.97 percent of households were from rural areas and 38.03 percent of households were from urban areas of the district.
- The district had a huge demographic dividend with 73.75 percent of the population in the age group up to 45 years. Almost one-third of the population was between 26-45 years of age. The percentage of people above 60 years of age was 9.21 percent.
- Around 94.45 percent of the households in the district followed Hinduism.
- The BC and MBC categories were the largest in number, together constituting around 80 percent of the total population in the district and around 15 percent of the households belonging to the SC category.

#### Education

- The district had a literacy rate of 73.99 percent, which was lower than the state estimates of 85.40 percent.
- The gender gap in the literacy rate of the district was higher in rural areas at 12.98 percent than in urban areas at 10.67 percent.
- Only around 70 percent of the population had formal schooling in the district.
   Among the population with no formal schooling, around 86 percent did not have functional literacy.

# **Employment**

- The unemployment rate was at 2.76 percent in the district, only 47.53 percent of the total population was employed and 49.72 percent were not in the labour force.
- Around 68.87 percent of the males were employed and only around 27.48 percent of the females were employed, which shows the prevailing gender gap in employment.
- Most males—about 50.69 percent—who were currently not working were students whereas most females—about 69.23 percent—in this category were homemakers.

- Majority of the population in the district were casual labourers in the agriculture sector.
- Self-employment in the non-agriculture sector was dominant in urban areas while casual labour in the agriculture sector was most common in rural areas of the district.

# Land Ownership and Assets

- Around 40 percent of the households owned agricultural land. This was higher among rural households than urban households. The MBC and BC category households were predominant agricultural land owners in the district.
- The percentage of households that depended on rain-fed irrigation in the district was 47.04 percent. A higher percentage of rural households at 49.15 percent owned unirrigated land than urban households at 32.38 percent.
- Around 93.98 percent of the agricultural land owners had marginal or small (less than 2 hectares) land.
- Around 40 percent of the households owned agriculture, allied or fishing assets in the district, and this was higher among rural households than urban households.
- Around 85 percent of the households in the district owned at least one household asset.

#### Household Income

- The annual mean income of the households in the financial year 2017-18 was Rs. 97,473 in the district; in the urban areas it was Rs.1,35,100 and in rural areas it was Rs. 89,388.
- The mean income from salaried work was the highest at Rs.1,61,042 and that from wage labour was the lowest at Rs 40,743.
- The income inequality in the district (0.500) was lower than the state estimate (0.563).
- Around 65 percent of the households in the district expected their income to increase in the next five years. Around 25 percent of households expect their income to remain the same. Less than one tenth of the households expected their income to decrease in the next five years. Rural households were more optimistic than urban households about the increase in their future income.

# Housing

- In the district, 90.87 percent of households resided in their own houses. A higher percentage of rural households resided in their own houses compared to urban households in the district.
- Out of the 90.87 percent that owned houses in the district, only 12.09 percent of houses were built under a government scheme and SC households were the main beneficiaries of the government housing schemes.
- Around 46 percent of the households in the district lived in Pucca houses, around 32 percent lived in Semi-Pucca and about 22 percent lived in Kutcha houses.

# Access to Drinking Water

• The most commonly used primary source of drinking water in the district was public tap or standpipe—around 69 percent—which was similar in both rural and urban areas of the district.

# Electricity

• Around 95.83 percent of households in the district had domestic electricity connections compared to the state estimate of 97.60 percent.

# Cooking Fuel

- Around 69 percent of the households used LPG as the primary cooking fuel.
- Around 30 percent of the households in the district used firewood as the primary cooking fuel.

#### Sanitation

- Around 71 percent of the households had latrines within the premises of the household. Latrine facilities were similar among urban and rural households of the district.
- The percentage of total households in the district following open defecation had declined from 79.04 percent in 2011 (Census, 2011) to 25.91 percent in 2018, as per the PBS estimates.
- Out of the 28.54 percent of households which did not have a latrine within the premises of the household, almost 97 percent of the households practised open defecation.

#### 1. Introduction

# 1.1 Profile of Dharmapuri District

Dharmapuri district in Tamil Nadu was formed in the year 1965 from the bifurcation of Salem district. It is in the Western region of the State, with Krishnagiri in the North, Tiruvannamalai and Viluppuram in the East, Salem in the South, and borders Karnataka in the West.

According to Census (2011), Dharmapuri had a total population of 15.07 lakhs, accounting for approximately 2.09 percent of Tamil Nadu's total population, which was 7.21 crores. The district comprised 3.76 lakh households, with 82.68 percent residing in rural areas. The male population was 51.39 percent, and the female population was 48.61 percent. Dharmapuri demonstrated a child-sex ratio of 913.26 compared to the state average of 943.27. Within the social groups, 16.3 percent of the population belonged to the Scheduled Castes, while 4.2 percent belonged to the Scheduled Tribes. The literacy rate in Dharmapuri district stood at 68.54 percent, compared to the state's average of 80.09 percent. The male literacy rate was 76.85 percent, while the female literacy rate was 59.8 percent, highlighting the need for investment in women's education.

In the fiscal year 2018-19, Dharmapuri's Net District Domestic Product was ₹24,56,121 lakhs, ranking twenty-second among all districts. The district's per capita Net District Domestic Product was recorded at ₹1,42,420, ranking it twenty-second among districts. Nonetheless, the per capita Net District Domestic Product of the district was below the Tamil Nadu average of ₹1,83,884 (Department of Economics and Statistics, 2023). In terms of sectoral distribution, the primary sector (agriculture and allied) contributes approximately 16 percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 20 percent and 64 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Dharmapuri ranked twenty first in terms of the Human Development Index with a score of 0.644, a relatively mediocre score. It ranked fifteenth in the Gender Inequality Index with a score of 0.074, which is a moderate score. In terms of the Child Development Index, the district ranked twenty second with a score of 0.616, indicative of an average performance in developing the youth. Additionally, Dharmapuri ranked thirty second in terms of the Multidimensional Poverty Index with a score of 0.7. The district must invest heavily and address the belowaverage performance in poverty alleviation.

Dharmapuri district portrays a stable economic landscape, with moderate Net District Domestic Product and per capita income rankings. The district's focus on human development, child welfare, and gender equality is apparent, yet concentrated efforts are required to combat multidimensional poverty and uplift its poverty alleviation endeavours for a more inclusive growth trajectory.

# 1.2 About the TNHPS and Pre-Baseline Survey (PBS)

The Tamil Nadu Household Panel Survey (TNHPS) has been designed as a longitudinal survey, beginning with a Pre-Baseline Survey or the PBS—an extensive household listing activity—followed by a Baseline Survey (Wave 1) and subsequent periodic surveys (Wave 2, Wave 3 etc.). The TNHPS aims to analyse the patterns of change in various socioeconomic indicators, including households' income, occupational structures and living conditions.

The PBS collected data on a comprehensive set of socio-economic indicators for the period 2018-19 with the results providing district-level estimates for these indicators and informing the sampling design and the associated sampling frame for the first wave of the TNHPS. In the absence of Census 2021, the PBS estimates act as a valid benchmark for the Government of Tamil Nadu in terms of socio-economic development since 2011. The PBS surveyed around 2,12,282 households in the erstwhile 32 districts of Tamil Nadu across 1476 Primary Sampling Units—684 rural PSUs and 792 urban PSUs.

This report analyses data from the PBS for the Dharmapuri district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent census data of Dharmapuri (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Dharmapuri district. The sample size for the district was 6,245 households, among which 3,870 households were from rural areas and 2,375 households were from urban areas. The blocks covered during the survey were: Dharmapuri, Harur, Karimangalam, Morappur, Nallampalli, Palacode, Pappireddipatti and Pennagaram.

# 2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 7,508 households in Dharmapuri district were selected using a multi-stage stratified sampling design<sup>1</sup>. The final sample size was 6,245 households for PBS, among which 61.97 percent of households were from rural areas and 38.03 percent of households were from urban areas of the district. The areawise distribution of the total sample as well as the survey response is given in Table 2.1.

