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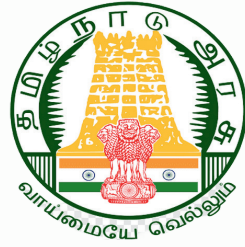
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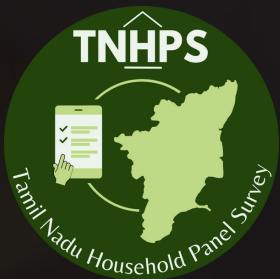
Tamil Nadu Household Panel Survey

Pre-Baseline District Report 2018-19

Tamil Nadu Household Panel Survey (TNHPS)

Pre-Baseline Survey (PBS) District Report 2018-19

Tiruppur District

February 2024

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**In collaboration with
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Summary of PBS Findings

Demographic Indicators

- Tiruppur had a sample size of 7,360 households, of which 55.62 percent of households were from rural areas and 44.37 percent of households were from urban areas.

- The district had a huge demographic dividend with 68.31 percent of the population in the age group up to 45 years. Around one-third of the population was between 26-45 years of age.

- The BC social group was the largest in number, consisting almost 52 percent of the total households in the district. Around 30 percent of the households belonged to the SC category.

Education

- Tiruppur district registered a marginal decrease in literacy rate between 2011 and 2018, from 78.68 percent to 78.17 percent. This was lower than the state estimate of 85.40 percent.

- The gender gap in literacy rate had increased from 13.67 percent in 2011 to 14.34 percent in 2018, which is higher than the state gender gap of 10.82 percent in 2018. The gender gap in literacy rate was higher in rural areas of the district at 18.75 percent than in urban areas at 11.10 percent.

- Only around 76 percent of the population aged 14 and above in the district had received formal schooling. While almost 95 percent of the General category population in the district had received formal education, only around 62 percent of the SC population had done so.

- Among the population with no formal schooling, around 90 percent did not possess functional literacy.

Employment

- The unemployment rate was at 1.79 percent in the district, which was lower than the state estimate of 3.50 percent. Almost 60 percent of the population aged 14 and above were employed and 38.74 percent were not in the labour force.

- While 78.60 percent of the male population was employed, the female work participation was 40.62 percent, which was considerably higher than the state estimate of 29.96 percent. Tiruppur district was ranked second in the state in terms of employed female population.

- Most males who were currently not in the labour force were students at 49.71 percent whereas most females in this category were homemakers at 71.96 percent.

- The largest fraction of the employed population in the district were casual labourers in the industrial sector at 24.81 percent.

- While salaried work in the private sector was predominant in urban areas, casual labourers in the agricultural sector was most common in rural areas of the district.

Land Ownership and Assets

- Around 15 percent of the households in the district owned agricultural land, which was lower than the state estimate of 19.41 percent. A relatively higher percentage of BC households owned agricultural land in the district compared to other social groups.

- Majority (42.31 percent) of the households that owned agricultural land in Tiruppur district depended on rain-fed agriculture.

- Around 60 percent of the agricultural landowners had marginal or small—less than two hectares—landholdings. This estimate was significantly lower than the state level estimate of 89.33 percent.

- Around 17 percent of the households in the district owned at least one agriculture, allied or fishing asset.

- Around 91 percent of the households in the district owned at least one household asset. Such ownership was high across all social groups, except the SC category, as around 14.03 percent of the SC households did not even own a mobile phone.

Household Income

- The annual mean income of the households in the district in the financial year 2017-18 was ₹1,19,423, which was lower than the state PBS estimate of ₹1,42,752; in the urban areas it was ₹1,47,439 and in rural areas it was ₹81,024.

- The mean income from salaried work (₹1,77,377) was the highest while that from wage labour was the lowest (₹53,540).

- The income inequality in the district (0.503) was lower than the state estimate (0.563).

- Around 38 percent of the households expected their income to remain the same in the next five years. Urban households were more optimistic than the rural households about an increase in their future income.

Housing

- In the district, 68.43 percent of households resided in their own house. A higher percentage of rural households resided in their own house compared to urban households in the district.

- Out of the 68.43 percent that owned houses in the district, only 12.97 percent of houses were built under a government scheme and SC households were the main beneficiaries of the government housing schemes.

- An equal percentage of households at 44 percent in the district lived in pucca and semi-pucca houses, and around 12 percent lived in kutccha houses.

Drinking Water, Electricity and Cooking Fuel

- The most commonly used primary source of drinking water in the district was public tap or standpipe at around 38 percent.

- Majority of the households in urban areas used piped water into the dwelling as the primary source of drinking water whereas public tap/standpipe was primarily used in rural areas.

- Around 96.11 percent of households in the district had domestic an electricity connection compared to the state estimate of 97.60 percent. Electrification in the rural areas of the district increased considerably from 89.55 percent in 2011 to 96.32 percent in 2018.

- The use of LPG as the primary cooking fuel had increased considerably from 66.15 percent in 2011 to 91.25 percent in 2018 in Tiruppur district. The district was ranked fourth in the state in terms of LPG use.

- Less than seven percent of the households in the district used firewood as the primary cooking fuel. Around 10 percent of rural households and 12 percent of SC households used firewood as the main cooking fuel.

Sanitation

- Around 70 percent of the households had a latrine within the premises of the household, which was lower than the state estimate of 72.52 percent. Higher percentage of the households in urban areas had latrine within the house premises than rural areas of the district.

- Out of the 30.25 percent households which did not have latrine within the premises of the household, around 79 percent of the households practiced open defecation.

- The percentage of total households in the district practicing open defecation had declined from 35.42 percent in 2011 (Census, 2011) to 23.88 percent in 2018.

1. Introduction

1.1 Profile of Tiruppur District

Tiruppur district in Tamil Nadu was formed in the year 2009 by reorganizing Coimbatore and Erode districts into Coimbatore, Erode and Tiruppur districts. It is in the western region of the state, with Erode in the north, Karur in the east, Dindigul and borders of Kerala in the south, and Coimbatore in the west.

According to Census (2011), Tiruppur had a total population of 24.79 lakhs, accounting for approximately 3.44 percent of Tamil Nadu's total population, which was 7.21 crores. The district comprised 7.12 lakh households, with 61.36 percent residing in urban areas. The male population was 50.27 percent, and the female population was 49.73 percent. Tiruppur demonstrated a child-sex ratio of 952.49 compared to the state average of 943.27. Within the social groups, 15.96 percent of the population belonged to the Scheduled Castes, while 0.22 percent belonged to the Scheduled Tribes. The literacy rate in Tiruppur district stood at 78.7 percent, compared to the state's average of 80.09 percent. The male literacy rate was reported to be 85.5 percent, while the female literacy rate was reported to be 71.8 percent, highlighting the need for investment in women's education.

In the fiscal year 2018-19, Tiruppur's Net District Domestic Product was ₹57,93,964 lakhs, ranking at eighth highest amongst districts. The district's per capita Net District Domestic Product was recorded at ₹1,64,716, ranking it at fifteenth 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 nine percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 39 percent and 52 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Tiruppur ranked twenty third in terms of the Human Development Index with a score of 0.627, indicating the need for improving the development of the general population. It ranked fourteenth in the Gender Inequality Index with a score of 0.07, which is a moderate score. In terms of the Child Development Index, the district ranked seventeenth with a score of 0.651, indicative of an average performance in developing the youth. Additionally, Tiruppur ranked sixth in terms of the Multidimensional Poverty Index with a score of 0.42, pointing to a relatively good performance in the eradication and prevention of poverty.

Tiruppur district showcases a strong economic position in terms of Net District Domestic Product yet faces the challenge of lower per capita income compared to the state average. The district demonstrates progress in reducing poverty and moderately addressing gender inequality, but further efforts are needed to enhance overall human development and child welfare.

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 analyze the patterns of change in various socio-economic 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. The PBS estimates act as an important intermediate database between Census 2011 and Census 2021 for the Government of Tamil Nadu. 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 analyzes data from the PBS for Tiruppur district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent census data of Tiruppur (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Tiruppur district. The sample size for the district was 7,360 households, among which 4,094 households were from rural areas and 3,266 households were from urban areas. The blocks covered during the survey were: Avinashi, Gudimangalam, Kangayam, Mulanur, Palladam, Pongalur, Tiruppur, Udumalpet, Uthukuli and Vellakoil.

2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 7,996 households in Tiruppur district were selected using a multi-stage stratified sampling design[1]. The final sample size for PBS was 7,360 households, of which 55.62 percent of households were from rural areas and 44.37 percent of households were from urban areas of the district. The area-wise 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

Response of Households	Area Type					
	Rural		Urban		Tiruppur	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	4,094	91.34	3,266	92.94	7,360	92.05
Non-Response	186	4.15	185	5.26	371	4.64
Non-sample	202	4.51	63	1.79	265	3.31
Total	**4,482**	**100**	**3,514**	**100**	**7,996**	**100**

Tiruppur district had a lower response rate—willingness of households to participate in the TNHPS-PBS—of 92.05 percent compared to the state response rate of 96.5 percent (TNHPS-PBS, 2021). Around 4.64 percent of households were not willing to participate in the survey. About 3.31 percent of the selected samples were removed as they were not considered as households as per the definition used in the PBS[2].

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[1] Detailed explanation of the Sampling Methodology is available in the TNHPS-PBS State Report (see TNHPS-PBS, 2021).

