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Pudukkottai

TNHPS

Tamil Nadu Household Panel Survey

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

Pudukkottai District

February 2024

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In collaboration with
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Summary of PBS Findings

Demographic Indicators

- Pudukkottai had a sample size of 5,974 households, of which 66.91 percent of households were from rural areas and 33.09 percent of households were from urban areas.
- The district had a huge demographic dividend with almost half the population—about 46.45 percent—aged between 17 and 45 years.
- The BC social group was the largest in the district, constituting 49.36 percent of the total households in the district.

Education (Age 7 and above)

- The literacy rate in the district had increased from 77.19 percent (Census 2011) to 79.98 percent in 2018. Pudukkottai was ranked twenty-sixth among the then 32 districts in terms of this indicator.
- Though both rural and urban literacy rates registered an increase, the rural literacy rate was 14.87 percent lesser than the urban literacy rate in 2018. The gender gap in literacy rate was wider in rural areas at 13.68 percent than in urban areas at 7.05 percent.
- While more than 90 percent of the specified General category population in the district had received formal education, less than 70 percent of the DNC population had done so.

Employment (Age 14 and above)

- The percentage of employed population in the district—about 49.44 percent—was lower than the state estimate of 50.10 percent, while the share of unemployed population—about 3.87 percent—was higher compared to the state estimate of 3.50 percent. The rest (46.68 percent) were not in the labour force.
- The percentage of the specified population that was employed was higher in rural parts of the district than the urban.
- While 69.43 percent of the male population aged 14 and above was employed, the female work participation in the district was 32.52 percent.

- Around 65.34 percent of the female population aged 14 and above were not in the labour force, and among these, majority of them—about 72.61 percent—were associated with attending to domestic duties as a homemaker.
- While salaried work in private sector was predominant in urban areas, casual labour in agriculture was most common in rural areas of the district. The industrial sector employed a very small part of the employed population.
- While the SC, MBC and DNC population were predominantly employed as casual labourers in agriculture, the General and BC populations were primarily engaged in salaried work in the private sector.

Land Ownership and Assets

- Pudukkottai district was ranked sixth in the state in terms of agricultural land ownership. Around 36 percent of households in the district owned agricultural land compared to the state estimate of 19.41 percent. A higher percentage of DNC and MBC category households were agricultural landowners in the district compared to the other social groups.
- Around 45 percent of the households that owned agricultural land in the district depended on rain-fed irrigation alone.
- Around 95 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares.
- Around 47.77 percent of the households in the district owned at least one agricultural, allied agricultural or fishing asset, which was significantly higher than the state estimate of 20.92 percent.
- Ownership of at least one household asset was least among SC households, where 10.42 percent of them did not even own a mobile phone.

Household Income

- The mean annual household income of Pudukkottai district (₹88,479) was 38.02 percent lesser than the state estimate (₹1,42,752); in the urban areas it was ₹1,44,441 and in rural areas it was ₹76,680. The district was ranked thirtieth out of 32 districts with respect to this parameter.
- The mean income from salaried work (₹1,35,465) was the highest, while that from wage labour was the lowest (₹34,077).

- The Gini coefficient measuring income inequality across households in the district (0.515) was lower than the state estimate (0.563). Interestingly, income inequality across households in rural areas of the district was found to be higher than the urban areas.

Housing

- Pudukkottai district was ranked sixth among all the districts of Tamil Nadu in terms of percentage of households living in their own house.
- Out of the households that lived in an own house in the district, 16.24 percent of houses were built under a government scheme. SC households had the highest percentage of houses built under a government scheme in the district compared to other social groups.
- Around 45.15 percent of the households in the district were living in pucca houses, which was considerably lower than the state level estimate of 63.42 percent.

Drinking Water, Electricity and Cooking Fuel

- The primary source of drinking water of households in the district was public tap/standpipe at 44.90 percent.
- The district witnessed increase in electrification from 90.75 percent in 2011 to 96.16 percent in 2018.
- Although the use of LPG as the primary cooking fuel had increased in the district from 21.24 percent in 2011 to 44.01 percent in 2018, firewood was still the dominant fuel, being used by more than half the households. The district was ranked first in the state in terms of firewood use and last (thirty–second) in terms of LPG use.
- Apart from the General and BC households, majority of all other social groups used firewood as the primary cooking fuel.

Sanitation

- The percentage of households with latrine within the house premises had increased from 27.96 percent in 2011 (Census, 2011) to 51.00 percent in 2018 in the district. Pudukkottai was ranked thirty-first among the 32 districts in the state in terms of this parameter.

- While almost 90 percent of the General category households had latrine access within the house, more than two-thirds of the SC households did not.
- The percentage of total households in the district following open defecation had declined from 69.75 percent in 2011 (Census, 2011) to 48.15 percent in 2018.

1. Introduction

1.1 Profile of Pudukkottai District

Pudukkottai district in Tamil Nadu was formed in the year 1974, comprising the former Pudukkottai division of Tiruchirappalli district with some additions from Thanjavur district. It is in the central region of the state, with Tiruchirappalli and Thanjavur in the north, Thanjavur and Bay of Bengal in the east, Ramanathapuram and Sivaganga in the south, and Sivaganga and Tiruchirappalli in the west.

According to Census (2011), Pudukkottai had a total population of 16.18 lakhs, accounting for approximately 2.24 percent of Tamil Nadu's population. The district comprised of 3.87 lakh households, with a notable majority of 80.45 percent residing in rural areas and 19.55 percent residing in urban areas. The male population was 49.63 percent, and the female population was 50.37 percent. Pudukkottai demonstrated a child-sex ratio of 959.61, which is higher compared to the state average of 943.27. Within the social groups, 17.59 percent of the population belonged to the Scheduled Caste community, while 0.08 percent belonged to the Scheduled Tribe community. The literacy rate in Pudukkottai district stood at 77.19 percent, which is lower compared to the state's average of 80.09 percent. The male literacy rate was reported to be 85.56 percent, while the female literacy rate was reported to be 69 percent. These figures indicate that there is potential to improve educational opportunities in the district, especially amongst females.

In the fiscal year 2018-19, Pudukkottai 's Net District Domestic Product was ₹21,27,462 lakhs, ranking it twenty-third among all districts. The district's per capita Net District Domestic Product was recorded at ₹1,22,294, ranking it twenty-fifth among districts. Nonetheless, the per capita Net District Domestic Product of the district was significantly 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 24 percent and 60 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Pudukkottai was ranked fourteenth in terms of the Multidimensional Poverty Index with a score of 0.51. However, the district occupies the lowest position in terms of other indicators of development. For example, Pudukkottai ranked twenty-second in terms of the Human Development Index with a score of 0.631, suggesting that the district lags in terms of overall human

development. It ranked twenty-second in the Gender Inequality Index with a score of 0.085, indicating that gender disparities persist in the district. In terms of the Child Development Index, the district ranked twenty-third with a score of 0.614, highlighting the need to improve health, nutrition, and education of children.

Overall, Pudukkottai is one of the backward districts of Tamil Nadu as it ranks poorly both in terms of District Domestic Product and other indicators of development.

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. As the Census 2021 has not yet commenced, 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 1,476 Primary Sampling Units—684 rural PSUs and 792 urban PSUs.

This report analyzes data from the PBS for Pudukkottai district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent Census data of Pudukkottai (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Pudukkottai district. The sample size for the district was 5,974 households, among which 3,997 households were from rural areas and 1,977 households were from urban areas. The blocks covered during the survey were: Annavasal, Aranthangi, Karambakudi, Kunnandarkoil, Manamelkudi, Ponnamaravathi, Pudukkottai, Thiruvarankulam and Viralimalai.

2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 6,512 households in Pudukkottai district were selected using a multi-stage stratified sampling design[1]. The final sample size for PBS was 5,974 households, of which 66.91 percent of households were from rural areas and 33.09 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		Pudukkottai	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	3,997	94.47	1,977	86.67	5,974	91.74
Non-Response	36	0.85	32	1.40	68	1.04
Non-sample	198	4.68	272	11.92	470	7.22
Total	**4,231**	**100**	**2,281**	**100**	**6,512**	**100**

Pudukkottai district had a lower response rate—willingness of households to participate in the TNHPS-PBS—of 91.74 percent compared to the state response rate of 96.5 percent. Rural areas had a higher response rate compared to the urban areas. Around 1.04 percent of households were not willing to participate in the survey. About 7.22 percent of the selected samples were removed as they were not considered as households as per the definition used in the PBS[2].

[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.