Table 2.1 Distribution of Sample Households – Response wise

	Area Type								
Response of Households	Rural		U	Irban	Dharmapuri				
nousellolas	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage			
Response	3,870	83.14	2,375	83.25	6,245	83.18			
Non-Response	203	4.36	170	5.96	373	4.97			
Non-sample	582	12.50	308	10.80	890	11.85			
Total	4,655	100	2,853	100	7,508	100			

Dharmapuri district had a lower response rate—the willingness of households to participate in the TNHPS-PBS—of 83.18 percent compared to the state response rate of 96.5 percent. Around 4.97 percent of households were not willing to participate in the survey. About 11.85 percent of the selected samples were removed as they were not considered households as per the definition used in the PBS<sup>2</sup>.

Detailed explanation of the Sampling Methodology available in the TNHPS-PBS State Report (see TNHPS-PBS, 2021)

A household is defined as a group of persons normally living together and taking food from a common kitchen. The category called non-sample consisted of institutions, houses of NRIs and other buildings where there was no kitchen.

# 3. Key Findings

# 3.1 Demographic Indicators

As per the PBS estimates, the average household size<sup>3</sup> in the district had reduced from 4.01 in 2011 (Census, 2011) to 3.58 in 2018 as per the PBS estimates. As per the PBS estimates, 49.31 percent of the population in the district was male, and 50.67 percent of the population was female. Around 20.67 percent of the households in the Dharmapuri district were headed by females, which was higher than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

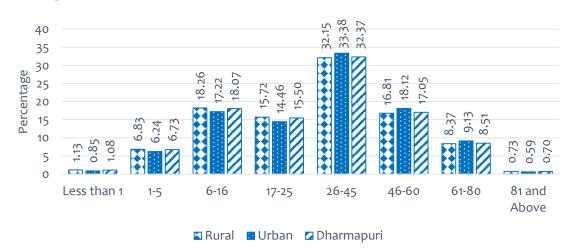


Chart 3.1 Age-wise Distribution of Population

As per the PBS estimates in 2018-19, almost one-third of the population in the district were in the age group of 26 to 45 years. The population between 17 to 60 years in the district was 64.92 percent, which was comparatively lower than the state estimate of 66.00 percent (TNHPS-PBS, 2021).

The percentage of the currently married population was higher in rural areas as compared to the urban areas of the district. A higher percentage of males were currently married as compared to females. The widowed female population at 17.68 percent was notably higher than the widowed male population at 2.66 percent.

The religion-wise distribution of the households in the district, as per the PBS estimates, shows that 94.45 percent of the households practised Hinduism, 4.21 percent practised Islam and 1.31 percent followed Christianity.

<sup>&</sup>lt;sup>3</sup>Household size is defined as the number of family members currently living in the household during the PBS survey.

Table 3.1 Social Group-wise Distribution of Households

Social Group	Percentage
SC	14.99
ST	0.25
ВС	20.76
MBC	63.74
General	0.11
DK/RF	0.15
Total	100

<sup>\*</sup>The DNC category was not covered in the sample as there was a minuscule population

As per the PBS estimates, the highest percentage of households in Dharmapuri district belonged to the MBC category. The percentages of SC and ST households in the district were 14.99 percent and 0.25 percent respectively in 2018.

The percentage of General and ST category households of Dharmapuri district was only 0.11 percent and 0.25 percent respectively and only 14 General category and 25 ST category households were sampled in the district. Hence, the results of these social groups discussed in this report must be interpreted in this context.

#### 3.2 Development Indicators

In this section, we discuss the PBS estimates on various development indicators such as literacy rate and employment status in Dharmapuri district.

# 3.2.1 Education

The change in literacy rate of Dharmapuri district and the state during the period 2011 and 2018 is given in Table 3.2. As per Census 2011, a person—age seven and above—who can both read and write with understanding in any language, is treated as literate. In the PBS, literacy rate is measured including those that have formal schooling and those that can read and write a simple sentence.

Table 3.2 Literacy Rates between Census 2011\* and PBS 2018

Condor	Rural		Rural Urban		Dharm	napuri	Tamil Nadu	
Gender	2011	2018	2011	2018	2011	2018	2011	2018
Male	74.69	78.15	87.33	90.58	76.85	80.39	86.77	90.97
Female	56.47	65.17	75.07	79.91	59.8	67.87	73.4	80.15
Total	65.86	71.53	81.21	85.07	68.54	73-99	80.09	85.40

<sup>\*</sup>The represented trend should be understood under the context that the Census does 100 percent enumeration whereas in the PBS, the sample is surveyed

The literacy rate in the district had increased to 68.54 percent in the year 2011, whereas the state average was 80.09 percent (Census, 2011). The PBS estimates show that in the year 2018, the literacy rate in the district was 73.99 percent, which continued to be lower than the state estimate of 85.40 percent. Nevertheless, the district registered a 5.45 percent increase in literacy rate between 2011 and 2018, while the state registered 5.31 percent growth rate. The difference in literacy rate between state and the district figures was 11.55 percent in 2011, which had reduced to 11.41 percent in 2018. Both male literacy as well as female literacy in the district recorded an increase during the period under consideration. The gender gap in literacy rate had declined from 17.05 percent in 2011 to 12.52 percent in 2018. The district was positioned last among the then 32 districts in terms of literacy rate (TNHPS-PBS, 2021).

The literacy rate in rural areas of the district was only 65.86 percent in the year 2011 (Census, 2011), which increased to 71.53 percent in the year 2018. The rural male and female literacy rate had also recorded an increase during the period 2011-18. The literacy rate in urban areas has also increased from 81.21 percent in the year 2011 (Census, 2011) to 85.07 percent in the year 2018. There had been an increase in both male literacy as well as female literacy in the urban areas of the district during the specified period. The urban literacy rate continued to be higher than the rural literacy rate. The gender gap in literacy rate was lower in urban areas compared to the rural areas of the district.

# 3.2.2 Education Status of Population (Age 7 and above)

In this section, we discuss the education status of the population aged seven and above in Dharmapuri district. The area-wise education status of the population in Dharmapuri district is given in Chart 3.2.

100 83.57 81.89 69.79 80 67.10 Percentage 60 32.76 30.01 40 17.62 15.98 20 0 District-Urban Tamil Nadu District-Rural Dharmapuri

Chart 3.2 Formal Schooling of the Population – Area-wise

\*Others and Don't Know/Refuse to Answer categories are not included in any chart, unless their value is substantially high. Therefore, their values may not add up to 100 percent.

■ No Formal Schooling

Chart 3.2 shows that only 69.79 percent of the population in Dharmapuri district had attended formal schooling compared to higher state estimates of 83.57 percent. The percentage of the population with formal education in urban areas was significantly higher than in rural areas of the district.

Chart 3.3 Formal Schooling of the Population – Gender-wise

☑ Formal Schooling

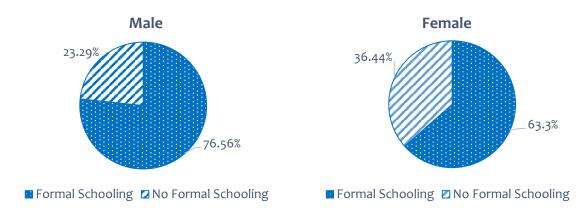


Chart 3.3 shows that the percentage of the population that acquired formal education was higher among the male population as compared to the female population. Almost a quarter of the male population did not have formal education compared to 36.44 percent of the female population.

A district-level analysis of educational attainment status showed greater divergence across various social groups.

Table 3.3 Formal Schooling of Population - Social Group-wise Percentages

Education Status	Social Group						
	SC	ST	ВС	МВС	General	Dharmapuri	
Formal Schooling	75.47	56.87	78.77	65.47	79.99	69.79	
No Formal Schooling	24.33	43.13	20.92	34.36	20.01	30.01	
Others and DK/RF	0.19	0.00	0.31	0.17	0.00	0.20	
Total	100	100	100	100	100	100	

Table 3.3 shows the percentage of the population who had attended formal schooling across various social group categories in Dharmapuri district. A majority of the BC and SC population in the district had formal education, while a higher percentage of MBC households did not have formal education.

This analysis does not take into account the level of education attained by the population. Table 3.4 shows more precise information on the highest level of formal educational attainment of the specified population.