[2] 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[3] in the district had reduced from 3.49 in 2011 (Census, 2011) to 3.24 in 2018. As per the PBS estimates, 50.62 percent of the population in the district were female, and 49.38 percent of the population were male. Around 16.43 percent of the households in the district were headed by females, which was lower than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

Chart 3.1 shows the age-wise distribution of the population in Tiruppur district.

Chart 3.1 Age-wise Distribution of Population
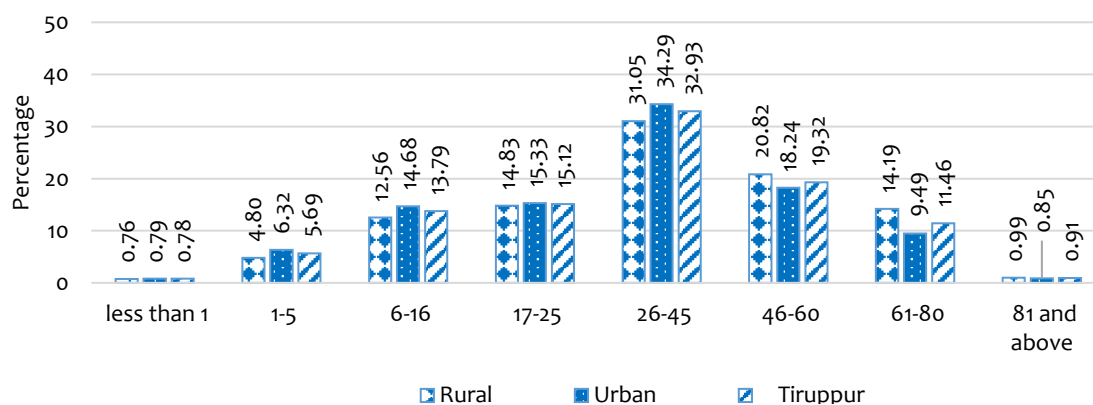
As per the PBS estimates, almost one-third of the population in the district were in the age group of 26 to 45 years. The 17-60 years category in the district was 67.37 percent, which was comparatively higher than the state estimate of 66.00 percent (TNHPS-PBS, 2021). The proportion of senior citizens—above 60 years—in Tiruppur district's population at 12.37 percent was higher than that at the state level estimate of 11 percent (TNHPS-PBS, 2021).

The percentage of currently married population in the district was 71.87 percent in 2018. A higher percentage of males were currently married compared to females. The widowed female population was notably higher than the widowed male population. The widowed population in rural areas was higher than in the urban areas of the district.

The religion-wise distribution of the households in the district as per the PBS estimates shows that 96.38 percent of the households practiced Hinduism, 1.92 percent practiced Islam and 1.68 percent followed Christianity.

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[3] Household size is defined as the number of family members currently living in the household during the PBS survey.

Table 3.1 shows the social group-wise distribution of the households in the district.

Table 3.1 Social Group-wise Distribution of Households

Social Group	Percentage
SC	30.54
ST	0.17
BC	51.61
MBC	15.61
Denotified Communities (DNC)	0.32
General	1.11
DK/RF	0.63
Total	**100**

As per the PBS estimates, the highest percentage of households in Tiruppur district belonged to the BC category, followed by the SC category. The percentages of SC and ST households in the district were 30.54 percent and 0.17 percent in 2018.

It is important to note that the percentage of DNC and ST category households in Tiruppur district was only 0.32 percent and 0.17 percent respectively—only twenty-one DNC households and fifteen ST households were sampled in the district. Hence, the results pertaining to these social groups that are discussed in the 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 Tiruppur district.

3.2.1 Education

The change in literacy rate of Tiruppur district during the period 2011 and 2018 is given in Table 3.2. As per Census 2011, a person aged 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

Gender	Rural		Urban		Tiruppur		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	78.34	79.31	90.06	89.94	85.49	85.44	86.77	90.97
Female	60.91	60.56	78.93	78.84	71.82	71.10	73.40	80.15
Total	69.61	69.80	84.53	84.31	78.68	78.17	80.09	85.40

*The represented trend should be understood under the context that Census does 100 percent enumeration whereas in the PBS, a sample is surveyed.

As per Census 2011, the literacy rate in Tiruppur district at 78.68 percent was lesser than the state estimate of 80.09 percent. The PBS estimates showed that in the year 2018, the literacy rate in Tiruppur district had decreased to 78.17 percent, which continued to be lower than the state estimate of 85.40 percent. Also, the district had registered a 0.51 percent decrease in literacy rate in this period while the state had registered a 5.31 percent increase. The difference in literacy rate between the state estimate and Tiruppur district was 1.41 percent in 2011, which had increased to 7.23 percent in 2018 as per the PBS estimates. The district was ranked low at thirty first among the then 32 districts in 2018 (TNHPS-PBS, 2021).

Both male and female literacy rates in Tiruppur district had recorded a decrease during the period under consideration, and a wide gender gap prevailed. The gender gap in literacy rate had increased from 13.67 percent in 2011 to 14.34 percent in 2018, which is higher than the state gender gap of 10.82 percent in 2018.

While rural literacy rate had registered a slight increase between 2011 and 2018, urban literacy rate had decreased during the same period. The rural literacy rate was 14.51 percent lower than the urban literacy rate in 2018. The gender gap in literacy rate was much higher in rural areas at 18.75 percent than in urban areas at 11.10 percent.

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 Tiruppur district. The area-wise education status of the population in the district is given in Chart 3.2.

Chart 3.2 Formal Schooling of the Population (Age 7 and above)- Area-wise Percentages

Legend: Formal Schooling / No Formal Schooling
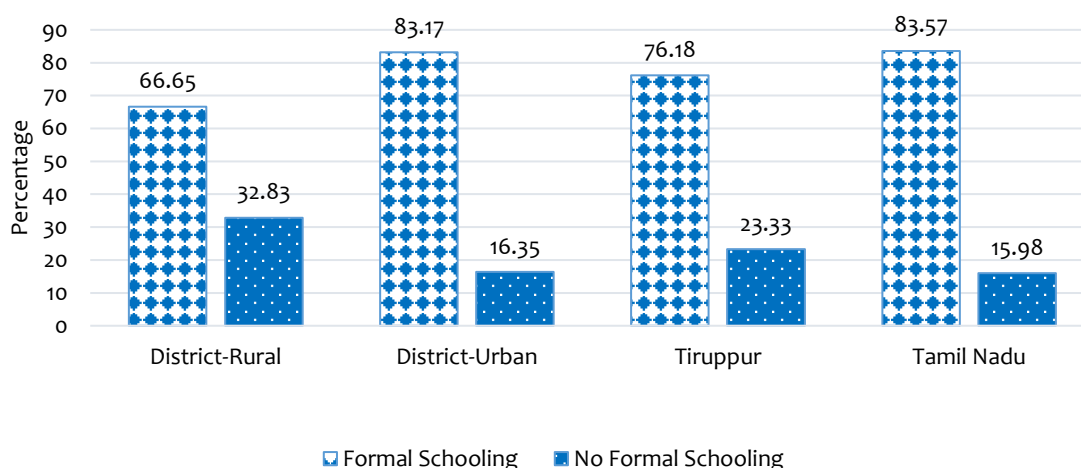
*Others and Don't Know/Refuse to Answer categories are not included in any chart, unless their value is substantially high. Therefore, the total might not add up to 100 percent.

Chart 3.2 shows that more than three quarters of the specified population in the district had attended formal schooling, which was lower compared to the state estimate. The percentage of population with formal education in urban areas was much higher than in rural areas of the district.

Chart 3.3 Formal Schooling of the Population – Gender-wise Percentages

Male

16.53%
83.02%

Formal Schooling   No Formal Schooling

Female

29.93%
69.52%

Formal Schooling   No Formal Schooling
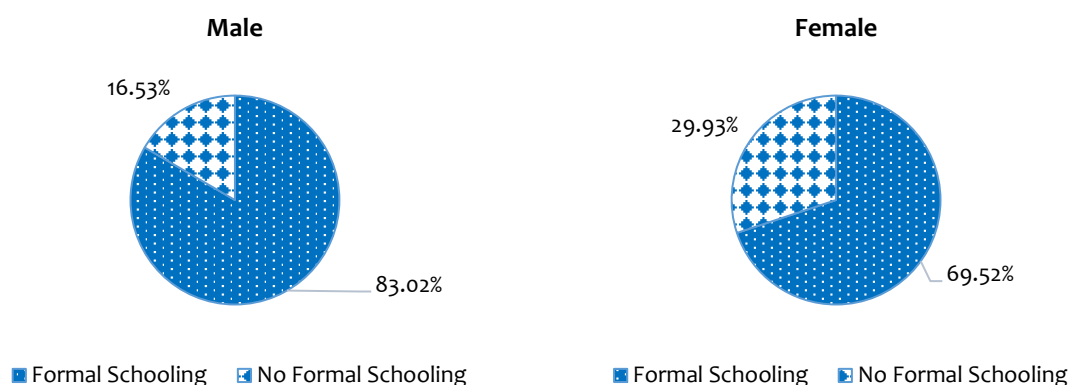
Chart 3.3 shows that the percentage of the population that had acquired formal education in the district was much higher among males compared to females, again denoting a wide gender gap, like in literacy.

A district level analysis of the PBS on the educational attainment status of various social groups is shown below.