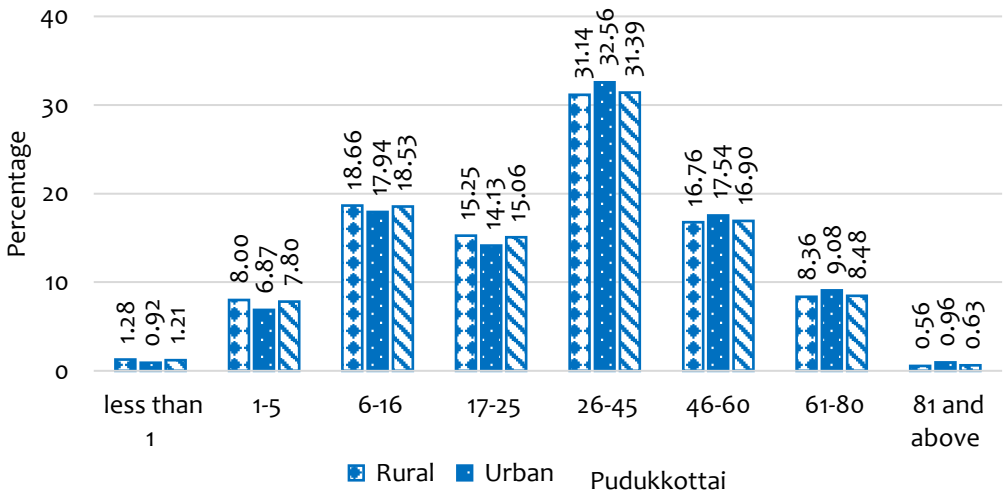
3. Key Findings

3.1 Demographic Indicators

As per the PBS estimates, the average household size[3] in the district had reduced from 4.18 in 2011 (Census, 2011) to 3.81 in 2018. As per the PBS estimates, 52.97 percent of the population in the district were female, and 47.03 percent of the population were male. Around 26.78 percent of the households in the district were headed by females, which was considerably higher than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

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

Chart 3.1 Age-wise Distribution of Population



As per the PBS estimates, around 31.39 percent of the population in the district was in the age group of 26 to 45 years. The population between age 17 to 60 years in the district was 63.35 percent, which was lower than the state estimate of 66.00 percent. The proportion of senior citizens—above 60 years—in the district's population at 9.11 percent was lower than that at the state level of 11 percent (TNHPS-PBS, 2021).

The percentage of currently married population in the district was 71.77 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.

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

The religion-wise distribution of the households in the district as per the PBS estimates shows that 84.18 percent of the households practiced Hinduism, 12.38 percent practiced Islam and 3.31 percent followed Christianity.

Table 3.1 Social Group-wise Distribution of Households

Social Group	Percentage
SC	20.03
ST	0.10
BC	49.36
MBC	15.70
Denotified Communities (DNC)	13.82
General	0.67
DK/RF	0.32
Total	**100**

As per the PBS estimates, the highest percentage of households in Pudukkottai district belonged to the BC category. The percentages of SC and ST households in the district were 20.03 percent and 0.10 percent respectively.

It is important to note that the percentage of ST households in Pudukkottai district was only 0.10 percent and only five ST households were sampled in the district. Hence, the results pertaining to this social group 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 Pudukkottai district.

3.2.1 Education

The change in literacy rate of Pudukkottai district and the state of Tamil Nadu 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 as 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	District-Rural		District-Urban		Pudukkottai		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	83.53	84.70	93.84	95.95	85.56	86.71	86.77	90.97
Female	65.42	71.02	83.71	88.90	69.00	74.12	73.40	80.15
Total	**74.37**	**77.37**	**88.74**	**92.24**	**77.19**	**79.98**	**80.09**	**85.40**

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

As per Census 2011, the literacy rate in Pudukkottai district at 77.19 percent was lesser than the state estimate of 80.09 percent. The PBS estimates showed that in the year 2018, the literacy rate in Pudukkottai district had increased to 79.98 percent, which continued to be lower than the state estimate of 85.40 percent. The district had registered only a 2.79 percent increase 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 Pudukkottai district was 2.9 percent in 2011, which had increased to 5.42 percent in 2018 as per the PBS estimates. In terms of literacy rate, Pudukkottai was ranked low at twenty-sixth among the then 32 districts in 2018 (TNHPS-PBS, 2021).

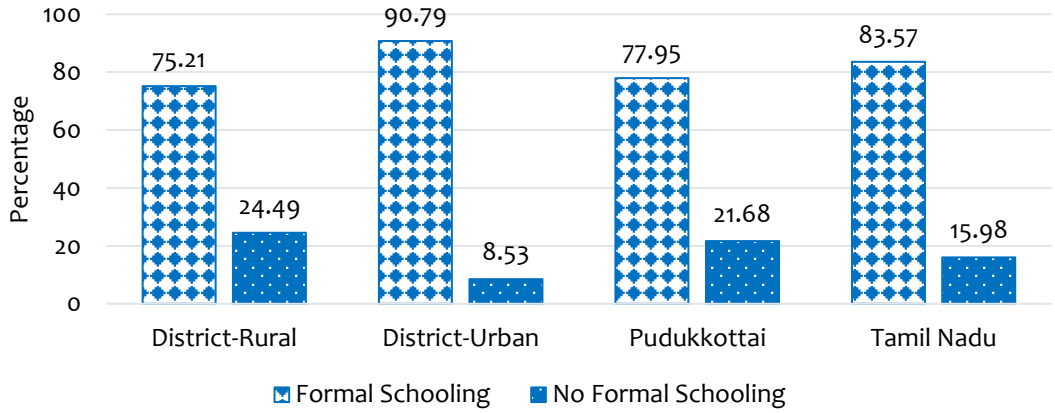
Both male and female literacy rates in Pudukkottai district had recorded an increase during the period under consideration, though a wide gender gap still prevailed. The gender gap in literacy rate had declined from 16.56 percent in 2011 to 12.59 percent in 2018, which is still higher than the state gender gap of 10.82 percent in 2018.

Both rural and urban literacy rates recorded an increase between 2011 and 2018, though the rural literacy rate was still 14.87 percent lower than the urban literacy rate in 2018. The gender gap in literacy rate was much higher in rural areas at 13.68 percent than in urban areas at 7.05 percent in 2018.

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 Pudukkottai district. The area-wise education status of the population in the district is given below.

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 values are 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

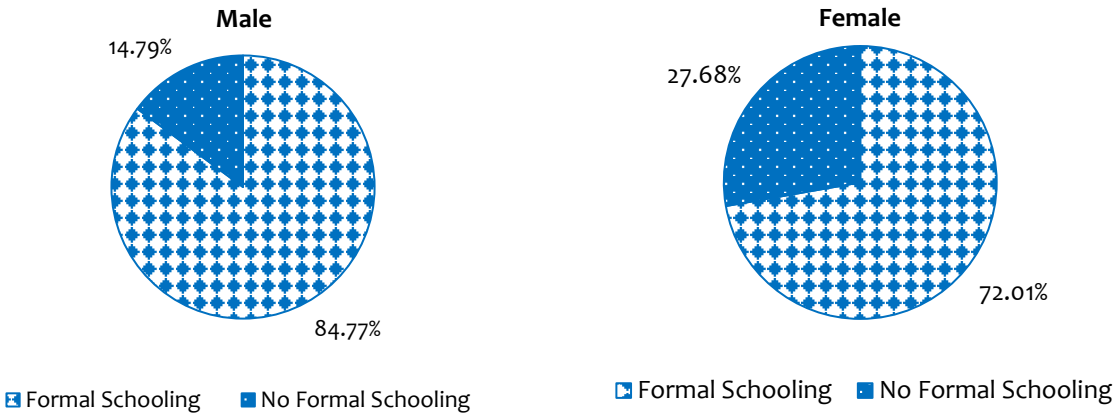


Chart 3.3 shows that the percentage of the population that had acquired formal education in the district was much higher among males compared to females, again denoting a wide gender gap, like in literacy.

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

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

Education Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Formal Schooling	76.58	57.17	82.58	73.12	68.95	93.68	77.95
No Formal Schooling	23.17	42.83	16.95	26.58	30.88	4.82	21.68
Others and DK/RF	0.25	0.00	0.47	0.29	0.17	1.50	0.37
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.3 shows a wide variation across social groups in attainment of formal schooling. While more than 90 percent of the specified General category population in the district had received formal education, less than 70 percent of the DNC population had done so. The results for the ST social group 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	Pudukkottai
Primary (I to V)	27.09	21.48	25.94
Middle School (VI to VIII)	23.73	21.58	23.29
High School (IX to X)	22.92	23.55	23.05
Higher Secondary (XI to XII)	15.05	14.38	14.91
Bachelor's degree	5.57	9.83	6.44
Diploma Degree	3.09	4.05	3.28
Post Graduate Degree	2.15	4.23	2.58
Other Higher Education	0.00	0.16	0.03
Others/DK/RF	0.40	0.74	0.47
Total	**100**	**100**	**100**

Around 87.19 percent of the district's population—age 7 and above, with formal education—was either pursuing or had completed schooling up to higher secondary level. The percentage of population that was either pursuing or had completed tertiary education—such as bachelor's degree, diploma, or post graduate degree and above—was only 12.33 percent, which was significantly lower than the state estimate of 20.02 percent (TNHPS-PBS, 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		
	Male	Female	Pudukkottai
Primary (I to V)	25.60	26.28	25.94
Middle School (VI to VIII)	23.06	23.54	23.29
High School (IX to X)	24.45	21.60	23.05
Higher Secondary (XI to XII)	13.29	16.57	14.91
Bachelor's degree	6.01	6.89	6.44
Diploma Degree	4.86	1.66	3.28
Post Graduate Degree	2.20	2.98	2.58
Other Higher Education	0.01	0.06	0.03
Others/DK/RF	0.51	0.43	0.47
Total	**100**	**100**	**100**

Table 3.5 shows that a higher percentage of females at 87.99 percent in the specified population were either pursuing or had completed schooling up to higher secondary level compared to males at 86.4 percent. In tertiary education, a higher percentage of females had completed bachelor's or post-graduate degree compared to males, whereas the case with respect to diploma degree percentages was the reverse.