Table 3.4 Highest Formal Educational Attainment of Population: Area-wise Percentages

Educational Attainment	Area Type						
Educational Attainment	Rural	Urban	Dharmapuri				
Primary (I to V)	25.91	20.44	24.74				
Middle (VI to VIII)	21.90	19.20	21.33				
High School (IX to X)	21.44	22.60	21.69				
Higher Secondary (XI to XII)	16.29	15.33	16.08				
Bachelor's degree	8.93	11.46	9.47				
Diploma Degree	2.61	4.44	3.00				
Post Graduate Degree	2.70	5.93	3.39				
Others/DK/RF	0.21	0.60	0.29				
Total	100	100	100				

The PBS estimates show that around 83.84 percent of the district's population was either pursuing or had completed primary or secondary schooling. Tertiary education comprises bachelor's degree, diploma, post graduate degree and other higher education. While the state estimates show that 20.02 percent of the population e were either pursuing or had completed tertiary education, the district estimates were lower at 15.86 percent. The percentage of the specified population that was either pursuing or had completed tertiary education was higher in urban areas at 21.83 percent compared to the rural areas at 14.24 percent.

Table 3.5 Highest Formal Educational Attainment of Population: Gender-wise Percentages

Educational Attainment	Area Type						
Educational Attainment	Male	Female	Dharmapuri				
Primary (I to V)	25.18	24.26	24.74				
Middle (VI to VIII)	21.93	20.58	21.33				
High School (IX to X)	21.00	22.50	21.69				
Higher Secondary (XI to XII)	14.45	17.97	16.08				
Bachelor's degree	9.85	9.04	9.47				
Diploma Degree	3.96	1.90	3.00				
Post Graduate Degree	3.43	3.35	3.39				
Others/DK/RF	0.20	0.40	0.29				
Total	100	100	100				

Table 3.5 shows the percentage of males and females who were either pursuing or had completed different levels of formal education. A higher percentage of males at 17.24 percent were either pursuing or had completed tertiary education compared to the females at 14.29 percent. There is a gender gap in terms of levels of educational attainment in the district.

To see the social group-wise disparity in educational attainment in Dharmapuri district, the PBS estimated the percentage of population under each category across various education levels.

Table 3.6 Highest Formal Educational Attainment of Population - Social Group-wise Percentages

Educational Attainment	Social Group						
Educational Attainment	SC	ST	ВС	МВС	General	Dharmapuri	
Primary (I to V)	21.61	31.02	25.16	25.48	9.79	24.74	
Middle (VI to VIII)	21.36	17.34	21.22	21.41	12.32	21.33	
High School (IX to X)	21.28	33.85	21.20	21.92	23.89	21.69	
Higher Secondary (XI to XII)	16.81	8.48	15.91	15.98	15.04	16.08	
Bachelor's degree	10.98	4.48	9.45	9.08	12.36	9.47	
Diploma Degree	4.07	2.14	3.16	2.61	18.31	3.00	
Post Graduate Degree	3.65	2.70	3.51	3.26	8.29	3.39	
Others/DK/RF	0.26	0.00	0.39	0.27	0.00	0.29	
Total	100	100	100	100	100	100	

Table 3.6 shows that a high percentage of the population from all the social groups were either pursuing or had completed primary or high school. The percentage of the population that was either pursuing or had completed tertiary education was higher among SC at 18.70 percent, followed by BC at 16.15 percent. The MBC population had a lower percentage in terms of this parameter at 5.46 percent. The proportion of the population that was either pursuing or had completed tertiary education within the MBC and BC population in the district was lower than the corresponding state-level estimates but was higher for the SC population. The results for the General and ST categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

Around 30.01 percent of the population had not received formal education in the Dharmapuri district (refer to Chart 3.2). The PBS investigated the ability of those who could read and write a simple sentence with understanding—or functional literacy.

Table 3.7 Functional Literacy of Population with No Formal Schooling – Area-wise Percentages

Functional Literacy	Area Type					
Functional Literacy	Rural	Urban	Dharmapuri			
Yes	13.53	18.09	14.01			
No	86.43	81.73	85.93			
DK/RF	0.04	0.18	0.06			
Total	100	100	100			

Table 3.7 shows the functional literacy status of the population with no formal schooling. Only 14.01 per cent of the population without formal schooling had functional literacy. The functional literacy rate of specified population groups in urban areas was higher than in rural areas of the district.

Table 3.8 Functional Literacy of Population with No Formal Schooling - Social Group-wise Percentages

Functional Literacy	Social Group						
Functional Literacy	SC	ST	ВС	MBC	General	Dharmapuri	
Yes	23.26	21.48	14.99	12.11	16.94	14.01	
No	76.74	78.52	84.87	87.84	83.06	85.93	
DK/RF	0.00	0.00	0.14	0.05	0.00	0.06	
Total	100	100	100	100	100	100	

Table 3.8 shows the functional literacy status of the population with no formal schooling, across various social group categories. Functional literacy was relatively higher among the SC category and lower among the MBC category. The results for the General and STcategories must be interpreted in the context of their sample size, as discussed in Section 3.1.

# 3.2.3 Employment Status

This section looks at the employment status of the household members, the types of employment that the household members are engaged in, the unemployment rate at the district level and compares the findings with state estimates. In the PBS, the population of 14 years and above is classified as employed, unemployed and not in the labour force<sup>4</sup>.

The category employed consists of the following categories:

- (i) People who are self-employed in agriculture,
- (ii) People who are self-employed in allied agricultural activities,
- (iii) People who are self-employed in non-agricultural activities,
- (iv) People who worked as casual labourers in agriculture,
- (v) People who worked as casual labourers in industry,
- (vi) People who worked as casual labourers in the service sector,
- (vii) People who worked as casual labourers in other domains,
- (viii) People who worked as salaried employees in the government sector,
- (ix) People who worked as salaried employees in the private sector,
- (x) People who are involved in multiple occupations, and
- (xi) People who are involved in other types of work.

The unemployed group was defined as the population aged 14 years and above, who did not work but were seeking and/or available for work.

The category not in the labour force consists of the following categories:

- (i) People who attended educational institutions,
- (ii) People who attended domestic duties only,
- (iii) Rentiers, pensioners, remittance recipients, etc.,
- (iv) People who are not able to work due to disability and
- (v) Others (including begging, etc.).

<sup>&</sup>lt;sup>4</sup>Percentage of population employed = (Number of employed persons 14 years and above/Total population of the district 14 years and above) \*100

Percentage of population unemployed = (Number of unemployed persons 14 years and above/Total population of the district 14 years and above) \*100

Percentage of population not in labour force = (Number of persons 14 years and above not in workforce/Total population of the district 14 years and above) \*100

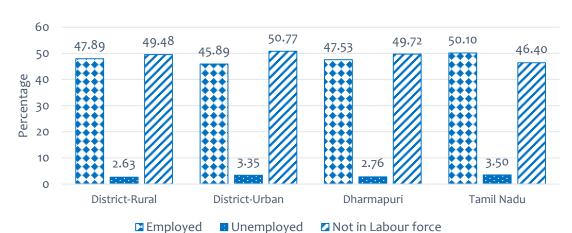


Chart 3.4 Employment Status of Population – Area-wise

The overall percentage of the employed population—14 years and above—in the district was lower than the state estimates. The percentage of the population employed in rural areas was higher than in the urban areas of the district. The percentage of the unemployed population in the district was lower than the state estimates. The unemployment status in rural areas of the district at 2.63 percent was lower than the state rural estimate of 3.60 percent—whereas the district urban unemployment status at 3.35 percent was marginally higher than the state urban estimate of 3.30 percent. Dharmapuri district was positioned twenty-fourth among all districts in Tamil Nadu in terms of employed population and positioned twenty-sixth in terms of unemployment status.

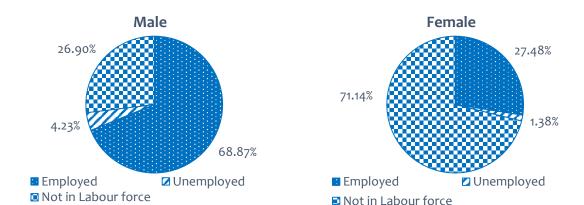


Chart 3.5 Employment Status of the Population – Gender-wise

Chart 3.5 shows the gender-wise employment status of the population of the aged 14 years and above. While 68.87 percent of the male population was employed, slightly more than a quarter of the female population was employed. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). The female work participation in the district was higher than the

national average of 23.3 percent in 2017-18 (National Statistical Office, 2019), and lesser than the state estimates of 29.96 percent (TNHPS-PBS, 2021). Around 71.14 percent of the female population were not in the workforce, among them a majority—about 69.23 percent—were associated with attending to domestic duties as homemakers (see Chart 3.7). Unemployment status was higher among males as compared to that of the female population. Dharmapuri district was positioned twenty second in terms of female work participation and positioned last in terms of female unemployment status.