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

Education Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Formal Schooling	62.26	72.63	83.85	77.39	89.39	94.67	76.18
No Formal Schooling	37.49	27.37	15.55	21.90	10.61	5.22	23.33
Others and DK/RF	0.25	0.00	0.60	0.71	0.00	0.11	0.50
Total	100	100	100	100	100	100	100

Table 3.3 shows a wide variation across social groups in the attainment of formal schooling. While almost 95 percent of the General category population in the district had received formal education, only around 62 percent of the SC population had done so. The results for the ST and DNC categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

To take this analysis further, Table 3.4 gives detailed information on the current highest level of formal educational attainment of the population that had received formal education.

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

Educational Attainment	Area Type		
	Rural	Urban	Tiruppur
Primary (I to V)	30.78	22.32	25.46
Middle School (VI to VIII)	22.60	22.71	22.67
High School (IX to X)	19.99	22.17	21.36
Higher Secondary (XI to XII)	15.05	14.23	14.53
Bachelor's degree	7.14	11.89	10.13
Diploma Degree	1.82	3.01	2.57
Post Graduate Degree	1.84	3.10	2.63
Others/DK/RF	0.78	0.57	0.65
Total	100	100	100

Around 84.02 percent of the population—aged seven and above, had completed schooling up to higher secondary level. The percentage of the population that was either pursuing or had completed tertiary education—such as bachelor's degree, diploma, or post graduate degree and above—was 15.33 percent, which was lower than the state estimate of 20.02 percent (TNHPS-PBS Data, 2021). Also, this figure was higher for urban areas than rural areas of the district.

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

Educational Attainment	Gender of the Member		
	Male	Female	Tiruppur
Primary (I to V)	24.85	26.16	25.46
Middle School (VI to VIII)	23.18	22.08	22.67
High School (IX to X)	22.80	19.70	21.36
Higher Secondary (XI to XII)	13.26	16.00	14.53
Bachelor's degree	9.68	10.65	10.13
Diploma Degree	3.27	1.76	2.57
Post Graduate Degree	2.43	2.86	2.63
Others/DK/RF	0.53	0.78	0.65
Total	**100**	**100**	**100**

Table 3.5 shows that a higher percentage of males at 84.09 percent in the specified population had completed schooling up to higher secondary level, compared to females at 83.94 percent. In tertiary education, a higher percentage of females were either pursuing or had completed bachelor's degree and post-graduate degree compared to males.

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

Educational Attainment	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Primary (I to V)	27.58	29.14	24.45	27.11	28.83	8.74	25.46
Middle School (VI to VIII)	26.76	18.98	21.47	21.54	20.83	8.71	22.67
High School (IX to X)	22.36	34.45	20.68	20.38	27.45	31.24	21.36
Higher Secondary (XI to XII)	14.16	12.40	14.65	14.62	13.67	17.29	14.53
Bachelor's degree	5.10	5.03	12.04	10.33	3.94	28.55	10.13
Diploma Degree	2.50	0.00	2.54	2.75	5.08	2.85	2.57
Post Graduate Degree	1.14	0.00	3.44	2.36	0.20	2.50	2.63
Others/DK/RF	0.40	0.00	0.72	0.91	0.00	0.12	0.65
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The social group-wise analysis in Table 3.6 shows that more than 90 percent of the SC population in the district were either pursuing or had completed only primary and secondary school. The percentage of population with tertiary education—bachelor's degree and above—was quite high among the General category at 33.9 percent, followed by the BC category at 18.02 percent. Similar to the national and state level trend, the percentage of population with higher educational qualification in the district was lower

among the SC category. The results pertaining to the ST and DNC categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

About 23.33 percent of the population had not received formal education in Tiruppur district (refer 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		
	Rural	Urban	Tiruppur
Yes	9.60	6.98	8.54
No	89.18	92.65	90.58
DK/RF	1.22	0.37	0.87
Total	**100**	**100**	**100**

Table 3.7 shows the functional literacy status of the population with no formal schooling in the district. Only 8.54 percent of the population without formal schooling had functional literacy. The specified population group in rural areas of the district had a better functional literacy rate than the urban areas.

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

Functional Literacy	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	6.36	0.00	12.83	6.29	0.00	3.35	8.54
No	92.78	100	86.72	91.75	100	96.65	90.58
DK/RF	0.86	0.00	0.46	1.97	0.00	0.00	0.87
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.8 shows the functional literacy status of the population with no formal schooling, across various social groups. Though functional literacy was low across all social groups, the BC category population had the highest functional literacy. The results pertaining to the ST and DNC categories 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, types of employment that they are engaged in, the unemployment rate at the district level and

comparison of these findings with the state PBS estimates. In the PBS, the population aged 14 years and above has been classified as employed, unemployed and not in the labour force[4].

The employed category—population aged 14 years and above—includes the following:

    (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 category includes those aged 14 years and above, who did not work but were actively seeking and/or available for work.

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

    (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.).

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[4] 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 the 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 (Age 14 years and above) – Area-wise
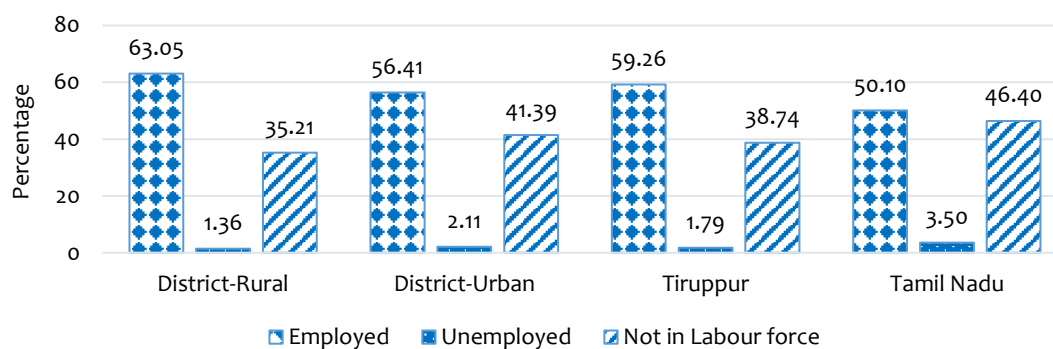
Chart 3.4 shows that the overall percentage of employed population—14 years and above—in the district was much higher than the state estimate. Also, the share of unemployed population was much lower in the district compared to the state. The percentage of population that was employed was higher in rural parts of the district than the urban. The unemployment status in rural areas of the district at 1.36 percent and unemployment status in urban areas of the district at 2.11 percent were lower than the state's rural and state's urban estimates of 3.6 percent and 3.3 percent respectively. Tiruppur district was ranked first among all districts in Tamil Nadu in terms of employed population and ranked lowest in terms of the unemployed population (TNHPS-PBS, 2021).

Chart 3.5 Employment Status of the Population – Gender-wise

Chart 3.5 shows the gender-wise employment status of the population aged 14 years and above. While more than three-quarters of the male population was employed, the female work participation was around 41 percent. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). The district female work participation was higher than both the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019) and the state estimate of 29.96 percent. Around 58 percent of the female population was not inclined to participate in the workforce, and among these, majority of them at about 71.96 percent were associated with attending to domestic duties as homemakers (see Chart 3.7). As per the state estimates, Tiruppur district was ranked second in terms of employed female population and ranked third lowest in terms of female unemployment (TNHPS-PBS, 2021).

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

Work Type	Area Type		
	Rural	Urban	Tiruppur
Self Employed Agriculture	10.75	4.11	7.14
Self Employed Non-Agriculture	8.40	14.50	11.72
Self Employed Allied Agriculture	1.02	0.86	0.93
Casual Labourer Agriculture	32.03	11.42	20.82
Casual Labourer Industry	24.64	24.96	24.81
Casual Labourer Service	5.33	11.28	8.56
Casual Labourer (Others)	5.43	3.31	4.28
Salaried Worker Government	1.51	3.84	2.78
Salaried Worker Private	8.17	25.03	17.34
Multiple Occupations	2.18	0.28	1.15
Other	0.33	0.34	0.33
DK/RF	0.22	0.07	0.14
Total	**100**	**100**	**100**

Since Tiruppur is primarily an urban district, almost a quarter of the employed population depended on the industrial sector for employment. While the greatest proportion of the working population in the state were salaried workers in the private sector at 21.82 percent, as per the state PBS estimates (TNHPS-PBS, 2021), majority of the working population in Tiruppur district were casual labourers in the industrial sector. While salaried work in the private sector was predominant in urban areas, casual labour in the agricultural sector was most common in rural areas with casual labour in industry coming second highest both in urban and rural of the district.

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

Work Type	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Self Employed Agriculture	0.15	0.00	13.66	4.01	0.00	0.60	7.14
Self Employed Non-Agriculture	3.54	0.00	16.50	14.91	16.99	27.56	11.72
Self Employed Allied Agriculture	0.23	0.00	0.85	2.97	0.00	0.00	0.93
Casual Labourer Agriculture	40.66	2.12	7.82	17.31	1.59	0.00	20.82
Casual Labourer Industry	25.91	47.44	23.32	27.00	40.52	5.58	24.81
Casual Labourer Service	10.15	12.37	6.60	11.70	0.61	2.46	8.56
Casual Labourer (Others)	6.48	27.31	2.96	2.50	5.99	0.52	4.27
Salaried Worker Government	2.58	5.43	2.97	2.62	0.61	4.73	2.78
Salaried Worker Private	9.51	5.34	22.99	15.53	33.68	57.99	17.34
Multiple Occupations	0.71	0.00	1.55	1.08	0.00	0.00	1.15
Other	0.07	0.00	0.53	0.37	0.00	0.58	0.33
DK/RF	0.04	0.00	0.26	0.00	0.00	0.00	0.14
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Tiruppur being an urban district provided employment opportunities in the industrial sector to the largest fraction of the BC and MBC populations. The SC population involved

in casual labour in agriculture in the district at 40.66 percent was higher than the state estimates of 33.33 percent (TNHPS-PBS, 2021). Those belonging to the General category were predominantly involved in salaried work in the private sector. The results pertaining to the ST and DNC categories must be interpreted in the context of their sample size, as discussed in Section 3.1.