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

Educational Attainment	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Primary (I to V)	25.14	30.27	25.75	27.57	26.56	12.94	25.94
Middle School (VI to VIII)	19.49	35.57	23.88	24.15	25.96	12.00	23.29
High School (IX to X)	25.30	13.78	22.00	23.37	23.54	26.29	23.05
Higher Secondary (XI to XII)	16.38	14.02	14.41	13.57	16.29	15.97	14.91
Bachelor's degree	6.72	6.36	7.12	5.47	3.94	17.64	6.44
Diploma Degree	3.74	0.00	3.48	3.08	2.12	2.60	3.28
Post Graduate Degree	2.80	0.00	2.78	2.37	1.33	10.99	2.58
Other Higher Education	0.10	0.00	0.02	0.02	0.00	0.00	0.03
Others/DK/RF	0.33	0.00	0.57	0.40	0.25	1.58	0.47
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The social group-wise analysis in Table 3.6 shows that apart from the General category, more than 85 percent of the specified population belonging to other social groups in the district were either pursuing or had completed schooling up to higher secondary level. The percentage of population either pursuing or having completed tertiary education—bachelor's degree and above—was quite high among the General category at 31.23

percent, followed by the SC category at 13.36 percent. The percentage of SC population that was either pursuing or had completed tertiary education was lower than their corresponding state level estimate of 15.52 percent. The results for the ST social group must be interpreted in the context of their sample size, as discussed in Section 3.1.

About 21.68 percent of the population had not received formal education in Pudukkottai district (refer Chart 3.2). Among them, 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	Pudukkottai
Yes	8.79	17.01	9.36
No	90.28	82.45	89.74
DK/RF	0.93	0.53	0.90
Total	**100**	**100**	**100**

Table 3.7 shows the literacy status of the population with no formal schooling. Only 9.36 percent of the population without formal schooling had functional literacy. The specified population group in urban areas of the district had better functional literacy rate compared to the rural 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	Pudukkottai
Yes	5.91	0.00	11.59	9.04	9.27	0.00	9.36
No	93.10	100.00	86.97	90.26	90.73	100.00	89.74
DK/RF	0.99	0.00	1.44	0.70	0.00	0.00	0.90
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.8 shows the literacy status of the population with no formal schooling, across various social groups. Functional literacy was low across all social groups. There were only four individuals each in the specified population of the ST and General categories surveyed in the district, and none of them happened to have functional literacy.

3.2.3 Employment Status

This section looks at the employment status of the household members, types of employment that they were engaged in, the unemployed and not-in-labour-force population 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 work as casual labourers in agriculture,

(v) People who work as casual labourers in industry,

(vi) People who work as casual labourers in the service sector,

(vii) People who work as casual labourers in other domains,

(viii) People who work as salaried employees in the government sector,

(ix) People who work 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,

[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

(ii) People who attended to 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.).

Chart 3.4 Employment Status of Population (Age 14 years and above) – Area-wise

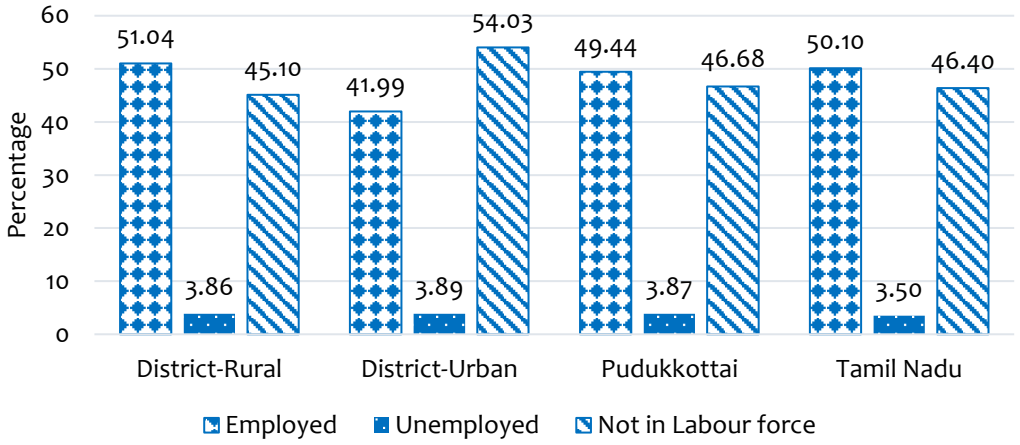


Chart 3.4 shows that the overall percentage of employed population—14 years and above—in the district was slightly lesser than the state estimate. The share of unemployed population was higher in the district compared to the state. The percentage of population that was employed was higher in rural parts of the district than the urban. The unemployment status in rural areas of the district at 3.86 percent was higher than the state's rural PBS estimate of 3.6 percent, and the district urban unemployment status at 3.89 percent was higher than the state urban PBS estimate of 3.3 percent. Pudukkottai district was ranked sixteenth among all districts in Tamil Nadu in terms of employed population and ranked thirteenth in terms of the unemployed population.

Chart 3.5 Employment Status of the Population – Gender-wise

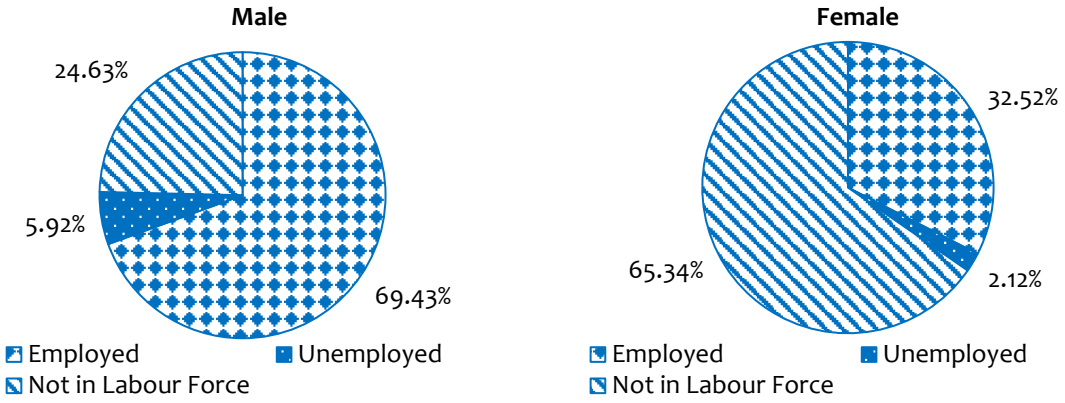


Chart 3.5 shows the gender-wise employment status of the population aged 14 years and above. While almost 70 percent of the male population was employed, the female work participation was only a little less than one-third of the female population. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). The district female work participation was higher than the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019), and higher than the state estimate of 29.96 percent (TNHPS-PBS, 2021). Around 65.34 percent of the female population was not in the labour force, and among these, majority of them—about 72.61 percent—were associated with attending to domestic duties as homemakers (see Chart 3.7). As per the state PBS estimates, Pudukkottai district was ranked twelfth in terms of employed female population and ranked nineteenth in terms of female unemployment.

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

Work Type	Area Type		
	Rural	Urban	Pudukkottai
Self Employed Agriculture	13.64	1.56	11.83
Self Employed Non-Agriculture	7.60	23.30	9.95
Self Employed Allied Agriculture	1.77	0.98	1.65
Casual Labourer Agriculture	26.24	0.59	22.39
Casual Labourer Industry	6.67	12.31	7.52
Casual Labourer Service	16.43	14.65	16.17
Casual Labourer (Others)	7.39	2.34	6.63
Salaried Worker Government	3.02	7.87	3.75
Salaried Worker Private	11.80	35.13	15.30
Others	0.07	0.24	0.10
Multiple Occupation	5.37	0.86	4.69
DK/RF	0.00	0.16	0.02
Total	**100**	**100**	**100**

Since Pudukkottai is primarily a rural district, more than one-third of the employed population depended on the agricultural sector for employment— as self-employed or casual labour. While the greatest proportion of the working population in the state were salaried workers in the private sector—about 21.82 percent—as per the state estimates (TNHPS-PBS, 2021), majority of the working population in Pudukkottai district were casual labourers in agriculture. While salaried work in private sector was predominant in urban areas, casual labour in agriculture was most common in rural areas of the district. The industrial sector employed a very small part of the employed population.