Table 3.9 Work Type of Employed Population – Area-wise Percentages

Work Top a		Area Type					
Work Type	Rural	Urban	Dharmapuri				
Self Employed Agriculture	15.42	13.84	15.14				
Self Employed Non-Agriculture	11.05	21.20	12.84				
Self Employed Allied Agriculture	3.10	1.97	2.90				
Casual Laborer Agriculture	20.37	5.61	17.76				
Casual Labourer Industry	10.10	7.40	9.62				
Casual Labourer Service	8.45	8.46	8.45				
Casual Labourer (Others)	13.56	11.66	13.22				
Salaried Worker Government	2.93	9.75	4.14				
Salaried Worker Private	10.66	16.94	11.77				
Multiple Occupation	4.02	2.99	3.83				
Other	0.16	0.11	0.15				
DK/RF	0.19	0.07	0.17				
Total	100	100	100				

The type of work that the population aged 14 and above—working population hereafter—is engaged in is given in Table 3.9. The highest proportion of the working population in the district were casual labourers in the agriculture sector—about 17.76 percent—followed by self-employed in the agriculture sector—about 15.14 percent. The highest proportion of the working population in the state was salaried private workers at 21.82 percent (TNHPS-PBS, 2021). While casual labourers in the agriculture sector were predominant in rural areas—about 20.37 percent—self-employment in the non-agricultural sector was predominant in urban areas—about 21.20 percent—of the district.

Table 3.10 Percentage of Employed Population Engaged in Different Types of Livelihood Activities – Social Group wise

Maul Ton		Social Group						
Work Type	SC	ST	ВС	МВС	General	Dharmapuri		
Self Employed Agriculture	3.69	9.52	25.80	14.45	8.94	15.14		
Self Employed Non-Agriculture	12.36	2.38	17.06	11.56	23.40	12.84		
Self Employed Allied Agriculture	2.35	2.29	2.00	3.33	0.00	2.90		
Casual Labourer Agriculture	25.17	23.97	12.16	17.80	0.00	17.76		
Casual Labourer Industry	16.33	7.15	4.42	9.72	8.52	9.62		
Casual Labourer Service	6.04	0.00	1.69	11.31	0.00	8.45		
Casual Labourer (Others)	8.89	33.83	15.12	13.59	16.63	13.22		
Salaried Worker Government	7.92	9.06	5.00	2.88	22.47	4.14		
Salaried Worker Private	16.30	11.79	14.43	9.80	20.05	11.77		
Multiple Occupation	0.89	0.00	1.90	5.21	0.00	3.83		
Other	0.05	0.00	0.34	0.11	0.00	0.15		
DK/RF	0.00	0.00	0.06	0.25	0.00	0.17		
Total	100	100	100	100	100	100		

The estimates show that the majority of the population from the SC and MBC categories were casual labourers in the agriculture sector. A higher percentage of the BC population were self-employed in the agriculture sector. The state estimates show that the majority of the population from the SC, ST, MBC and DNC categories were casual labourers in the agricultural sector and a higher percentage of BC and the General population were salaried workers in the private sector (TNHPS-PBS, 2021). It is interesting to note that the percentage of salaried workers in government was higher in the SC and ST populations compared to the BC and MBC populations. The results for the ST and General categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

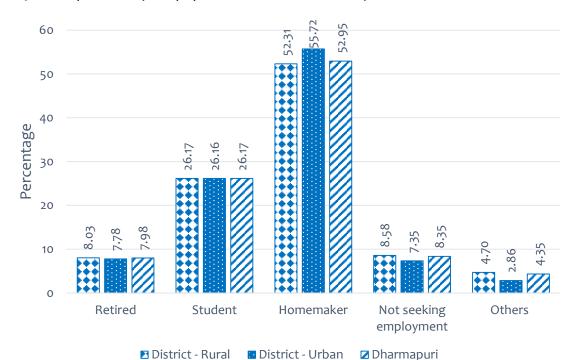


Chart 3.6 Composition of the population not in the labour force -Area-wise

Chart 3.6 shows that similar to the trend at the state level, more than half the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were homemakers were higher in urban areas than rural areas, whereas the percentages of retired people and those not seeking employment were higher in rural areas than urban areas. The proportion of the population that were students was similar in both rural and urban areas of the district.

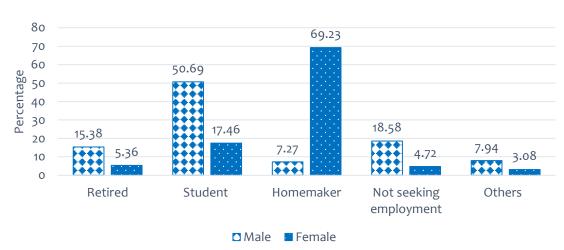


Chart 3.7 Composition of the population not in the labour force – Gender-wise

The gender-wise distribution of the population currently not in the labour force is given in Chart 3.7. While Chart 3.3 represents the lower female involvement in formal education, Chart 3.7 shows the staggeringly lower female involvement in higher education as compared to men as only 17.46 percent of the female not-in-labour-force population were students. Similar to the state trend, the majority of the male not-in-labour-force population were students, whereas a majority of females were homemakers. It must be noted that the study did not capture unpaid domestic labour or any other form of unpaid labour carried out by women.

Table 3.11 Composition of Population not in Labour Force - Social Group-wise Percentages

Current Status	Social Group						
Current Status	SC	ST	ВС	МВС	General	Dharmapuri	
Retired	5.29	6.17	7.99	8.59	50.29	7.98	
Student	31.82	8.78	24.96	25.35	7.72	26.17	
Homemaker	47.98	72.15	53.8	53.77	36.55	52.95	
Not seeking employment	10.21	2.66	5.79	8.8	5.44	8.35	
Others	4.19	10.24	7.22	3.39	0.00	4.35	
DK/RF	0.51	0.00	0.25	0.10	0.00	0.19	
Total	100	100	100	100	100	100	

Table 3.11 shows that within all social groups, the percentage of homemakers was highest compared to other categories in the district. The SC category had a higher percentage of the non-working population as students compared to the other social groups. Although most of the employed SC population were casual agricultural labourers (see Table 3.10), the not-working population belonging to the student category were higher among the SC population than the other social groups, probably suggesting increasing awareness of the importance of education. The results for the General and ST categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

# 3.3 Socio-Economic Indicators

The PBS estimates for various socio-economic indicators of Dharmapuri district such as ownership of agricultural land, household assets and income are shown in this section.

# 3.3.1 Ownership of Agricultural Land

The PBS estimates of ownership of agricultural land at the household level—namely irrigated, unirrigated or a combination of both—in the rural and urban areas of Dharmapuri district are given in Chart 3.8. The TNHPS PBS definition of land ownership does not include leased land or other forms of holdings. Data were collected on the

ownership of agricultural land only. The fourth round of the National Family Health Survey (NFHS, 2015-16) was a secondary source of data that followed the same definition for ownership of agricultural land.

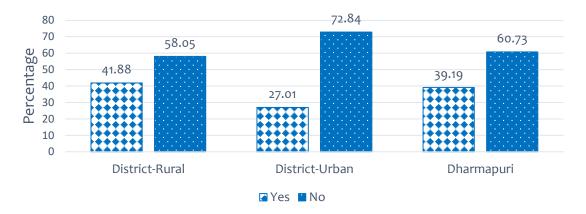


Chart 3.8 Ownership of Agricultural Land

As per the state estimates, the percentage of total households owning agricultural land in Tamil Nadu was 19.41 percent. Dharmapuri is largely a rural and agricultural district, it was ranked 3<sup>rd</sup> on the percentage of total households owning agricultural land, next to Ariyalur district at 46.17 percent and Perambalur district at 42.41 percent (TNHPS-PBS, 2021). Chart 3.8 shows that while 39.19 percent of the households in the Dharmapuri district owned agricultural land, 60.73 percent of the households in the district did not own agricultural land. The percentage of households owing agricultural land was significantly higher in rural areas than in urban areas of the district.