Chart 3.6 Composition of Population Not in the Labour Force – Area-wise
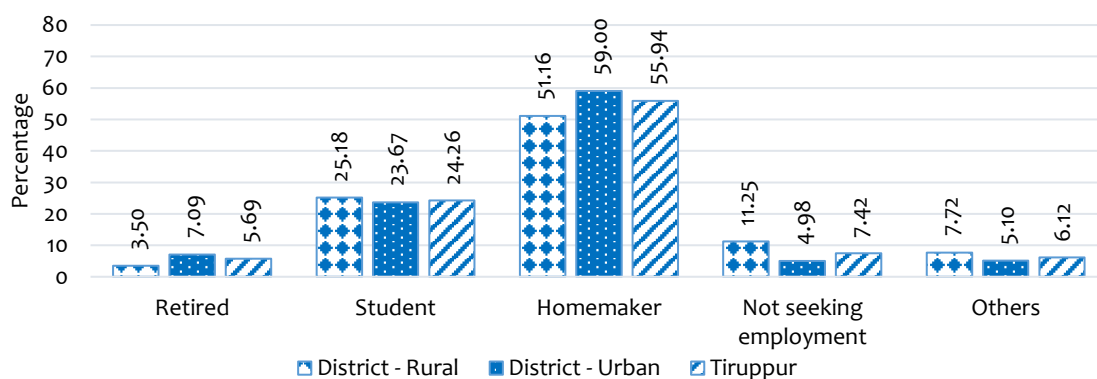
Chart 3.6 shows that, similar to the trend at the state level (TNHPS-PBS, 2021), more than half the population that was not in the labour force in the district comprised of homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were not seeking employment or were students were higher in rural areas than urban areas, whereas the percentages of retired people and homemakers were higher in urban areas than rural areas.

Chart 3.7 Composition of Population Not in the Labour Force – Gender-wise
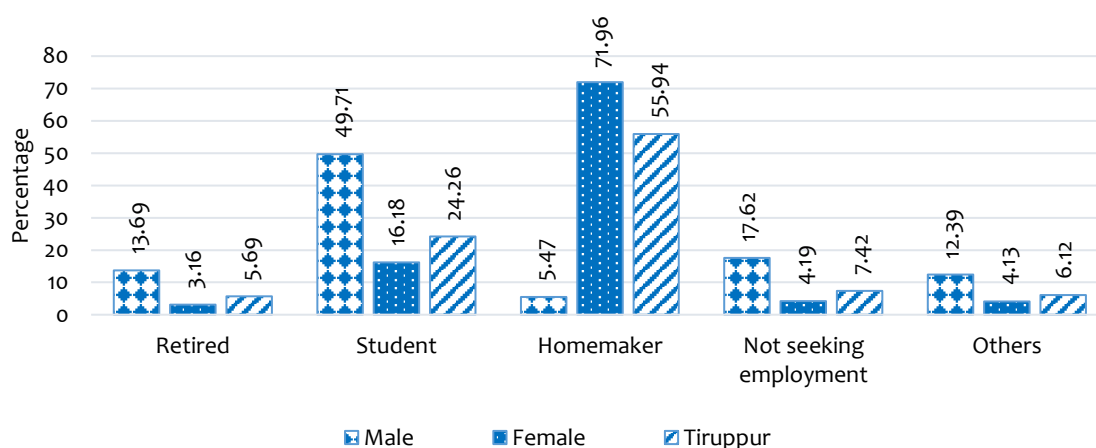
The gender-wise distribution of the population currently not in the labour force aged 14 and above is given in Chart 3.7. While Chart 3.3 represents the lower female involvement in formal education, Chart 3.7 shows the staggeringly lower female involvement in higher education compared to men as only 16.18 percent of the female not-in-labour-force

population were students. Similar to the state trend (TNHPS-PBS, 2021), 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 the Population Not in the Labour Force – Social Group-wise Percentages

Current Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Retired	3.92	0.00	6.58	3.80	1.51	17.95	5.69
Student	27.30	34.99	23.30	23.14	1.96	23.16	24.26
Homemaker	50.89	45.13	57.84	57.01	78.80	50.40	55.94
Not seeking employment	10.28	3.63	5.85	9.27	17.73	3.88	7.42
Others	6.45	16.25	6.16	6.26	0.00	1.97	6.12
DK/RF	1.16	0.00	0.26	0.53	0.00	2.64	0.56
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.11 shows that within all social groups, the percentage of homemakers was the largest compared to other categories in the district. The SC category had a higher percentage of not-working population as students compared to the other social groups. Although majority of the employed SC population worked as casual labourers (see Table 3.10), the not-working population belonging to the student category was high for this social group, probably suggesting increasing awareness on the importance of education. The results pertaining to the ST and DNC 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 Tiruppur 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 combination of both, in the rural and urban areas of Tiruppur district are given in Chart 3.8. The TNHPS PBS definition of land ownership does not include leased-in land or other forms of holdings. Data was collected only on the ownership of agricultural land. The fourth round of 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
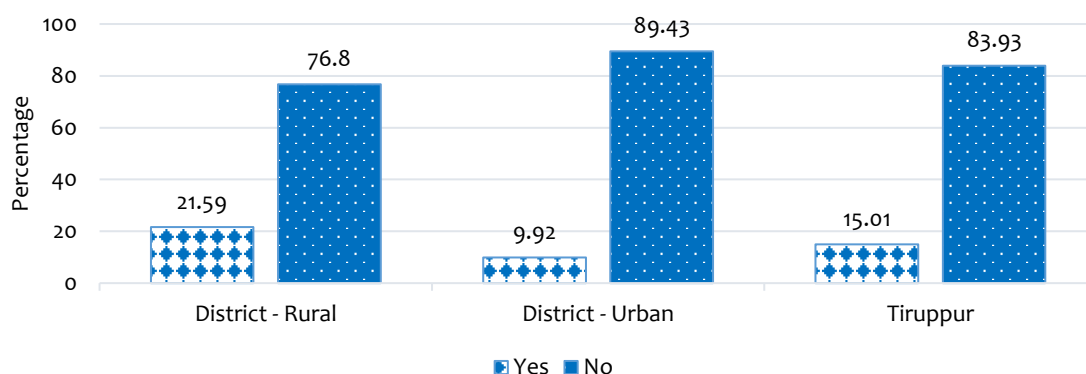
Around 15 percent of households in the district, owned agricultural land, which was lower than the state estimate of 19.41 percent. Tiruppur district was ranked twenty fourth in the state on the percentage of households owning agricultural land (TNHPS-PBS, 2021). This percentage was higher in rural areas than urban areas of the district.

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

Type of Agricultural Land	Area Type		
	Rural	Urban	District
Only Irrigated Agricultural Land	21.35	58.86	35.28
Only Unirrigated Agricultural Land	47.31	33.83	42.31
Both Irrigated and Unirrigated Agricultural Land	30.95	5.34	21.44
DK/RF	0.39	1.96	0.97
Total	**100**	**100**	**100**

Table 3.12 shows that, majority of the households who owned agricultural land in Tiruppur district—about 42.31 percent—depended on rain-fed irrigation. Around 35.28 percent of agricultural land-owning households utilized various irrigation sources, which was lower compared to the state estimate of 50.03 percent. Canal irrigation, tank irrigation, tube and open well irrigation are the major sources of irrigation in Tiruppur district (Tamil Nadu State Planning Commission, 2017b).

Table 3.13 Ownership of Agricultural Land - Social Group wise Percentages

Agricultural Land Ownership	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	1.35	7.45	24.86	10.16	8.93	7.72	15.01
No	97.48	92.55	74.43	88.40	91.07	87.67	83.93
DK/RF	1.17	0.00	0.71	1.44	0.00	4.61	1.07
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.13 shows the analysis of the social group wise ownership of agricultural land at the household level. A relatively higher percentage of BC households owned agricultural land in the district compared to other social groups. Only 1.35 percent of SC category

households owned agricultural land in the district. The results for the ST and DNC category 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 in Table 3.14.

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

Size of Agricultural Land (in Hectares)	Area Type		
	Rural	Urban	Tiruppur
Marginal (0.01 - 0.99)	30.05	50.32	37.45
Small (1 - 1.99)	23.01	20.43	22.07
Semi Medium (2 - 3.99)	27.64	20.52	25.04
Medium (4 - 9.99)	16.33	6.46	12.73
Large (10 and above)	2.98	2.27	2.72
Total	**100**	**100**	**100**

Table 3.14 shows that 59.52 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares. This estimate was significantly lower than the state level estimate of 89.33 percent. The shares of semi-medium, medium, and large landholdings were higher than that of the state estimates of 7.64 percent, 2.26 percent and 0.77 percent respectively.