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

Work Type	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Self Employed Agriculture	5.39	0.00	14.65	12.25	12.52	1.93	11.83
Self Employed Non-Agriculture	6.00	0.00	13.52	9.20	5.70	36.94	9.95
Self Employed Allied Agriculture	0.53	0.00	1.92	1.99	2.06	0.00	1.65
Casual Labourer Agriculture	28.57	0.00	13.91	26.56	33.40	0.00	22.39
Casual Labourer Industry	9.74	0.00	7.83	6.77	4.79	3.17	7.52
Casual Labourer Service	20.71	0.00	14.64	13.76	17.31	2.52	16.17
Casual Labourer (Others)	8.30	59.94	5.80	5.96	7.11	1.64	6.63
Salaried Worker Government	4.54	12.26	4.34	3.52	1.13	11.65	3.75
Salaried Worker Private	14.43	27.80	18.85	14.12	7.52	39.32	15.30
Others	0.02	0.00	0.08	0.20	0.15	0.00	0.10
Multiple Occupation	1.77	0.00	4.41	5.65	8.31	2.83	4.69
DK/RF	0.00	0.00	0.05	0.00	0.00	0.00	0.02
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Pudukkottai being a rural district provided employment opportunities in the agriculture sector to more than one-third of the SC, MBC, and DNC populations—self-employed and casual labour. The SC population involved as casual labour in agriculture in the district was lower than the corresponding state estimate of 33.33 percent (TNHPS-PBS, 2021). Those belonging to the General and BC categories were predominantly involved in salaried work in the private sector. The results for the ST social group must be interpreted in the context of their sample size of only nine ST respondents surveyed in the specified population in the district, as discussed in Section 3.1.

Chart 3.6 Composition of Population Not in the Labour Force – Area-wise

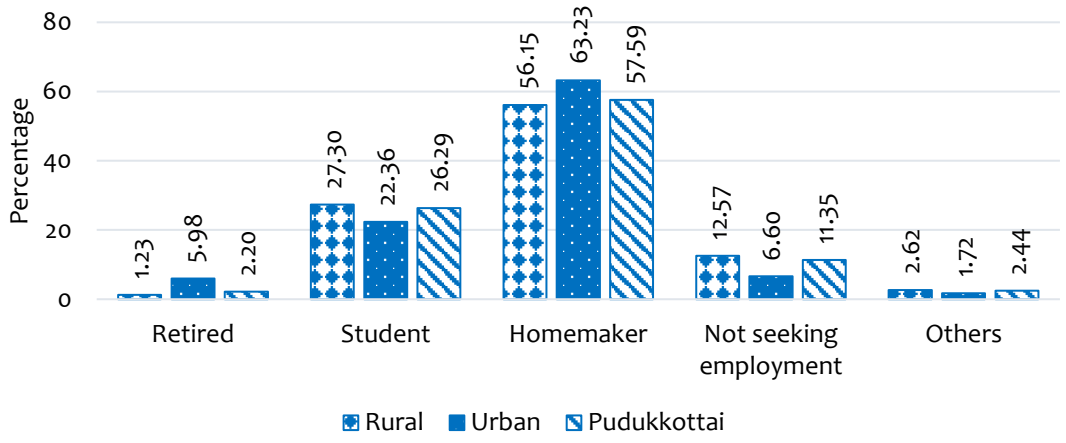
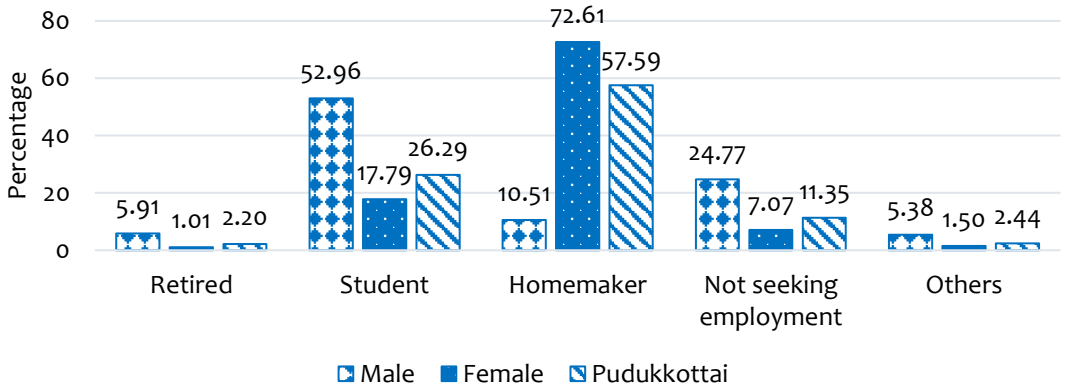


Chart 3.6 shows that, similar to the trend at the state level, a majority of the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were not seeking employment 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 17.79 percent of the female not-in-labour-force population were students. Similar to the state trend, 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 the Labour Force - Social Group-wise Percentages

Current Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Retired	2.58	3.38	2.08	1.92	0.87	20.69	2.20
Student	32.78	0.00	22.44	29.58	31.14	12.99	26.29
Homemaker	49.34	96.62	62.33	53.29	53.41	60.66	57.59
Not seeking employment	12.15	0.00	10.88	13.03	10.90	4.68	11.35
Others	3.16	0.00	2.10	2.06	3.44	0.98	2.44
DK/RF	0.00	0.00	0.16	0.11	0.23	0.00	0.13
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The composition of the population not in the labour force in the district analyzed according to social groups is given in Table 3.11. Within all social groups, the percentage of homemakers was the largest compared to other categories. The SC and DNC categories had a higher percentage of not-working population as students compared to the other social groups. There were only four ST respondents surveyed in the not-in-labour-force population in the district, hence the results for this social group must be interpreted in this context, as discussed in Section 3.1.

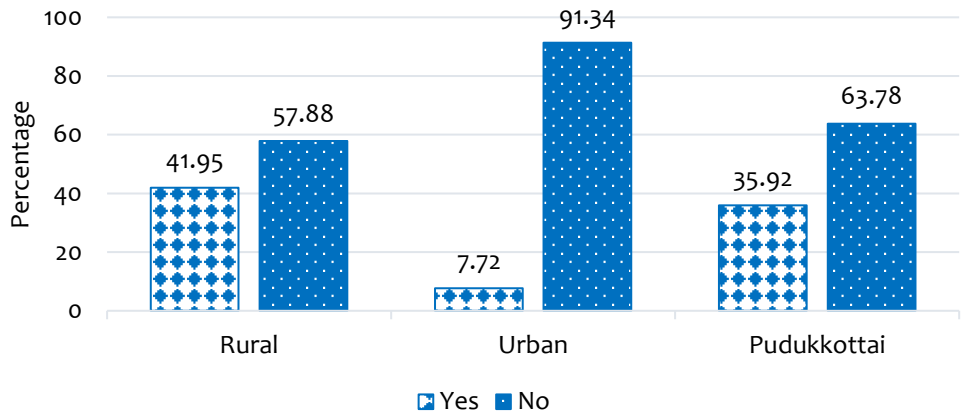
3.3 Socio-Economic Indicators

The PBS estimates for various socio-economic indicators of Pudukkottai 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 in the rural and urban areas of Pudukkottai 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 were collected on the ownership of agricultural land only. 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 – Area-wise



Pudukkottai is a predominantly rural and agricultural district. The percentage of households owning agricultural land in the district was significantly higher than the state level estimate of 19.41 percent. The district was ranked sixth in the state in terms of agricultural land ownership (TNHPS-PBS, 2021). Such ownership was much higher in rural areas than urban areas. While a considerably higher proportion of households in rural areas of the district owned agricultural land compared to the state rural estimate of 29.00 percent, agricultural land ownership in urban areas of the district was lower than the state urban estimate of 8.61 percent (TNHPS-PBS, 2021).

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

Type of Agricultural Land	Area Type		
	Rural	Urban	Pudukkottai
Only Irrigated Agricultural Land	42.32	30.76	41.89
Only Unirrigated Agricultural Land	44.44	59.80	45.01
Both Irrigated and Unirrigated Agricultural Land	12.81	7.16	12.60
DK/RF	0.43	2.28	0.50
Total	**100**	**100**	**100**

Table 3.12 shows that, as per the PBS estimates, a larger proportion of agricultural landowning households owned unirrigated land as opposed to irrigated land. Interestingly, a higher percentage of rural households owned irrigated agricultural land compared to the urban households in the district. Canal irrigation, tank irrigation and tube wells are the major sources of irrigation in Pudukkottai district (Tamil Nadu State Planning Commission, 2017b). The proportion of households having irrigated agricultural land was lower in the district at 41.89 percent compared to the state estimate of 50.03 percent.

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

Agricultural Land Ownership	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Yes	28.55	0.00	34.03	42.75	47.82	8.67	35.92
No	70.98	100.00	65.63	57.18	52.02	91.33	63.78
DK/RF	0.47	0.00	0.34	0.07	0.15	0.00	0.31
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

An analysis of the social group-wise ownership of agricultural land by households in Table 3.13 showed that a relatively higher percentage of the DNC and MBC households owned agricultural land in the district compared to other social groups. Only 8.67 percent of General category households owned agricultural land in the district. Though 25 percent of the ST households in the state-owned agricultural land, none of the five ST households surveyed in the district owned agricultural land.

Based on the size of agricultural land, the PBS classified the land owned by the households into marginal, small, semi-medium, medium, and large. Of the households that owned agricultural land, the percentage of households under each size category is given in Table 3.14.