Table 3.12 Type of Agricultural Land Owned by the Households – Area-wise Percentages

Type of Agriculture Land	Area Type					
Type of Agriculture Land	Rural	Urban	Dharmapuri			
Only Irrigated Agriculture Land	39.08	48.85	40.31			
Only Unirrigated Agriculture Land	49.15	32.38	47.04			
Both Irrigated and Unirrigated Agriculture Land	11.36	18.46	12.26			
DK/RF	0.41	0.31	0.39			
Total	100	100	100			

Table 3.12 shows that the majority of the households who owned agricultural land in the Dharmapuri district—about 47.04 percent—depended on rain-fed irrigation alone. Around 40.31 percent of agricultural land-owning households depended on various irrigation sources. Dug wells, bore wells, open wells, pump sets, canals and tanks are the major sources of irrigation in Dharmapuri district (Tamil Nadu State Planning Commission, 2017b). Around 39.08 percent of agricultural land-owning households in rural areas and 48.85

percent of agricultural land-owning households in urban areas depended on various sources of irrigation. Among the agricultural land-holding households, the households having irrigated agricultural land in the district—about 40.31 percent—were lower than the state estimates at 50.03 percent (TNHPS-PBS, 2021).

Table 3.13 Ownership of Agricultural Land - Social Group-wise Percentages

Agriculture Land		Social Group						
Ownership	SC	ST	ВС	мвс	General	Dharmapuri		
Yes	14.94	18.76	42.21	44.12	11.16	39.19		
No	85.01	81.24	57.53	55.85	88.84	60.73		
DK/RF	0.05	0.00	0.25	0.03	0.00	0.08		
Total	100	100	100	100	100	100		

Table 3.13 shows that MBC category households at 44.12 percent and BC category households at 42.21 percent were predominant landholders in the Dharmapuri district compared to other social groups. Only 14.94 percent of the SC category households owned agricultural land in the district. The results for the ST and General categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

Based on the size of agricultural land, the PBS classified the land owned by the households into marginal, small, semi-medium, medium and large. The percentage of households—that owned agricultural land—under each size category is given below.

Table 3.14 Size of Agricultural Land Owned by Households – Area-wise Percentages

Size of Agriculture Land (in Hectares)	Area Type					
	Rural	Urban	Dharmapuri			
Marginal (0.01 - 0.99)	81.10	70.80	79.82			
Small (1 - 1.99)	13.42	19.36	14.16			
Semi Medium (2 - 3.99)	5.01	7.85	5.37			
Medium (4 - 9.99)	0.47	1.66	0.61			
Large (10 and above)	0.00	0.34	0.04			
Total	100	100	100			

Table 3.14 shows that 93.98 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands (less than 2 hectares). This estimate was higher than the state-level estimate of 89.33 percent. The shares of semi-medium, medium and large landholdings were lower than that of the state-which was 7.64 percent, 2.26 percent and 0.77 percent respectively (TNHPS-PBS, 2021).

# 3.3.2 Ownership of Agricultural, Allied agricultural and Fishing Assets

In this section, we discuss the ownership of agricultural, allied agricultural and fishing assets such as tractors, pump sets, dairy animals, poultry birds, and mechanized and non-mechanized boats, amongst the households of Dharmapuri district.

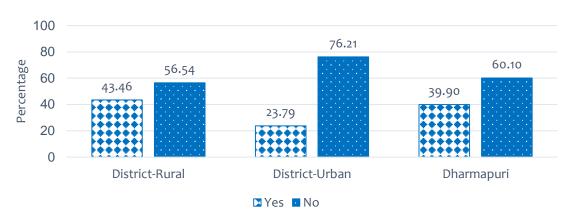


Chart 3.9 Ownership of Agricultural, Allied agricultural and Fishing Assets – Area wise

Chart 3.9 shows that 39.90 percent of the households in the Dharmapuri district owned at least one agricultural, allied agricultural and fishing asset. The estimate was significantly higher than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The proportion of households owning at least one agricultural, allied agricultural and fishing assets was higher in rural areas—about 43.46 percent—than in urban areas—about 23.79 percent—of the district.

# 3.3.3 Presence of Household Assets

This section discusses the percentage of households in Dharmapuri district that owned at least one household asset. Household assets include Air Conditioner (AC), refrigerator, two-wheeler, four-wheeler and mobile phones. The PBS estimates found that the combination of mobile phones and two-wheelers was the predominantly owned asset in rural areas whereas a combination of refrigerators, two-wheelers and mobile phones was largely owned in urban areas.

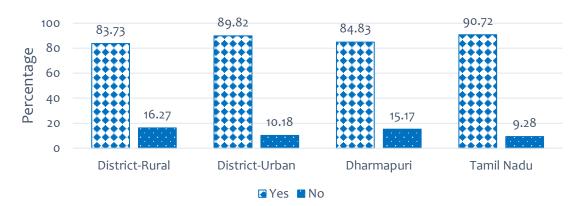


Chart 3.10 Ownership of at least one Household Asset - Area wise

The percentage of households owning at least one household asset in the Dharmapuri district was 84.83 percent, which was lower than the state estimate of 90.72 percent. Within the district, the urban areas had a higher percentage of households owning at least one household asset than the rural areas.

Table 3.15 Presence of at least one Household Asset - Social Group-wise Percentages

Presence of	Social Group					
Household Assets	SC	ST	ВС	МВС	General	Dharmapuri
Yes	83.95	87.91	85.34	84.82	100	84.83
No	16.05	12.09	14.66	15.18	0.00	15.17
Total	100	100	100	100	100	100

The PBS estimates show that 85.34 percent of BC category households owned at least one household asset. The SC category had the lowest percentage of households owning at least one household asset—about 83.95 percent—compared to other social groups in the district. Around 16.05 percent of the SC households did not even own a mobile phone. The results for the ST and General categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

# 3.3.4 Possession of Ration Card

Possession of a ration card can be treated as a determinant of socio-economic status at the household level. It plays a vital role in the inclusion—or exclusion—of households from the government welfare schemes such as the availability of subsidized items from the Public Distribution System and subsidized LPG connection. The percentage of households that possessed a ration card in rural and urban areas of Dharmapuri district is given in Chart 3.11.

91.99 91.34 90.77 100 88.37 Percentage 60 40 20 8.61 7.99 0 District-Rural District-Urban Dharmapuri Tamil Nadu

Chart 3.11 Possession of Ration Card

Chart 3.11 shows that the percentage of households in Dharmapuri district that possessed a ration card was higher than the state estimate. A higher percentage of rural households possessed ration cards as compared to urban households.

Yes ■ No

Table 3.16 Possession of Ration Card at the Household Level - Social Group-wise Percentages

Possession of Ration	Social Group						
Card	SC	ST	ВС	МВС	General	Dharmapuri	
Yes	92.27	83.27	89.61	91.72	100	91.34	
No	7.73	16.73	10.3	8.23	0.00	8.61	
DK/RF	0.00	0.00	0.09	0.05	0.00	0.05	
Total	100	100	100	100	100	100	

Table 3.16 shows that around 90 percent of households belonging to almost all social groups except the ST category possessed a ration card. Possession of ration cards was highest among the SC category households at 92.27 percent and lowest among BC category households at 89.61 percent. The results for the ST and General categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

# 3.3.5 Type of Ration Card

According to the National Food Security Act (NFSA) 2013, ration cards are broadly categorized into Priority Households (PHH) and Non-Priority Households (NPHH). Households with priority ration cards are the target group of various social welfare schemes such as Antyodaya Anna Yojana (AAY) among others. The percentage of households possessing priority and non-priority ration cards in rural and urban areas of Dharmapuri district are given below.

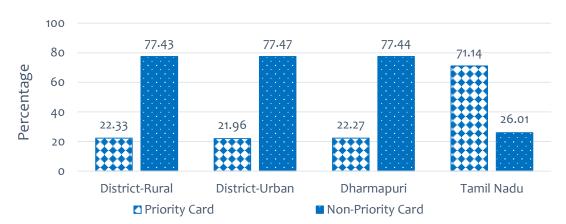


Chart 3.12 Type of Ration Card at the Household Level

The percentage of households possessing priority ration cards in the district was significantly lower than the state estimates. A higher percentage of rural households possessed priority ration cards than urban households of the district.