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 tractor, pump set, dairy animals, poultry birds, mechanized and non-mechanized boats, amongst the households of Tiruppur district.

Chart 3.9 Ownership of Agricultural, Allied Agricultural and Fishing Assets – Area wise
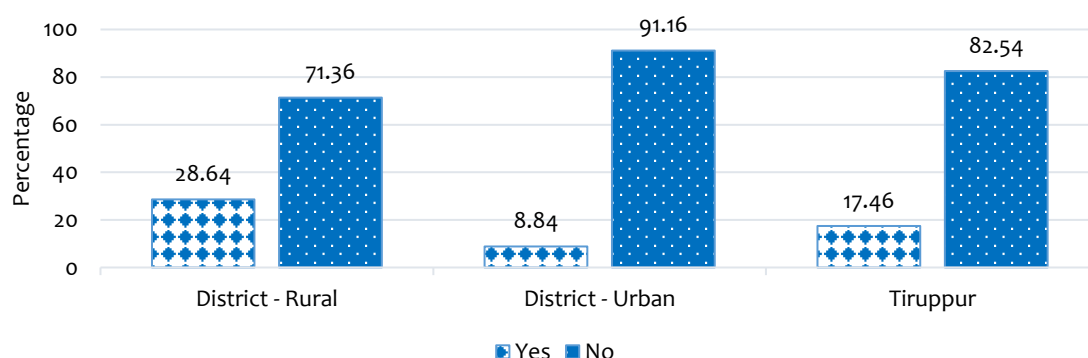
Chart 3.9 shows that 17.46 percent of the households in Tiruppur district owned at least one agricultural, allied agricultural or fishing asset. The estimate was lower than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The proportion of households owning at

least one agricultural, allied agricultural or fishing asset was higher in rural areas at 28.64 percent than in urban areas at 8.84 percent of the district.

3.3.3 Presence of Household Assets

Chart 3.10 shows the percentage of households in Tiruppur district that owned at least one household asset. Household assets include Air Conditioner (AC), refrigerator, two-wheeler, four-wheeler, and mobile phones. The state PBS estimates found that the combination of mobile phone and two-wheeler were the predominantly owned assets in rural areas whereas a combination of refrigerator, two-wheeler and mobile phone was largely owned in the urban areas.

Chart 3.10 Ownership of at least one Household Asset - Area-wise
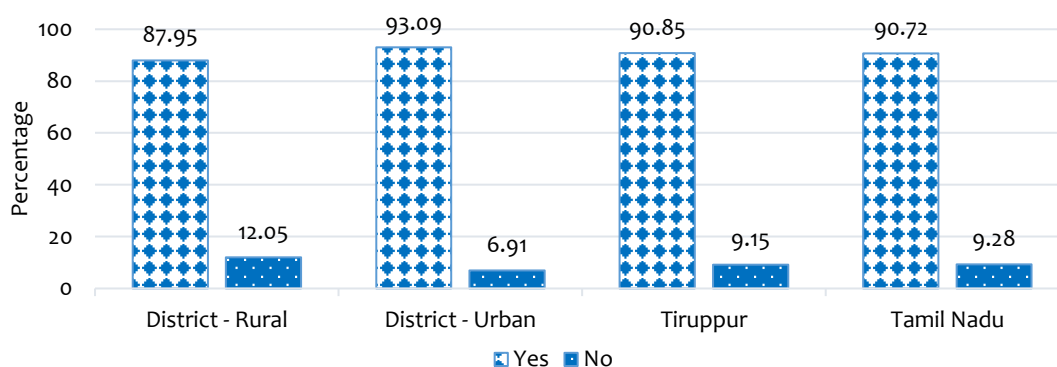
The percentage of households owning at least one household asset in Tiruppur district at 90.85 percent was similar to the state estimate of 90.72 percent. Within the district, the urban areas had a higher percentage of households owning at least one household asset than the rural areas.

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

Presence of Household Assets	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	85.97	92.55	93.48	91.07	100	98.85	90.85
No	14.03	7.45	6.52	8.93	0.00	1.15	9.15
Total	100	100	100	100	100	100	100

The social group wise ownership of household assets in Tiruppur district is given in Table 3.15. The estimates show that more than 90 percent of households belonging to each social group owned at least one household asset, except the SC category. Around 14.03 percent of the SC households did not even own a mobile phone. The results for the ST and DNC category 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 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, for instance. The percentage of households that possessed ration card in rural and urban areas of Tiruppur district are given in Chart 3.11.

Chart 3.11 Possession of Ration Card
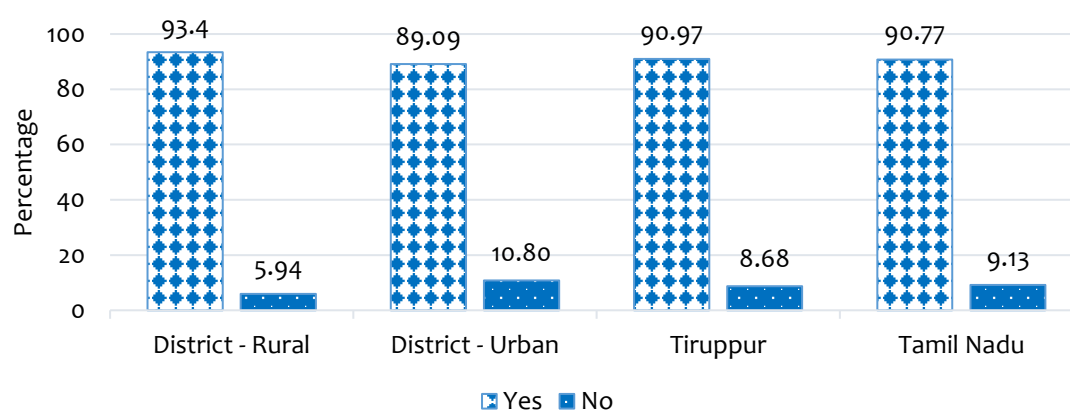
Chart 3.11 show that the percentage of households in Tiruppur district that possessed a ration card was similar to the state estimate. A higher percentage of rural households possessed ration cards compared to the urban households.

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

Possession of Ration Card	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	91.55	71.06	92.42	87.00	64.20	93.21	90.97
No	8.00	26.09	7.44	12.34	35.80	6.35	8.68
DK/RF	0.45	2.85	0.14	0.65	0.00	0.44	0.35
Total	100	100	100	100	100	100	100

The social group-wise ownership of household assets in Tiruppur district is given in Table 3.16. Around 90 percent of households belonging to almost all social groups possessed a ration card. Possession of ration card was highest among the General category households at 93.21 percent and lowest among MBC category households at 87.00 percent. The results for the ST and DNC category 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 Tiruppur district are given in Chart 3.12.

Chart 3.12 Type of Ration Card at the Household Level
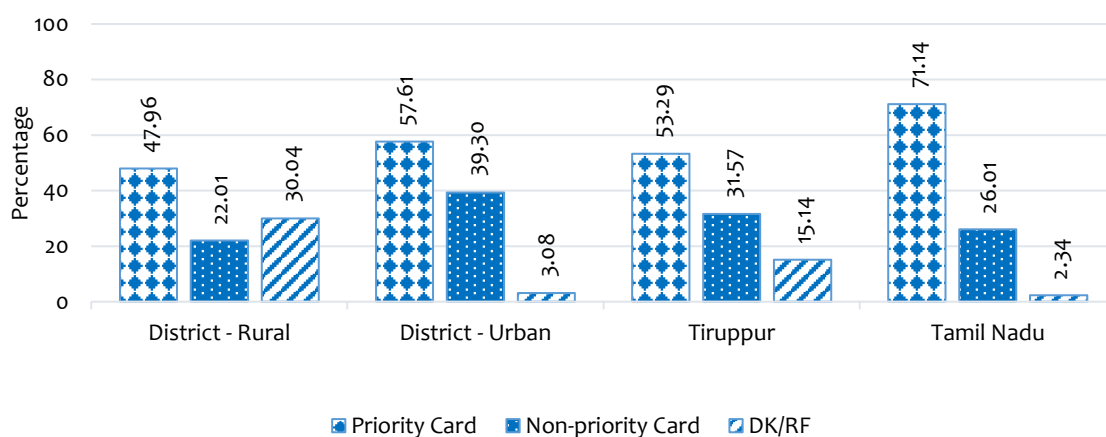
The percentage of households possessing priority ration cards in the district was considerably lower than the state estimates. A higher percentage of urban households possessed priority ration cards than rural households of the district. A large fraction of households, especially in the rural areas, refused to answer this question.

3.4 Household Income

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

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

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

Source	Rural	Urban	Tiruppur	Tamil Nadu
Agriculture	89,482	1,08,716	98,965	61,830
Allied Agriculture	65,054	40,281	56,353	38,576
Salaried	1,25,900	1,92,172	1,77,376	2,29,857
Self Employed	1,13,833	1,92,928	1,72,631	1,47,403
Wage Labour	49,269	57,520	53,539	47,734
Other Sources	48,912	99,810	72,119	97,646
Income from all Sources	**81,024**	**1,47,439**	**1,19,422**	**1,42,752**

The mean annual household income of Tiruppur district was 16.34 percent lesser than the state estimates. The mean household income was higher among the households with salaried income and lower among the households that depended on wage labour. Among the then 32 districts, Tiruppur was at thirteenth place in terms of mean annual household income (TNHPS-PBS, 2021).