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

Size of Agricultural Land (in Hectares)	Area Type		
	Rural	Urban	Pudukkottai
Marginal (0.01 - 0.99)	84.20	72.52	83.81
Small (1 - 1.99)	11.09	11.31	11.10
Semi Medium (2 - 3.99)	3.31	11.40	3.58
Medium (4 - 9.99)	0.79	4.04	0.90
Large (10 and above)	0.61	0.73	0.61
Total	**100**	**100**	**100**

Table 3.14 shows that 94.91 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares. This figure is higher than the state level estimate of 89.33 percent (TNHPS-PBS, 2021). The shares of semi-medium, medium, and large landholdings were lesser 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 tractor, pump set, dairy animals, poultry birds, mechanized and non-mechanized boats, amongst the households of Pudukkottai district.

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

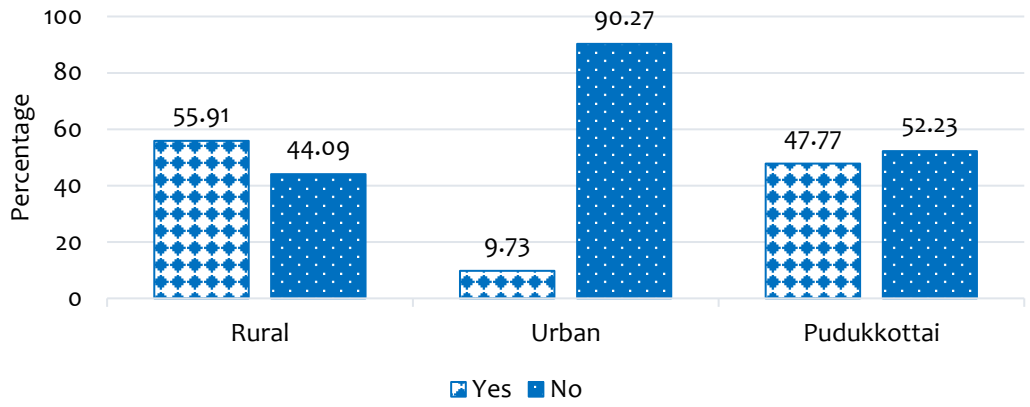
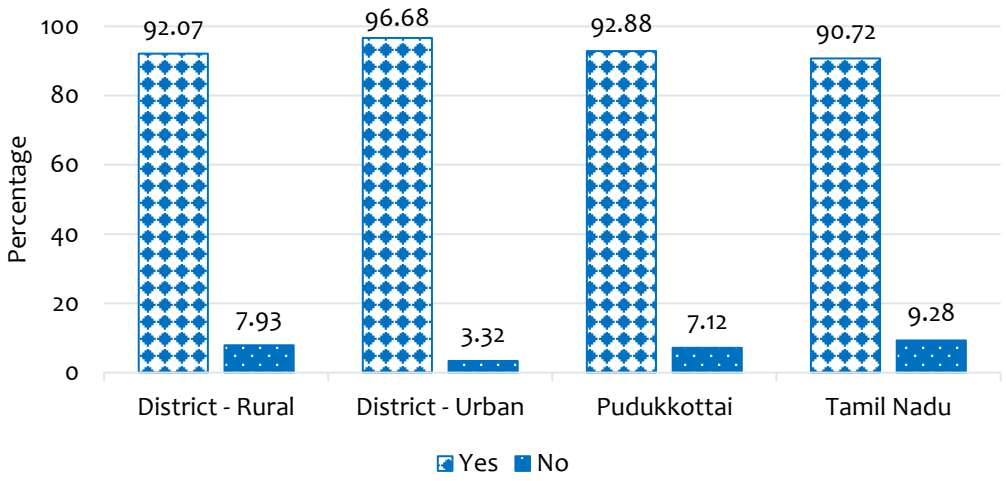


Chart 3.9 shows that 47.77 percent of the households in Pudukkottai district owned at least one agricultural, allied agricultural or fishing asset. This estimate was considerably higher than the state PBS estimate of 20.92 percent (TNHPS-PBS, 2021). This is reflective of the rural nature of the district. The ownership of such assets was significantly higher in rural areas than urban areas. The ownership pattern was higher in both rural and urban areas of the district compared to the state rural estimates of 32.69 percent and state urban estimates of 7.67 percent (TNHPS-PBS, 2021).

3.3.3 Presence of Household Assets

Chart 3.10 shows the percentage of households in Pudukkottai 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 Pudukkottai district was higher than the state estimate. Within the district, the urban areas had a higher percentage of households owning at least one household asset compared to the rural areas.

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

Presence of Household Asset	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Yes	89.58	54.89	94.85	93.67	90.48	98.77	92.88
No	10.42	45.11	5.15	6.33	9.52	1.23	7.12
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The social group-wise ownership of household assets in Pudukkottai district is given in Table 3.15. The PBS estimates showed that more than 90 percent of the General, BC, MBC and DNC households owned at least one household asset. Such ownership was least among the SC households, where 10.42 percent of them did not even own a mobile phone. The results for the ST group must be interpreted in the context of their sample size of five households in the district, 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 percentages of households that possessed a ration card in rural and urban areas of Pudukkottai district are given in Chart 3.11.

Chart 3.11 Possession of Ration Card – Area-wise

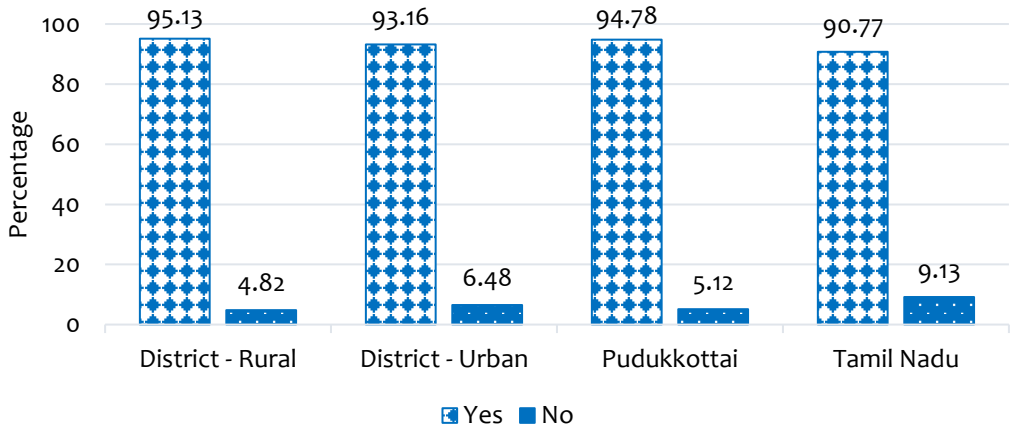


Chart 3.11 shows that the percentage of households that possessed a ration card in the district was higher than the state estimate. Within the district, a higher percentage of rural households possessed ration cards compared to the urban households.

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

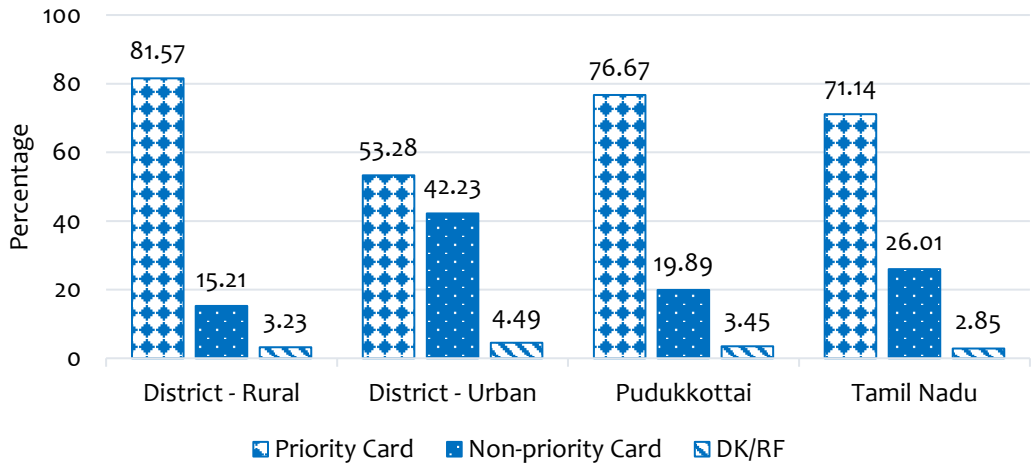
Possession of Ration Card	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Yes	95.36	72.31	94.65	94.74	95.07	89.55	94.78
No	4.49	27.69	5.24	5.19	4.93	10.45	5.12
DK/RF	0.15	0.00	0.11	0.07	0.00	0.00	0.11
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Social group-wise estimates on the possession of ration card at the household level is shown in Table 3.16. More than 90 percent of households belonging to all social groups, except General category, possessed ration cards in the district. The results for the ST group must be interpreted in the context of their sample size of five households in the district, 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 card 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 the rural and urban areas of Pudukkottai district are given in Chart 3.12.