# 3.4 Household Income

# 3.4.1 Annual Household Income from Various Sources in the year 2017-2018

In this section, we analyse the annual income of households in Dharmapuri district from various sources in the year 2017-2018. The sources of income are income earned from activities such as agriculture, allied agriculture, salaried work, self-employed, wage labour and other sources. The category 'other sources' consists of income sources such as pensions, remittances, investments and other mixed categories. Table 3.17 shows the mean income of households that depended on various sources of income in Dharmapuri district.

Table 3.17 Annual Household Income from Different Sources in the FY 2017-2018 – Dharmapuri (INR)

Source	Rural	Urban	Dharmapuri	Tamil Nadu
Agriculture	61,678	1,04,127	65,031	61,830
Allied Agriculture	46,445	53,487	47,119	38,576
Salaried	1,33,530	2,18,875	1,61,042	2,29,857
Self Employed	1,03,442	1,15,090	1,06,043	1,47,403
Wage Labour	40,333	43,672	40,743	47,734
Other Sources	71,021	96,845	75,672	97,646
Income from all Sources	89,388	1,35,100	97,473	1,42,752

The mean household income was higher among the households with salaried income and lower among the households that depended on wages. On the whole, the mean annual household income of Dharmapuri district was 31.72 percent lesser than the state estimates (TNHPS-PBS, 2021). The failure of agriculture and inadequate alternative opportunities were the reasons for the poor economy of the district (Tamil Nadu State Planning Commission, 2017b). Among the then 32 districts, Dharmapuri was at twenty-fifth place in terms of mean annual household income (TNHPS-PBS, 2021).

In the year 2017-18, the mean household income in the rural areas of Dharmapuri district was lower compared to the rural state estimate of ₹92,765 (TNHPS-PBS, 2021). Although agriculture was predominant in Dharmapuri, the mean annual household income was comparatively lesser due to various reasons such as a high number of marginal landholders, a high percentage of non-irrigated agriculture and drought during the previous years. The mean household income was higher among the households that depended on salaried income. Lower mean income was reported among the households that engaged in wage labour as a source of income. The mean household income in the urban areas of Dharmapuri district was lower compared to the urban state estimate of ₹1,99,629 (TNHPS-PBS, 2021). The mean household income was higher among the households who depended on salaried income. Lower mean income was reported among the households that engaged in wage labour.

# 3.4.2 Income Inequality in Dharmapuri District

Table 3.18 represents the area wise Gini coefficient values. The Gini coefficient measures the inequality levels where the Gini coefficient value of o represents perfect equality and 1—or 100 percent—represents perfect inequality across households. The income inequality in Dharmapuri district (0.500) was lower than the state estimate (0.563)<sup>5</sup>. The income inequality across households in urban areas of the district was found to be higher than the rural areas of the district.

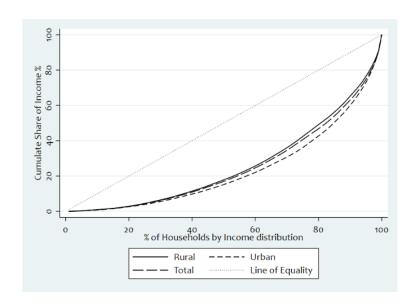
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Other studies have estimated the Gini coefficient for Tamil Nadu, for instance - Chandrasekhar et al (2021) estimated the Gini coefficient of income inequality for Tamil Nadu as 0.378 in 2018-19 using data from the Periodic Labour Force Survey (PLFS) (2018-19).

Table 3.18 Gini Coefficient of Income Inequality- Area wise

Area	Gini Coefficient			
Rural	0.482			
Urban	0.535			
Dharmapuri	0.500			
Tamil Nadu	0.563			

Chart 3.13 Lorenz Curve and Income Inequality



Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of the population. Chart 3.13 shows that the bottom 60 percent of households have around 20 percent of total income; the bottom 80 percent of households have around 45 percent of total income and the top 20 percent of households have around 55 percent of total income. Both Chart 3.13 and Table 3.18 show that income inequality was higher in urban areas compared to the rural areas of the district.

# 3.4.3 Households' Expectation of Change in their Income in the Next 5 Years

Besides the present income of the households in the year 2017-18, the PBS also investigated the expectation of change in household income in the following five years. The expectation of a household head on the change in household income in future depends highly on various factors such as the probability of a household member's entry (or exit) to (or from) the labour market, expected possession of financial and non-financial assets and so on. These variables are capable of capturing the level of optimism—or pessimism—that each household has about its future economic status.

Table 3.19 Households' Expectation of Change in Income in the Next 5 Years – Area-wise Percentages

Expectation of Change in	Area Type					
Household Income	Rural	Urban	Dharmapuri	Tamil Nadu		
Higher	65.28	63.45	64.95	50.06		
Lower	7.05	2.96	6.31	8.17		
About the same	25.57	25.19	25.50	31.66		
DK/RF	2.10	8.40	3.24	10.11		
Total	100	100	100	100		

Most of the households in both rural and urban areas of Dharmapuri district were expecting that their income in future would increase in the coming five years. Around 65 percent of the households in the district foresaw an increase in their income in the future. Around 25.50 percent of the households in the district foresaw that their future income would remain the same.

Table 3.20 Households' Expectation of Change in Income in the Next 5 Years - Social Groupwise Percentages

Expectation of Change in	Social Group					
Household Income	SC	ST	ВС	МВС	General	Dharmapuri
Higher	60.38	89.77	63.42	66.4	65.73	64.95
Lower	8.06	0.00	6.50	5.89	0.00	6.31
About the same	26.37	10.23	25.34	25.43	25.87	25.50
DK/RF	5.19	0.00	4.74	2.28	8.40	3.24
Total	100	100	100	100	100	100

More than 60 percent of the households in MBC, BC and SC households were expecting an increase in income in the next five years (since 2018). The percentage of households expecting a decline in income and expecting the income to remain the same was higher among SC households compared to the other categories. The results for the General and ST categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

# 3.5 Basic Infrastructure

In this section, we discuss the PBS estimates of variables such as ownership and type of houses, electrification status, drinking water and sanitation.

#### 3.5.1 House Ownership Status

The area wise percentage of households that live in their own house or stay at a rented house is given below.

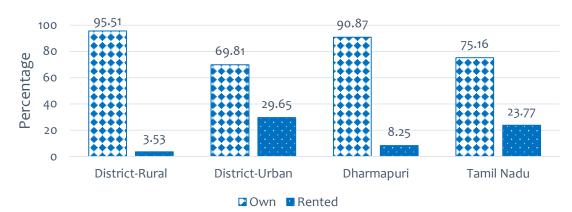


Chart 3.14 Ownership Status of the Households' Dwelling/House - Area wise

The majority of the households lived in their own houses and, less than one-tenth of the households lived in rented houses in Dharmapuri district. The percentage of households living in their own houses in the district was higher than the state estimates. The district was ranked second, next to Ariyalur district, among all districts of Tamil Nadu in terms of percentage of households living in their own houses (TNHPS-PBS, 2021). There existed a wide range of disparity between the ownership of houses in rural and urban areas. While most of the households lived in their own houses in rural areas, more than a quarter of urban households were relying on rented houses. Less than one percent of households were living in other houses such as a relative's house, encroachments etc. This data does not capture the ownership of a house in a different geographical location.

Table 3.21 Ownership Status of the Households' Dwelling/House - Social Group-wise Percentages

Ownership Status	Social Group						
	SC	ST	ВС	МВС	General	Dharmapuri	
Own	91.60	80.29	82.10	93.69	55-35	90.87	
Rented	8.16	19.71	16.18	5.55	44.65	8.25	
Others	0.17	0.00	1.42	0.76	0.00	0.81	
DK/RF	0.07	0.00	0.30	0.00	0.00	0.07	
Total	100	100	100	100	100	100	

Table 3.21 shows that most of the MBC, SC and BC households in the Dharmapuri district lived in their own houses at 93.69 percent, 91.60 percent and 82.10 percent respectively. The percentage of BC category households living in their own houses was much higher than the state estimates of 68.29 percent. This is probably reflective of the higher urbanization of BC category households in the district. The results for the General and ST categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

A detailed analysis of the ownership of houses showed that out of 90.87 percent of households that owned houses in the Dharmapuri district (see Chart 3.14), 12.09 percent of houses were built under a government scheme (See Table 3.22).