In rural areas of Tiruppur district, the mean household income was lower compared to the state rural estimate of ₹92,765 (TNHPS-PBS, 2021). The mean household income was higher among the households that depended on salaried income. Lower mean income was reported among the households that depended on wage labour and other sources.

In urban areas of the district, the mean household income was lower compared to the state urban estimate of ₹1,99,629 (TNHPS-PBS, 2021). The mean household income was higher among the households who were self-employed. Lower mean income was reported among the households that engaged in allied agricultural activities as a source of income.

3.4.2 Income Inequality in Tiruppur District

The Gini coefficient measures inequality levels in income or wealth where the coefficient value of 0 denotes perfect equality and 1 denotes perfect inequality (across households). The income inequality in Tiruppur district (0.503) was lower than the state estimate (0.563)[5]. Income inequality across households in urban areas (0.486) of the district was found to be higher than in rural areas (0.478).

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[5] 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	0.478
Urban	0.486
Tiruppur	0.503
Tamil Nadu	**0.563**

Chart 3.13 Lorenz Curve and Income Inequality
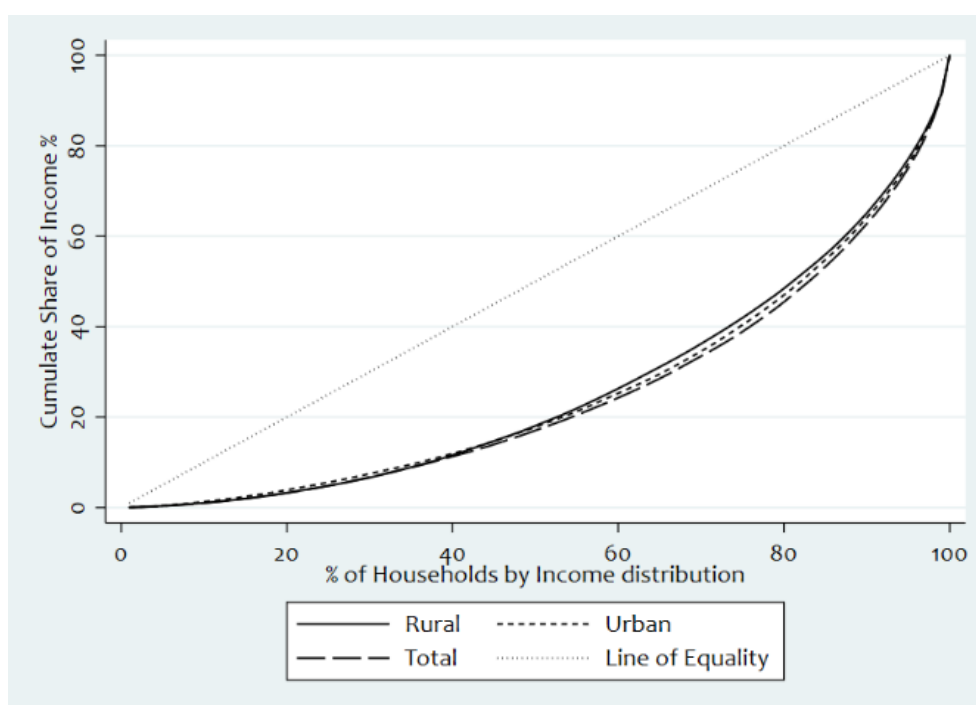
The Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of the population. Chart 3.13 represents that the bottom 60 percent of the households held around 20 percent of the total income; the bottom 80 percent of households held around 40 percent of total income and the top 20 percent of households held around 60 percent of total income.

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 had 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 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 can capture the level of optimism—or pessimism—that

each household has about their future economic status. Table 3.19 shows the area-wise percentage of households expecting an increase, decrease or no change in income in Tiruppur district.

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

Expectation of Change in Household Income	Area Type			
	Rural	Urban	Tiruppur	Tamil Nadu
Higher	16.75	44.86	32.61	50.06
Lower	10.36	7.15	8.55	8.17
About the same	38.95	37.18	37.95	31.66
DK/RF	33.94	10.80	20.88	10.11
Total	100	100	100	100

Majority of the households in the district expected that their household income to remain the same in the next five years, and about 32.61 percent of the households in the district foresaw their future income to increase. Less than one-tenth of the households expected their income to decrease in the next five years. Urban households were more optimistic than the rural households about an increase in their future income.

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

Expectation of Change in Household Income	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Higher	27.03	43.20	35.31	32.26	59.45	63.66	32.61
Lower	9.26	19.87	7.69	10.65	0.00	1.04	8.55
About the same	43.42	16.33	34.52	39.98	22.15	29.39	37.95
DK/RF	20.29	20.60	22.48	17.10	18.40	5.91	20.88
Total	100	100	100	100	100	100	100

While 63.66 percent of the general category households in Tiruppur district were expecting an increase in income in the next five years since 2018, the percentage of SC households that expected such an increase was only 27.03 percent. The percentage of households expecting a decline in future income was higher among MBC households at 10.65 percent compared to the other social groups. The results for the ST and DNC 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 lived in their own house or stayed at a rented house are given in Chart 3.14.

Chart 3.14 Ownership Status of the Households' Dwelling/ House – Area-wise
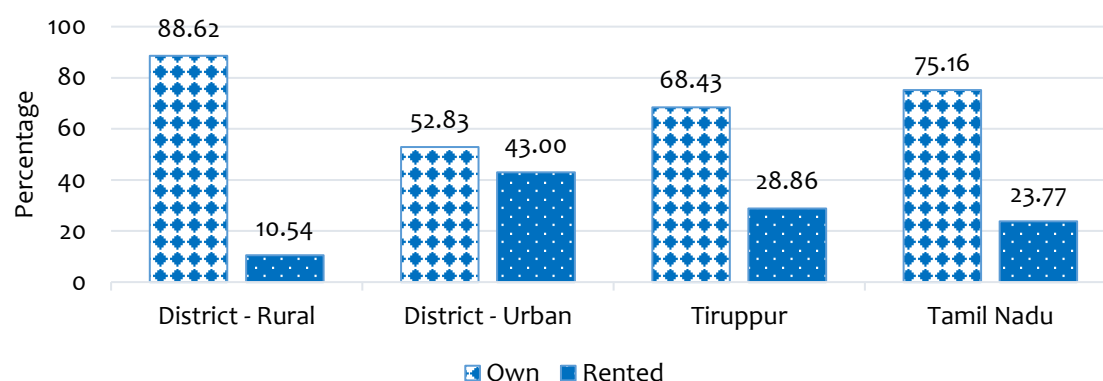
Around 68.43 percent of the households lived in their own house in Tiruppur district, which was lower than the state estimate. The district was ranked twenty eighth among all districts of Tamil Nadu in terms of percentage of households living in their own house (TNHPS-PBS, 2021). A considerably higher number of rural households lived in an own house compared to urban households. Around three percent of households lived in other houses such as 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	BC	MBC	DNC	General	Tiruppur
Own	81.91	22.18	64.48	59.27	38.78	49.36	68.43
Rented	12.54	68.98	34.66	37.24	61.22	49.93	28.86
Others	5.50	8.84	0.85	3.24	0.00	0.35	2.65
DK/RF	0.05	0.00	0.01	0.26	0.00	0.35	0.07
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.21 shows the social group wise house ownership status in the district. Around 81.91 percent of the SC category households were living in their own house. Almost half of the General category households in the district lived in rented houses, which was higher compared to the state estimate of 36.4 percent (TNHPS-PBS, 2021). The percentage of BC and MBC households that lived in rented houses were also higher than their respective state level estimates (TNHPS-PBS, 2021). The results for the ST and DNC category must be interpreted in the context of their sample size, as discussed in Section 3.1.

A detailed analysis of ownership of houses showed that out of 68.43 percent households that owned houses in Tiruppur district, 12.97 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 Government Scheme	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	28.07	0.00	3.73	6.13	31.09	0.00	12.97
No	71.12	100	96.27	93.21	68.91	100	86.65
DK/RF	0.82	0.00	0.00	0.66	0.00	0.00	0.39
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Among the owned houses, the percentage of houses constructed under a government scheme were lower in Tiruppur district at 12.97 percent compared to the state estimate of 14.12 percent (TNHPS-PBS, 2021). In Tiruppur, SC households had the highest percentage of houses built under a government scheme compared to other social groups. The results for the ST and DNC 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 wall/roof or quality of the house, the PBS classified houses as Kutccha, Pucca and Semi-pucca. The percentage of houses that come under each type are given below.