Chart 3.12 Type of Ration Card at the Household Level – Area-wise



The percentage of households possessing priority ration cards in the district was higher compared to the state level estimate. A higher percentage of rural households possessed priority cards than urban households. A sizable fraction of households, especially in the urban 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 Pudukkottai district from various sources in the financial year 2017-2018. The sources of income include income earned from agriculture, allied agriculture, salaried work, self-employed labour, wage labour and other sources. The category 'other sources' consists of 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 Pudukkottai district.

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

Source	District-Rural	District-Urban	Pudukkottai	Tamil Nadu
Agriculture	34,497	96,176	36,370	61,830
Allied Agriculture	39,847	65,695	41,464	38,576
Salaried	1,18,437	1,72,684	1,35,465	2,29,857
Self Employed	89,168	1,34,180	1,03,523	1,47,403
Wage Labour	32,562	48,880	34,077	47,734
Other Sources	74,040	1,15,623	80,566	97,646
Income from all Sources	**76,680**	**1,44,441**	**88,479**	**1,42,752**

The mean annual household income of Pudukkottai district was 38.02 percent lower than the state estimate of ₹1,42,752 (TNHPS-PBS, 2021). Among the then 32 districts, Pudukkottai was ranked thirtieth in terms of mean annual household income, followed by Tiruvannamalai and Tiruvarur districts. The mean household income was higher among the households with salaried income and lower among the households that depended on wages and agriculture.

In rural areas of Pudukkottai district, the mean household income was ₹76,680, which was lower than 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 engaged in wage labour.

In urban areas of Pudukkottai district, the mean household income was ₹1,44,441, which was lower than the state urban estimate of ₹1,99,629 (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.

3.4.2 Income Inequality in Pudukkottai District

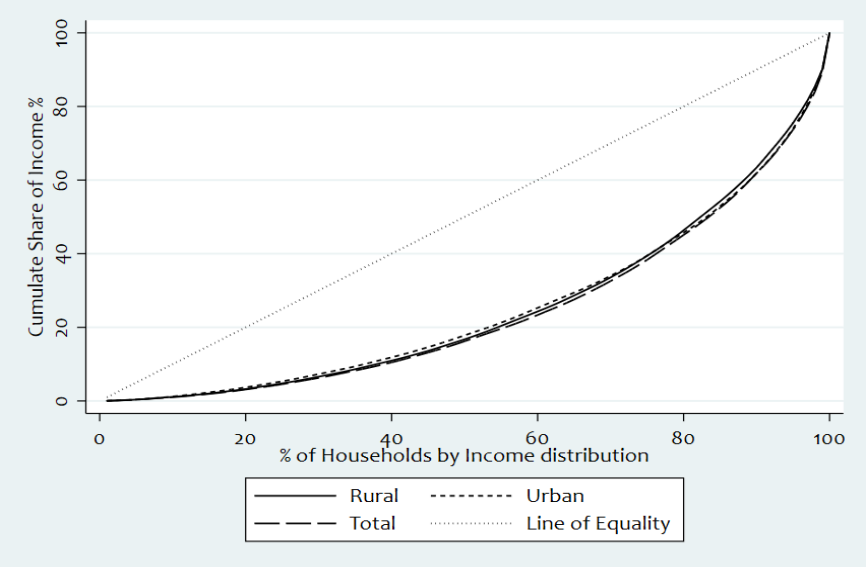
The Gini coefficient measures inequality levels in income or wealth where the coefficient value of 0 denotes perfect equality and 1 denotes perfect inequality (across households). The income inequality in Pudukkottai district (0.515) was lower than the state estimate (0.563)[5]. Interestingly, income inequality across households in rural areas of the district was found to be higher than the urban areas.

[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 Type	Gini coefficient
Rural	0.501
Urban	0.497
Pudukkottai	0.515
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 households. Chart 3.13 shows that in Pudukkottai district, the bottom 60 percent of the households held around 25 percent of the total income; the bottom 80 percent of households held around 45 percent of the total income and the top 20 percent of households held around 55 percent of the 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 also investigated the households' expectation of change in income in the next five years. The expectation of a household head on the change in the household's income in the future depends 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 had 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 Pudukkottai district.

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

Expectation of Change in Future Income	Area Type			
	District-Rural	District-Urban	Pudukkottai	Tamil Nadu
Higher	35.68	49.22	38.06	50.06
Lower	11.31	6.64	10.49	8.17
About the same	41.68	35.79	40.64	31.66
DK/RF	11.33	8.36	10.81	10.11
Total	**100**	**100**	**100**	**100**

While majority of the households in rural areas were expecting that their income in future would remain the same, majority of the urban households in Pudukkottai district expected an increase in household income in the coming five years. Around 38.06 percent of the households in the district foresaw an increase in their income in future and 40.64 percent of the households expected their income to remain the same.

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

Expectation of Change in Future Income	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Higher	36.01	85.36	39.40	35.82	38.06	54.37	38.06
Lower	17.00	0.00	9.41	11.18	4.39	4.09	10.49
About the same	38.93	14.64	39.21	43.03	45.84	33.04	40.64
DK/RF	8.06	0.00	11.98	9.97	11.72	8.50	10.81
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Compared to other social groups, a higher percentage of General category households expected an increase in their future income. A high proportion of the SC population expected a decline in their future income, compared to other social groups. More than 40 percent of the DNC and MBC populations expected their income to remain the same.

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 percentages of households that lived in their own house or stayed at a rented house in 2018-19 are given in Chart 3.14.

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

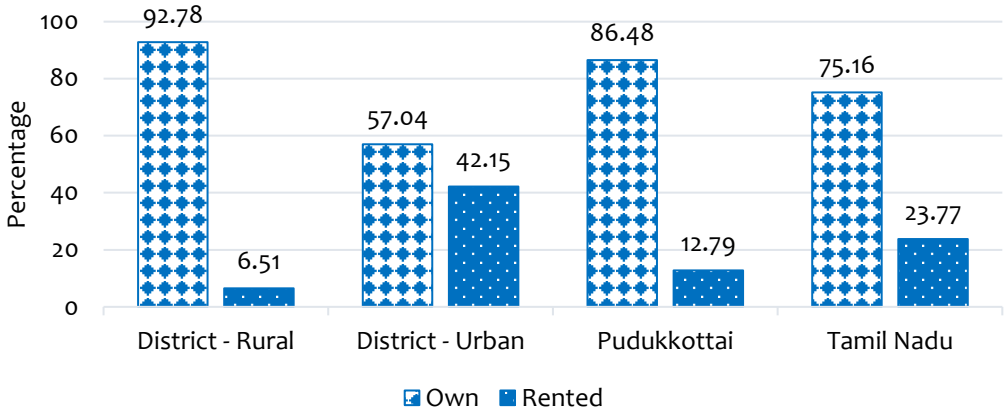


Chart 3.14 shows that the proportion of households that lived in their own house in the district was much higher than the state level estimate. Pudukkottai district was ranked sixth among the then 32 districts of Tamil Nadu in terms of percentage of households living in their own house (TNHPS-PBS, 2021). While most of the households in rural areas lived in their own house, a large proportion of urban households were relying on rented houses for their stay. Only less than one percent of households were living 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	Pudukkottai
Own	90.77	47.20	82.38	88.16	94.66	67.58	86.48
Rented	8.18	52.80	16.80	11.64	4.84	32.42	12.79
Others	1.05	0.00	0.79	0.21	0.42	0.00	0.69
DK/RF	0.00	0.00	0.03	0.00	0.08	0.00	0.04
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.21 shows that while more than 90 percent of the DNC and SC households were living in their own house, only a little over two-thirds of the General category households

were doing so. The results for the ST category must be interpreted in the context of its sample size of five households, as discussed in Section 3.1.

A detailed analysis of ownership of houses showed that out of the 86.48 percent households (see Chart 3.14) that lived in an own house in the district, 16.24 percent of houses were built under a government scheme, which was higher than the state estimate of 14.12 percent (TNHPS-PBS, 2021). The social group-wise analysis of this parameter is given below.

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

House Constructed under a Government Scheme	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Yes	37.24	0.00	8.83	12.99	14.20	0.00	16.24
No	62.76	100.00	91.16	87.01	85.80	100.00	83.75
DK/RF	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

In Pudukkottai, SC households had the highest percentage of houses built under a government scheme compared to other social groups. None of the house-owning General category households surveyed in the district had built houses under a government scheme. Though 34.7 percent of the ST households in the state had constructed a house under a government scheme (TNHPS-PBS, 2021), neither of the two house-owning ST households surveyed in the district had done so.

3.5.2 House Type

Based on the material used for wall/roof or the quality of the house, the PBS classifies a house as kutccha, pucca or semi-pucca. The percentage of houses that come under each type are given below.