Table 3.22 House Constructed Under a Government Scheme - Social Group-wise Percentages

House Constructed under the Government Scheme	Social Group						
	SC	ST	ВС	МВС	General	Dharmapuri	
Yes	37.92	26.13	5.07	8.14	0.00	12.09	
No	61.58	73.87	94.93	91.85	100	87.83	
DK/RF	0.50	0.00	0.00	0.01	0.00	0.08	
Total	100	100	100	100	100	100	

Among the owned houses, the percentage of houses constructed under a government scheme was lower in the Dharmapuri district—about 12.09 percent—compared to the state estimate of 14.12 percent. In Dharmapuri, SC households at 37.92 percent had the highest percentage of houses built under a government scheme compared to other social groups. None of the eight house-owning General category households surveyed in the district had constructed a house under any government scheme. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

### 3.5.2 House Type

Based on the material used for the wall or roof or the quality of the houses, the PBS classifies the houses as kutccha, pucca and semi-pucca. The percentage of houses that come under each type of house is as follows.

Chart 3.15 Types of Houses - Area wise

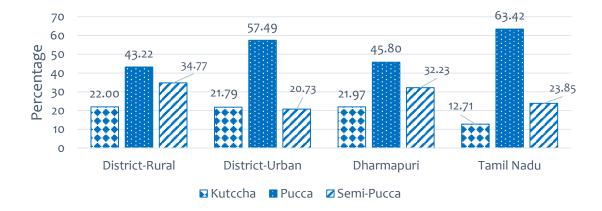


Chart 3.15 shows that majority of households—about 45.80 percent—in the Dharmapuri district were living in pucca houses. The percentage of households living in pucca houses was lower than the state estimates of 63.42 percent. The percentage of households living in pucca houses was higher in urban areas compared to the rural areas of the district. While 75.22 percent of state urban households lived in pucca houses (TNHPS-PBS, 2021), only 57.49 percent of urban households in the district lived in pucca houses. The percentage of households living in semi-pucca and kutcha houses was higher in the district than the state estimates (TNHPS-PBS, 2021). In urban areas of the district, the percentage of households living in semi-pucca and kutcha houses were similar.

## 3.5.3 Primary Drinking Water Source

In this section, we discuss the findings of PBS on the primary source of drinking water for households in Dharmapuri district. The primary sources<sup>6</sup> of water are bottled water, piped water into dwelling, piped water to yard or plot, public tap or standpipe, tube well or borehole. Other water sources include protected wells, unprotected wells, rainwater collection, and surface water (tank/pond/river/dam).

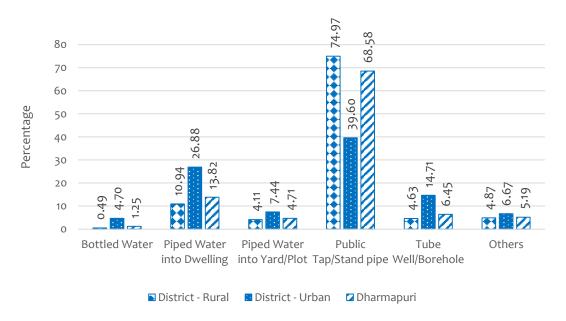


Chart 3.16 Primary Source of Drinking Water for Households

Chart 3.16 shows that the majority of the households—about 68.58 percent—in Dharmapuri district were using public tap or standpipe as their primary source of drinking water, followed by piped water into dwelling, whereas 32.84 percent of households in the

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<sup>&</sup>lt;sup>6</sup> Primary source - Water that is availed for the greater part of the year

state were using public tap or standpipe and 32.00 percent were using piped water into the dwelling (TNHPS-PBS, 2021). The state estimates show that piped water into the dwelling in urban areas—about 37.02 percent—and public tap/standpipe in the rural area—about 44.51 percent—were the primary water sources of households (TNHPS-PBS, 2021). In Dharmapuri district, public tap/standpipe was mostly used both by urban and rural households at 39.60 percent and 74.97 percent respectively.

#### 3.5.4 Electricity

The state had witnessed mass electrification during the last decade. A comparison of households with electricity connections between Census (2011) and 2018 PBS estimates shows that the state was close to achieving complete electrification in the case of urban areas (TNHPS-PBS, 2021). The electrification status had improved in rural areas as well. Chart 3.17 shows the electrification status of households in Dharmapuri district, along with a comparison to the electrification status during the Census (2011).

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Chart 3.17 Comparison of Households with Electricity between Census 2011 and the PBS 2018

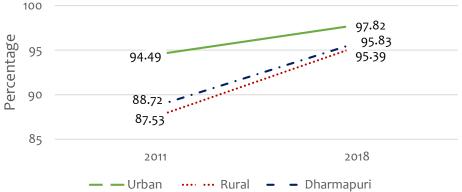


Chart 3.17 shows that mass electrification happened in both rural and urban areas of the Dharmapuri district during the period from 2011 to 2018 where the rate of growth of households with electricity was higher in rural areas. Dharmapuri district was ranked thirtyfirst among the then 32 districts in terms of electrification. Around 95.83 percent of households in the district had domestic electricity connections compared to the state estimate of 97.6 percent (TNHPS-PBS, 2021).

#### 3.5.5 Primary Cooking Fuel

A comparison of the 2011 Census and 2018 PBS estimates on the primary cooking fuel by the households in the district is given below.

Chart 3.18 Comparison of Primary Fuel used for Cooking - Dharmapuri and Tamil Nadu

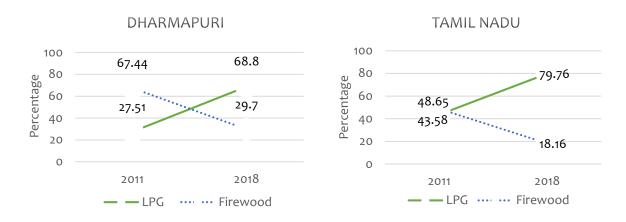


Chart 3.18 shows that, although the use of LPG as primary fuel for cooking in Dharmapuri district had increased tremendously from 27.51 percent in 2011 (Census 2011) to 68.80 percent in 2018, and about 29.70 percent still used firewood significantly in the district. Compared to other districts of Tamil Nadu, Dharmapuri district stood at ninth place in terms of the higher percentage of firewood use and ranked twenty-fourth in terms of percent of LPG used as primary fuel for cooking (TNHPS-PBS, 2021).

Chart 3.19 Comparison of Primary Fuel used for Cooking – Rural and Urban

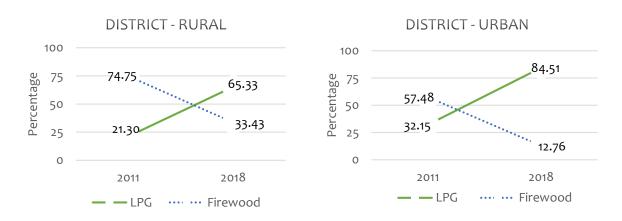


Chart 3.19 indicates that the majority of the households in both rural areas—about 65.33 percent—and urban areas—about84.51 percent—used LPG as the primary cooking fuel in 2018. The percentage of households using LPG as the primary cooking fuel was higher in urban areas of the district compared to rural areas. The usage of firewood had reduced drastically and there was a notable increase in LPG as primary cooking fuel in both urban and rural areas. Around one-third of the households in the rural areas of the district still used firewood as primary fuel for cooking.

Table 3.23 shows the use of alternative fuels for cooking among households of various social groups in Dharmapuri district.