Chart 3.15 Type of House – Area-wise
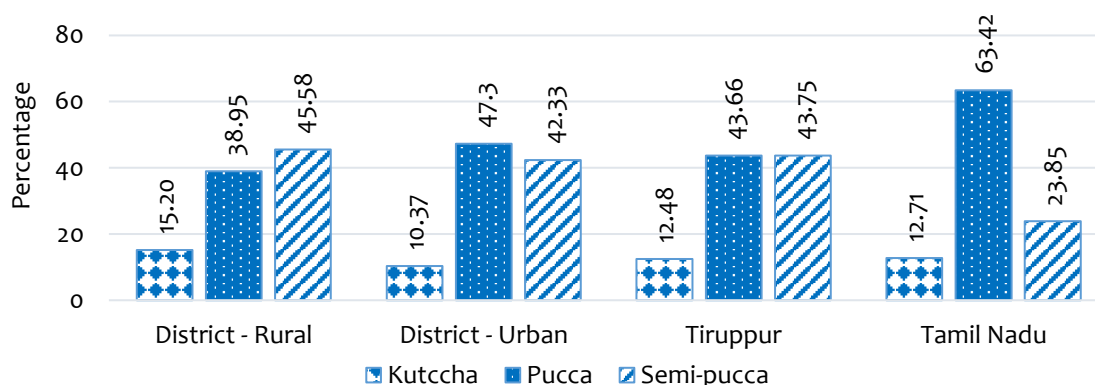
Chart 3.15 shows that the majority of households at 43.75 percent in Tiruppur district were living in semi-pucca houses. The percentage of households living in pucca houses was significantly lower than the state estimate of 63.42 percent. The percentage of people living in pucca houses is higher in urban areas compared to the rural areas of the district. While 75.22 percent of the state urban households and 52.93 percent of the state rural

households lived in pucca houses (TNHPS-PBS, 2021), 47.30 percent of the district urban households and 38.95 percent of the district rural households lived in pucca houses. The percentage of people living in a kutccha house was similar to the state estimate. A higher percentage of people lived in semi-pucca houses in rural areas and pucca houses in urban areas.

3.5.3 Primary Drinking Water Source

In this section, we discuss the PBS findings on the primary source of drinking water of the households in Tiruppur district. The primary sources[6] 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 well, unprotected well, rainwater collection and surface water (tank/pond/river/dam).

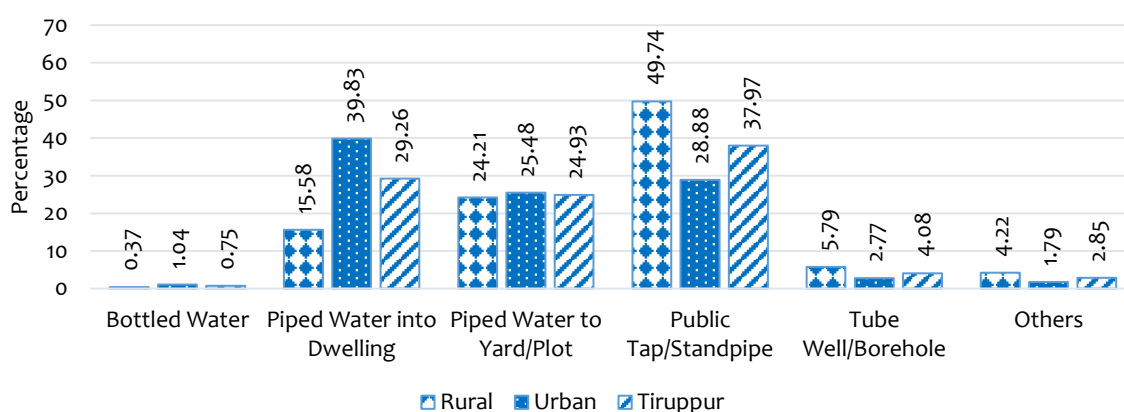### Chart 3.16 Primary Source of Drinking Water of Households

Chart 3.16 shows that 37.97 percent of households in Tiruppur district were using public tap/standpipe as their primary source of drinking water followed by piped water into dwelling. About 32.80 percent of households in the state used public tap/standpipe and, 32.04 percent used piped water into the dwelling as the primary drinking water source (TNHPS-PBS, 2021). Similar to the state estimates, which showed that piped water into the dwelling in urban areas at 37.02 percent and public tap/standpipe in rural areas at 44.51 percent were the primary water sources of households (TNHPS-PBS, 2021), Tiruppur district shows a similar pattern.

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[6] Primary source - Water that is availed for the greater part of the year

3.5.4 Electricity

The state had witnessed mass electrification during the last decade. A comparison of households with electricity connection between Census (2011) and the state PBS estimates in 2018 (TNHPS-PBS, 2021) showed that the state was close to achieving complete electrification. Chart 3.17 shows the electrification status of households in Tiruppur district, along with a comparison to the electrification status during Census (2011).

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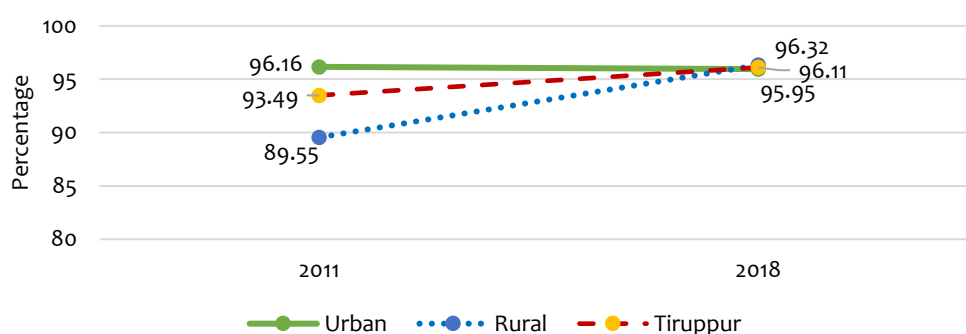

Chart 3.17 shows that mass electrification had happened in the rural areas of Tiruppur district during the period from 2011 to 2018. Tiruppur was positioned twenty ninth among the then 32 districts in terms of electrification (TNHPS-PBS, 2021). Around 96.11 percent of households in the district had domestic electricity connection compared to the state estimate of 97.6 percent (TNHPS-PBS, 2021).

3.5.5 Primary Cooking Fuel

A comparison of 2011 Census and the 2018 PBS estimates on the Primary Cooking Fuel[7] used by the households in the district and the state is given in Chart 3.18.

Chart 3.18 Comparison of Primary Cooking Fuel – Tiruppur and Tamil Nadu

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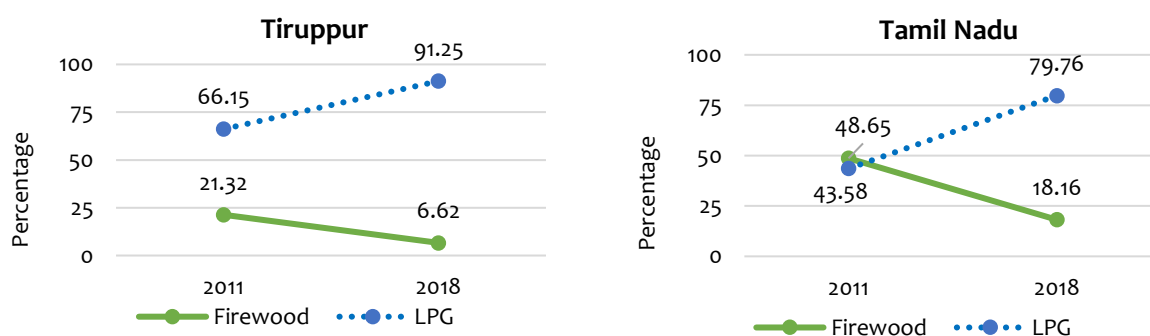
[7] Primary Cooking Fuel: Fuel that is used for the greater part of the year

Chart 3.18 shows that, the use of LPG as the primary cooking fuel in Tiruppur district had increased considerably from 66.15 percent in 2011 (Census 2011) to 91.25 percent in 2018. Simultaneously, firewood use had reduced to just 6.62 percent of the households in 2018. Compared to other districts of Tamil Nadu, Tiruppur was ranked fourth in terms of LPG use and ranked twenty ninth in terms of firewood use (TNHPS-PBS, 2021).

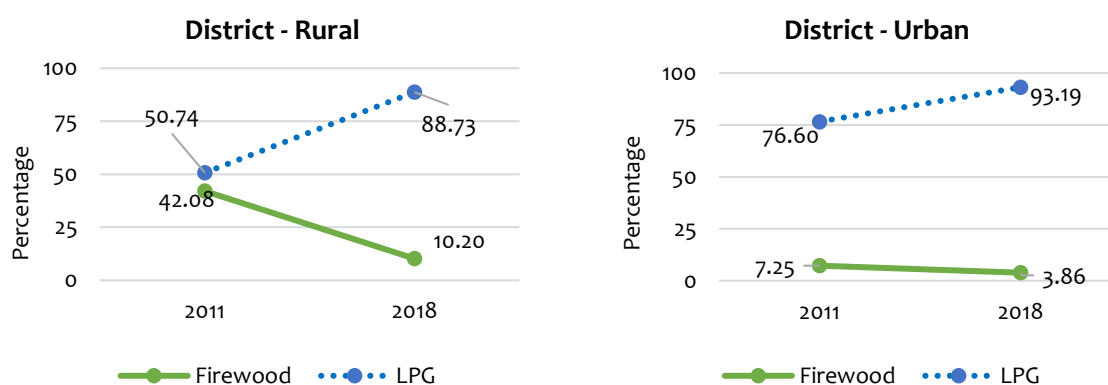*Chart 3.19 Comparison of Primary Cooking Fuel – Rural and Urban*

Chart 3.19 indicates that majority of the households in both rural and urban areas at 88.73 percent and 93.19 percent respectively used LPG as the primary cooking fuel. The percentage of households using LPG as the main fuel was higher in urban areas of the district than the rural areas. Around one-tenth of the rural households in the district were still using firewood as the main fuel. The usage of firewood had reduced and that of LPG had increased in both urban and rural areas between 2011-18.