Chart 3.15 Type of House – Area-wise

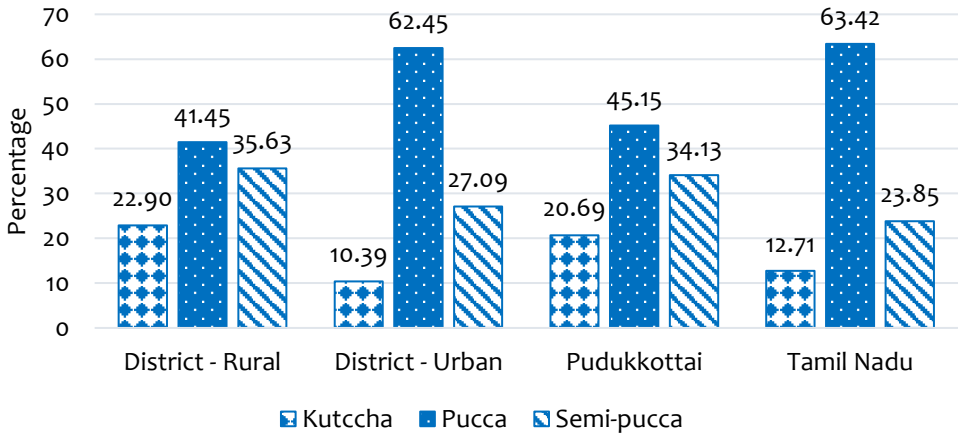


Chart 3.15 shows that 45.15 percent of households in Pudukkottai district were living in pucca houses. However, the percentage of households living in pucca houses was lesser than the state estimate of 63.42 percent. The percentage of people living in semi-pucca houses in the district was higher than kutccha houses.

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 the district. The primary sources[6] of water are: bottled water, piped water into dwelling, piped water to yard or plot, public tap or standpipe and tube well or borehole. Other water sources include protected well, unprotected well, rainwater collection and surface water (tank/pond/river/dam).

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

Chart 3.16 Primary Source of Drinking Water of Households – Area-wise

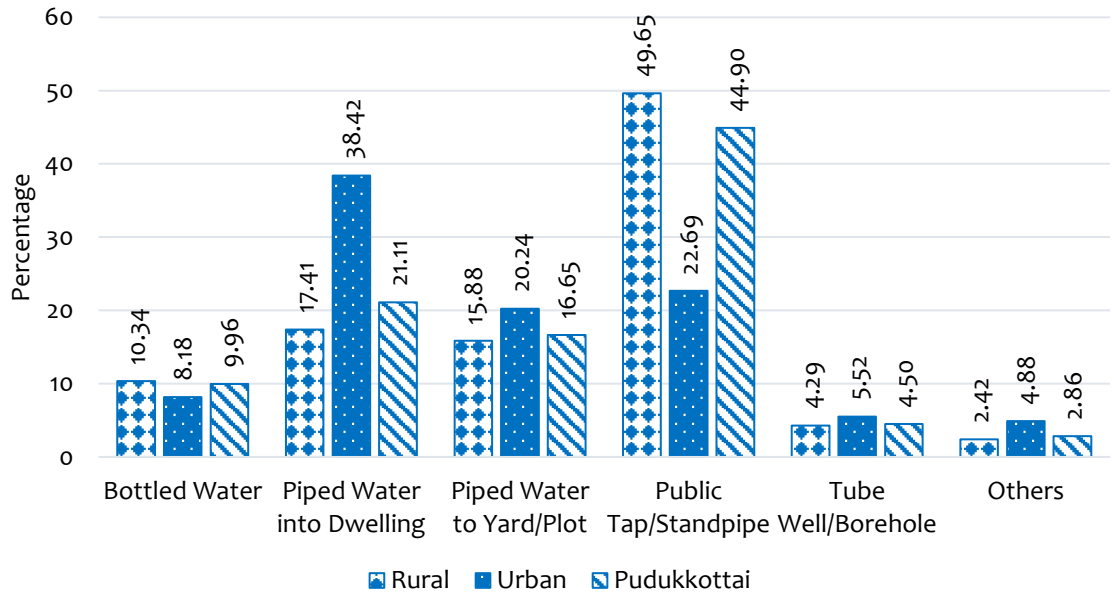


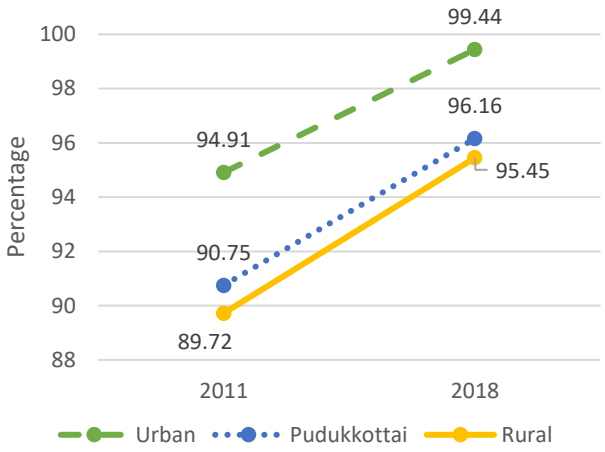
Chart 3.16 shows that 44.90 percent of households in Pudukkottai district were using public tap or standpipe as their primary source of drinking water, which is higher than the state estimate of 32.84 percent (TNHPS-PBS, 2021). The state PBS estimates showed that piped water into the dwelling in urban areas—about 37.02 percent—and public tap/standpipe in rural areas—about 44.51 percent—were the primary water sources of households (TNHPS-PBS, 2021). A similar pattern was observed in Pudukkottai district as well.

3.5.4 Electricity

Tamil Nadu had witnessed mass electrification during the last decade. A comparison of households with an 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 in case of urban areas. The electrification status had improved in rural areas as well.

Chart 3.17 shows the electrification status of households in Pudukkottai 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

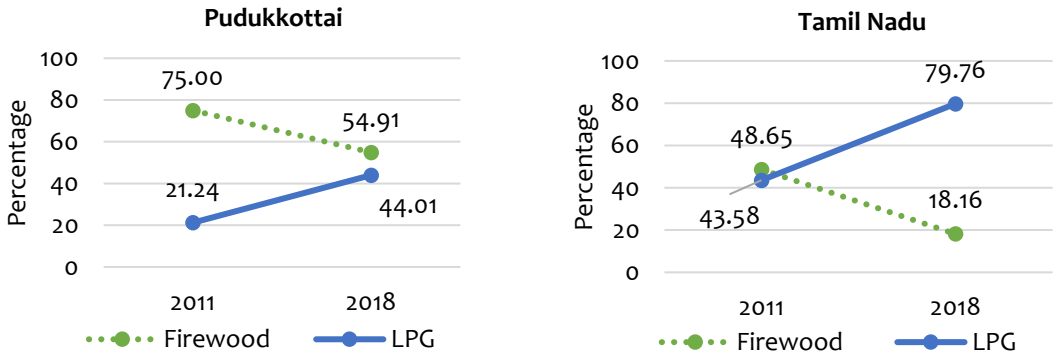


An increase in electrification had happened in both rural and urban areas of the district during the period 2011 to 2018. Although the district was ranked twenty-eighth among the then 32 districts in terms of electrification as per the state estimates, the difference in electrification between the district at 96.16 percent and the state at 97.6 percent was small (TNHPS-PBS, 2021).

3.5.5 Primary Cooking Fuel

A comparison of Census (2011) and the PBS estimates on the main fuel[7] used for cooking by the households in the district is given in Chart 3.18.

Chart 3.18 Comparison of Primary Cooking Fuel – District and State



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

Although the use of LPG as the primary cooking fuel had increased considerably in the district from 2011 (Census 2011) to 2018, firewood was still the dominant fuel, being used by more than half the households. Compared to other districts of Tamil Nadu, Pudukkottai district was ranked first in terms of firewood use and last in terms of LPG use in the state (TNHPS-PBS, 2021).

Chart 3.19 Comparison of Primary Cooking Fuel – Rural and Urban

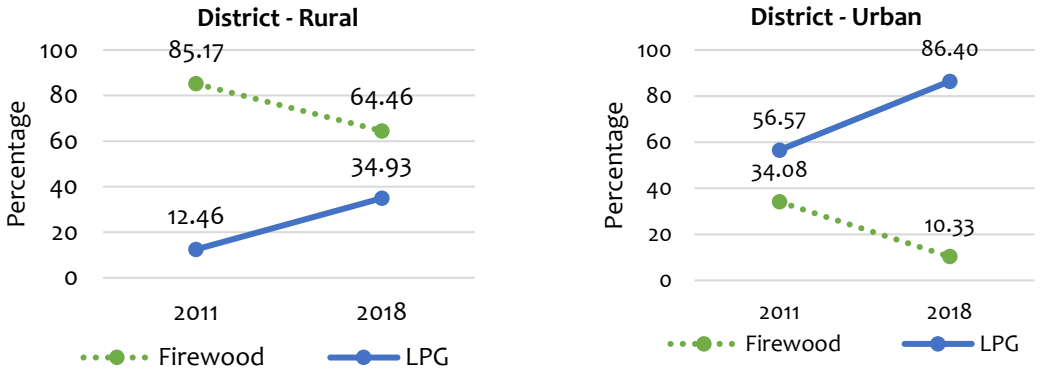


Chart 3.19 shows that while LPG adoption had increased in rural areas between 2011-18, firewood was still the predominant fuel, being used by almost two-thirds of the rural households. LPG uptake had increased further in urban areas, and that of firewood had dropped to just around ten per cent during the same period.