Table 3.23 Primary Fuel for Cooking in Household - Social Group-wise Percentages

Primary Cooking Fuel	Social Group						
	SC	ST	ВС	МВС	General	Dharmapuri	
Firewood	22.61	18.05	26.07	32.7	0.00	29.7	
LPG	74.44	81.95	72.58	66.09	100	68.8	
Kerosene	1.34	0.00	0.91	0.87	0.00	0.94	
Others	1.00	0.00	0.24	0.11	0.00	0.27	
DK/RF	0.62	0.00	0.21	0.23	0.00	0.29	
Total	100	100	100	100	100	100	

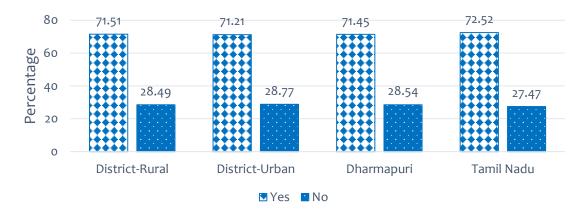
<sup>\*</sup>Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that the majority of the households from the SC and BC categories used LPG as the primary fuel for cooking. The percentage of SC households was similar to the state estimates while it was lower for BC households (TNHPS-PBS, 2021). All the fourteen General category households surveyed in the district used LPG as the primary cooking fuel. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

#### 3.5.6 Sanitation

The PBS estimates on households with and without latrines is given in Chart 3.20.

Chart 3.20 Presence of Latrine within the Premises of the Household



The percentage of households with latrines within house premises had increased from 41.50 percent in 2011 (Census, 2011) to 71.45 percent in 2018 as per the PBS estimates. Dharmapuri district was positioned seventeenth among the 32 districts in terms of the presence of latrine facilities within the premises of the household (TNHPS-PBS, 2021). The percentage of households equipped with latrine facilities in the district was marginally

lower than the state estimate. The percentage of households with latrines within house premises in rural areas was on par with the urban areas.

Table 3.24 Presence of Latrine within the premises of the Household - Social Group wise Percentages

Latrine within House Premises	Social Group						
	SC	ST	ВС	MBC	General	Dharmapuri	
Yes	66.99	75.81	80.1	69.6	91.18	71.45	
No	32.98	24.19	19.9	30.4	8.82	28.54	
DK/RF	0.03	0.00	0.00	0.00	0.00	0.00	
Total	100	100	100	100	100	100	

The estimates show that the majority of BC households had a latrine within the premises of the household in the district, the percentages were similar to the state estimates. More than 30 percent of the SC and MBC households in the district did not have a latrine within the premises, compared to 47.70 percent and 32.50 percent as per the state estimates respectively (TNHPS-PBS, 2021). The results for the General and ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

Chart 3.21 Presence of Latrine in the Premises of Different Types of Houses – Area-wise

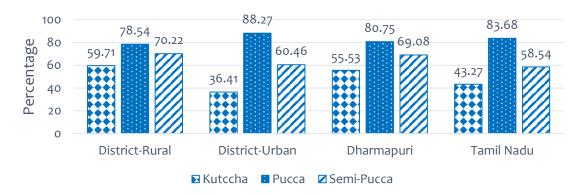
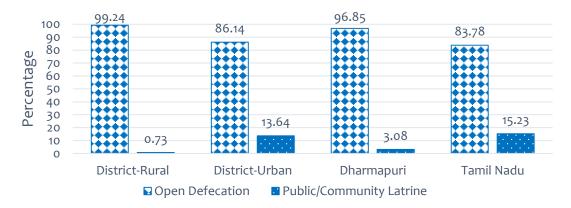


Chart 3.21 depicts presence of a latrine in the premises of different types of houses. The majority of the pucca houses in the district had latrine facilities within the premises of the house. The percentage of semi-pucca and kutcha houses with latrine facilities within the premises of the house were lower compared to the pucca houses of the district. The percentage of households with latrine facilities in pucca houses was higher in urban areas compared to rural areas of the district, while the percentage of households with latrine facilities in kutcha and semi-pucca houses was higher in rural areas of the district. The estimates of the district were higher than the state estimates for kutcha and semi-pucca houses.





The percentage of total households in the district following open defecation had declined from 79.04 percent in 2011 (Census, 2011) to 25.91 percent in 2018 as per the PBS estimates. Chart 3.22 shows that 96.85 percent of households in the Dharmapuri district were following open defecation. The practice of open defecation was higher in rural areas (99.24 percent) compared to urban areas (86.14 percent) of the Dharmapuri district. The percentage of households following open defecation in the district was higher than the state estimates. The district was ranked tenth in terms of the percentage of total households practising open defecation.

# 4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Dharmapuri district was conducted from a sample of 6,245 households in the district who were willing to participate in the survey. The survey focused on five major indicators: i) demographic indicators, ii) development indicators, iii) socio-economic indicators, iv) household income and v) basic infrastructure.

Dharmapuri district exhibits notable rankings in various socio-economic indicators. It secures the third position in the percentage of total households owning agricultural land, following Ariyalur and Perambalur districts. In terms of house ownership, the district is ranked second, surpassed only by Ariyalur. Additionally, Dharmapuri district outperforms the state estimate in the ownership pattern of agricultural, allied agricultural, and fishing assets. The Gini coefficient and Lorenz curve analysis reveal lower income inequality in the district compared to state estimates. The district aligns with the state estimate in terms of the percentage of households with latrines within their premises.

Despite substantial progress since 2011 in rural and urban literacy rates, household electrification, and the adoption of LPG as the primary cooking fuel in urban areas, the district's estimates in these indicators fall considerably below the state averages. Addressing this disparity is crucial for ensuring more equitable socio-economic development in the Dharmapuri district.

The district finds itself in the least favourable position among the erstwhile 32 districts, particularly in terms of the percentage of the population with formal education. Approximately 30 percent of the district's population lacks formal education, with over 80 percent of this demographic grappling with functional illiteracy. Both the employment rate and the annual average household income fall below the state average, with the mean annual household income in the district trailing the state estimate by approximately 32 percent. This economic disparity maybe attributed to the district's heavy reliance on agriculture and allied agricultural activities as the primary source of employment.

In terms of infrastructure, the district ranks thirty-first in domestic electricity connection. The adoption of LPG as the primary cooking fuel is lower than the state estimate, resulting in a higher prevalence of households using firewood for cooking. Moreover, the district's estimate of households residing in pucca houses is considerably lower compared to the state estimate. The primary water source for most households is public tap/standpipes. These indicators collectively underscore significant challenges in education, employment, income, and infrastructure in the district that necessitate targeted interventions for comprehensive development.

Collectively, the PBS shows that the Dharmapuri district exhibits a state of economic underdevelopment, primarily stemming from the district's deficiencies in three pivotal economic indicators: education, employment, and income. These inadequacies are a cause

of concern, given their potential ripple effects on various other social and developmental indicators. Therefore, a targeted emphasis on this issue becomes imperative, to stimulate increased participation in formal education, ultimately contributing to the improvement in employment rates, and therefore income.

In addition, the district grapples with infrastructural challenges as well. Despite the overall progress in electrification at the state level, districts like Dharmapuri find themselves in a state of lag. Notably, the prevalent issue of heightened firewood usage for cooking carries gendered ramifications, as women disproportionately allocate significant time to firewood collection for cooking. A transition to cleaner fuels within these households could not only redirect the time spent on firewood gathering towards more productive endeavours but also positively impact the health of women engaged in daily cooking duties. We also see that the percentage of households following open defecation in the district was higher than the state estimates. Consequently, efforts to mitigate open defecation in Dharmapuri district should include an expansion of household-level latrine facilities.

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# A collaborative project between Department of Economics and Statistics & Madras Institute of Development Studies

The Tamil Nadu Household Panel Survey (TNHPS) is designed as a longitudinal survey where a set of sample households in Tamil Nadu will be surveyed at specific intervals to analyse the change in their socio-economic conditions over time. The TNHPS aims to analyse how individuals, families, communities, and society are transforming in Tamil Nadu. Understanding this transformation is important for informed policy-making and for society in today's modern world where open links with other states and countries lead to enormous movement of people, ideas, technology, capital, and goods and services. The Pre-Baseline Survey (PBS) elicited information from 2,12,282 households across different districts of Tamil Nadu on a comprehensive set of socio-economic indicators. This serves as the sampling frame for the Baseline Survey (BLS) of subsequent rounds of comprehensive surveys of 7,45,653 individuals in the state.

Based on the information collected during the PBS 2018-19, this report provides a baseline on key socio-economic and demographic indicators of the district along with brief notes on the methods and processes followed in collecting, processing and analysis of data. As the first state-level initiative for collecting comprehensive household panel data through digital data collection methods, TNHPS emerges as an important source of information for evidence-based policymaking in the state.



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