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

Primary Cooking Fuel	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Firewood	11.97	42.42	3.26	7.36	1.09	1.15	6.62
Kerosene	2.10	0.00	1.15	1.93	0.00	0.00	1.59
LPG	85.36	57.58	95.13	90.10	97.39	98.85	91.25
Others	0.29	0.00	0.33	0.36	1.53	0.00	0.33
DK/RF	0.29	0.00	0.13	0.26	0.00	0.00	0.22
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

*Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that while most of the General—about 98.85 percent—and BC category—about 95.13 percent—households used LPG as the primary cooking fuel, firewood use was relatively high among the SC category households at 11.97 percent. This was still lower than the state estimate for firewood uses by the SC category at 27.60 percent (TNHPS-PBS, 2021). The results for the ST and DNC categories 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 latrine in the district is given in Chart 3.20.

Chart 3.20 Presence of Latrine within the Premises of the Household
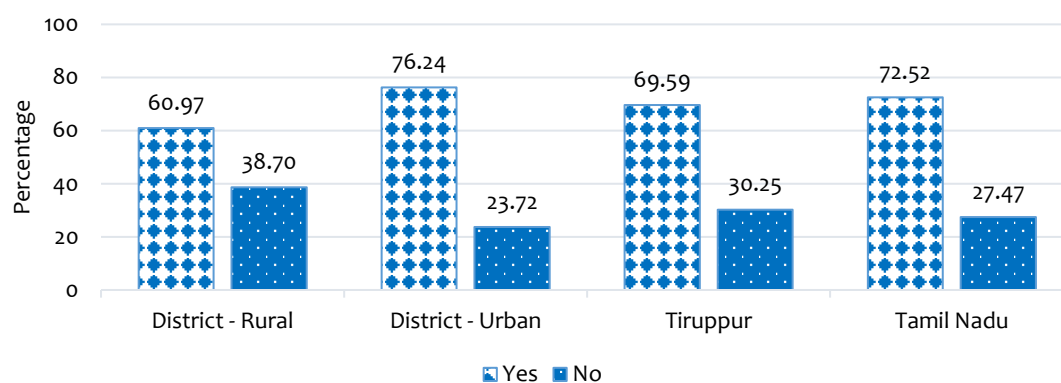
The percentage of households with latrine within the house premises had increased from 57.18 percent in 2011 (Census, 2011) to 69.59 percent in 2018. Tiruppur district was positioned nineteenth among the 32 districts in terms of the presence of latrine facilities within the premises of the household (TNHPS-PBS, 2021). The percentage of households equipped with latrine facilities in the district was lower than the state estimate. Higher percentage of the households in urban areas had latrine within the house premises than rural areas of the district.

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

Latrine within the House Premises	Social Group						
	SC	ST	BC	MBC	DNC	General	Tiruppur
Yes	41.58	57.74	84.11	73.14	95.65	97.96	69.59
No	58.08	34.81	15.82	26.78	4.35	2.04	30.25
DK/RF	0.35	7.45	0.07	0.08	0.00	0.00	0.17
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The estimates show that majority of the General category households had latrine within the premises of the household, similar to their state estimate (TNHPS-PBS, 2021). Around 58.08 percent of the SC households in the district did not have latrine within the house premises, which was higher than the state estimate of 47.70 percent (TNHPS-PBS, 2021). The results for the ST and DNC categories 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
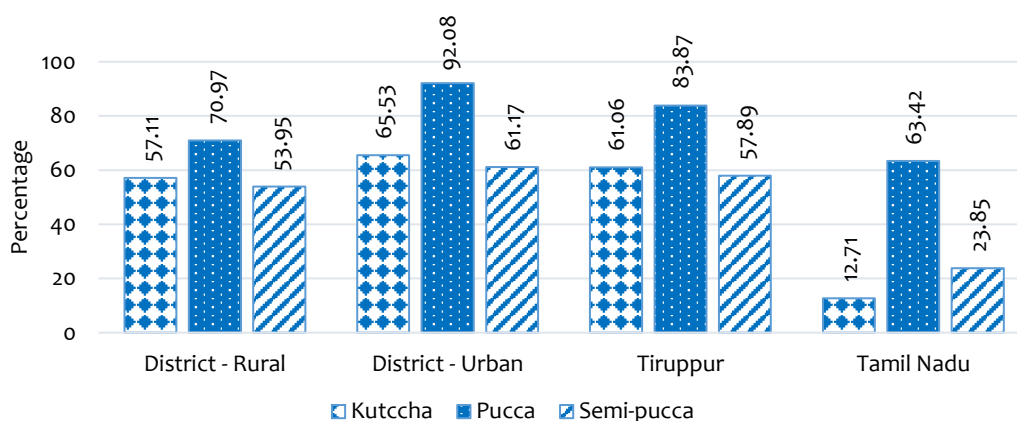

Chart 3.21 depicts the presence of latrine in the premises of different types of houses. Majority of the pucca houses had latrine facilities within the premises of the house. The percentage of semi-pucca and kutccha houses with latrine facilities within the premises of the house were lower compared to the pucca houses of the district. The percentage of households with latrine facilities in kutccha, pucca and semi-pucca houses were higher in urban areas compared to rural areas of the district.

The alternative practices of defecation followed by 30.25 percent of the households without latrine within the premises of the house is shown in the Chart 3.22.

Chart 3.22 Alternate Practices of Defecation by the Households without Latrine
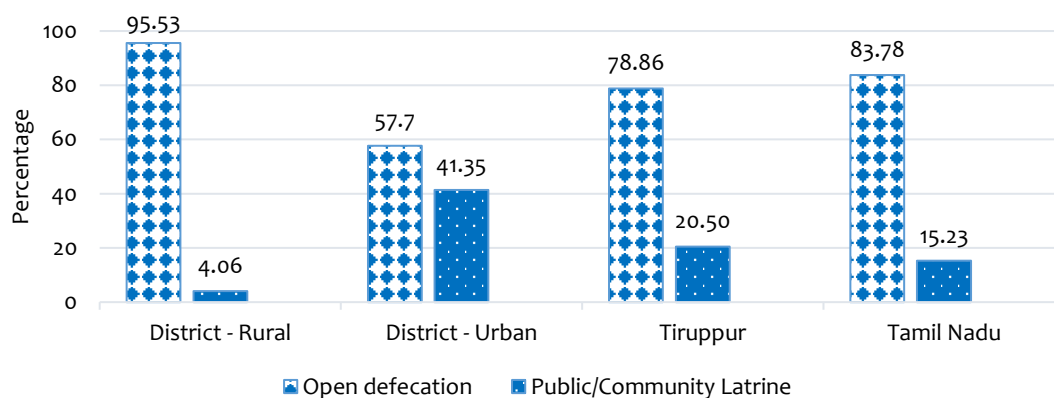
The percentage of total households in the district following open defecation had declined from 35.42 percent in 2011 (Census, 2011) to 23.88 percent in 2018 (TNHPS-PBS, 2021). Chart 3.22 shows that 78.86 percent of the households without a latrine within the premises of the house in Tiruppur district were following open defecation, and this was lower than the state estimate. The practice of open defecation was significantly higher in rural areas compared to urban areas of the district. Compared to other districts of Tamil Nadu, Tiruppur district was positioned fifteenth in terms of percentage of households following open defection.

4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Tiruppur district was conducted from the sample of 7,360 households in the district who were willing to participate in the survey. The survey focused on five major indicators i.e., i) demographic indicators, ii) development indicators, iii) socio-economic indicators, iv) household income and v) basic infrastructure.

Tiruppur district was ranked first among all districts in Tamil Nadu in terms of working population, and second in terms of the employed female population. The district had witnessed a considerable increase in electrification of its rural areas. Gini coefficient and Lorenz curve measured that income inequality was lower in the district compared to the state estimate. The district was ranked fourth in terms of LPG use as the primary cooking fuel. Firewood use was lesser compared to the state estimate.

There are certain indicators in the district which merit attention. Tiruppur district registered a decrease in literacy rate between 2011 and 2018. Both male literacy as well as female literacy in the district had recorded a fall. Among the then 32 districts, Tiruppur was ranked thirty first in terms of literacy rate, followed by Dharmapuri district. Around 23.33 percent of the population in the district had not received formal education and around 90 percent of the specified population—among the 23.33 percent of the population without formal education—did not have functional literacy. In contrast, Tiruppur ranks first in employment generation. State's skill development initiative could be deployed strategically to better match skills with employment opportunities. The mean annual household income of Tiruppur district was 16.34 percent lesser than the state estimates. The percentage of households living in pucca houses in the district was also much lesser compared to the state estimates. The percentage of households equipped with latrine facilities in the district was found to be lower than the state estimate.

The district requires better educational infrastructure to improve literacy rate. Government intervention in the form of adult literacy programs such as the famous *"Arivoli Iyakkam"* may ensure that the population with no formal education gets access to functional literacy. Possibilities could be explored to provide electricity connection to all households. A significant number of households in the district were still using tube well or bore hole as the primary source of water. Government intervention to ensure that all households are provided with either piped water into dwelling or at least public tap/standpipe for better access to quality water may be explored. The issue of high rate of open defecation, especially in rural areas, needs immediate policy attention. Policies could be drawn to increase the availability of latrine facilities at the household level to reduce open defecation.

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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.