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

Table 3.23 Primary Cooking Fuel used by Households - Social Group-wise Percentages

Primary Cooking Fuel	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Firewood	69.76	72.80	40.57	62.12	78.79	8.12	54.91
Kerosene	0.59	0.00	1.24	0.49	0.24	0.00	0.84
LPG	29.49	14.64	57.90	37.34	20.79	91.88	44.01
Others	0.05	12.56	0.29	0.05	0.19	0.00	0.20
DK/RF	0.11	0.00	0.00	0.00	0.00	0.00	0.03
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

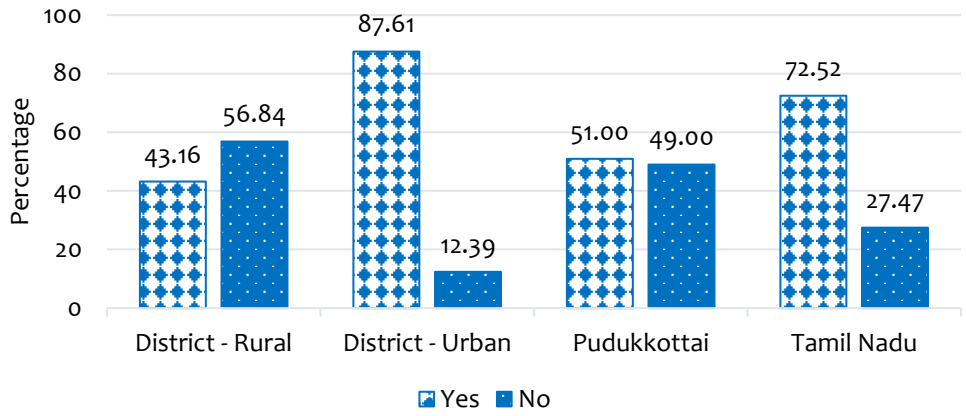
*Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that, apart from the General category households and a little more than half of the BC households, majority of all other social groups used firewood as the primary cooking fuel.

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 – Area-wise



The percentage of households with latrine within the house premises had increased from 27.96 percent in 2011 (Census, 2011) to 51.00 percent in 2018. Pudukkottai district was positioned thirty-first in the state among the 32 districts in terms of this indicator (TNHPS-PBS, 2021). The percentage of households equipped with latrine facilities in the district was considerably lower than the state level estimate. Latrine facilities within the house premises was significantly higher in urban areas than the rural areas of the district. It is pertinent to note that almost half the households in the district did not have access to a latrine within their house premises.

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

Latrine within House Premises	Social Group						
	SC	ST	BC	MBC	DNC	General	Pudukkottai
Yes	32.14	14.64	62.20	46.03	41.77	89.85	51.00
No	67.86	85.36	37.80	53.97	58.23	10.15	49.00
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.24 shows the presence of latrine within the premises of the household across various social groups. While almost 90 percent of the General category households had latrine access within the house, more than two-thirds of the SC households did not. The

percentages of SC and MBC households with latrine access in the district were considerably lower than their state level estimates of 52.2 percent and 67.5 percent respectively (TNHPS-PBS, 2021).

The presence of latrine facilities in the premises of households residing in different types of houses in the rural and urban areas of Pudukkottai district are compared in Chart 3.21.

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

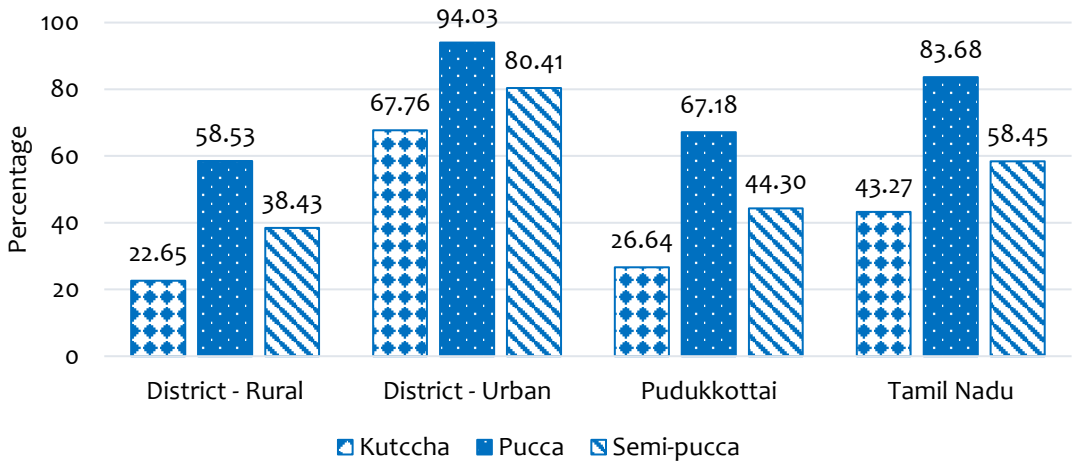


Chart 3.21 shows that the percentage of pucca houses with latrine facilities was higher than for semi-pucca and kutccha houses in the district. The percentages of latrine facilities in kutccha, pucca and semi-pucca houses in the district were lower than their respective state estimates. A higher percentage of all three types of houses in urban areas in the district had latrine facilities than in rural areas.

The percentage of total households in the district following open defecation had declined from 69.75 percent in 2011 (Census, 2011) to 48.15 percent in 2018 (TNHPS-PBS, 2021). Pudukkottai district was ranked second in terms of the percentage of total households following open defecation, after Ariyalur. The alternative practices of defecation followed by 49.00 percent of the district's households (see Chart 3.20) that did not have a latrine within the premises of the house is shown in Chart 3.22.

Chart 3.22 Alternate Practices of Defecation by the Households without Latrine

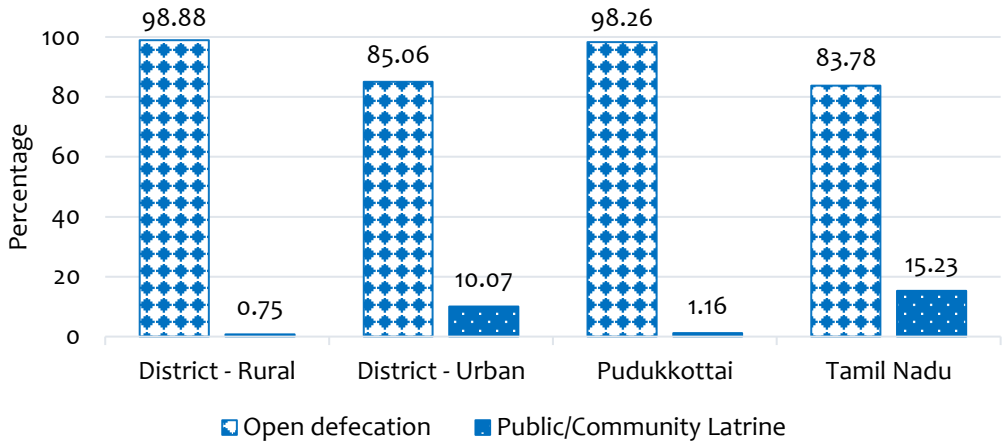


Chart 3.22 shows that more than 98 percent of households without latrine within the premises of the house in the district were following open defecation, which was significantly higher than the state level estimate. The practice of open defecation by these households was higher in rural areas compared to urban areas of the district.

4. Conclusion and Recommendations

The Pre-Baseline Survey 2018-19 of Pudukkottai district was conducted from the sample of 5,974 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.

Pudukkottai is an agrarian district with high agricultural land ownership. The district was ranked sixth in terms of this parameter. The ownership pattern of agricultural, allied agricultural and fishing assets was also higher in the district compared to the state. Almost 42 percent of the rural employed population were engaged in agriculture and allied activities, predominantly as casual labourers. Almost 95 percent of the landholdings were less than two hectares in size. Employment levels in the industrial sector were low. All these factors may have contributed to lower mean incomes in the district, especially agricultural income, as compared to the state. Efforts to make agriculture a more viable economic activity though diversification could be explored, along with the development of MSMEs to enable the rural population to transition out of the agricultural sector.

The district's literacy rate and formal educational attainment were lesser than the state estimates. A wide gender gap persisted in literacy rate, with the gap being considerably wider in rural areas. However, the district performed better than most districts in terms of female work participation. A social group-wise disparity also existed in the district where the prevalence of formal education was lower among the DNC and MBC households compared to other social groups. The SC, MBC and DNC populations were largely employed as casual labourers in the agricultural sector, which yielded lower incomes. Policy interventions targeted at these marginalized sections to improve their access to education and upskilling through schemes like the Naan Mudhalvan scheme may help reduce these disparities.

With respect to developmental indicators, the district was ranked first in the state in terms of households using firewood as the primary cooking fuel and last with respect to LPG usage. Firewood use was especially high in rural areas and among SC, MBC, and DNC households. Also, the district was positioned thirty-first among the then 32 districts in terms of the presence of latrine facilities within the house premises. The prevalence of open defecation was also much higher than the state estimate. Again, a social group-wise pattern was observed where the SC, ST, DNC and MBC categories had significantly higher firewood use and considerably lower latrine access as compared to other social groups. Social group-wise and rural targeting of policies to increase the adoption of LPG and promote latrine facilities might prove beneficial in bridging the gap.

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A collaborative project between
Department of Economics and Statistics &
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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.

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