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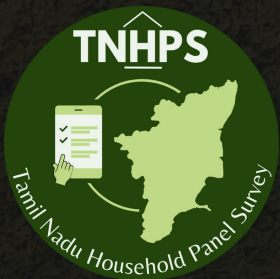
Perambalur

Tamil Nadu Household Panel Survey

Pre-Baseline District Report 2018-19

TNHPS
Tamil Nadu Household Panel Survey

Tamil Nadu Household Panel Survey (TNHPS)

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

Perambalur District

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**Principal Investigator
& Project Coordinator**   Prof. Kripa Ananthpur

Principal Investigator   Prof. L. Venkatachalam

Principal Investigator   Dr. K. Jafar

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

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Madras Institute of Development Studies
79, Second Main Road, Gandhi Nagar
Adyar, Chennai 600020
Ph: 24411574 / 24412589
www.mids.ac.in

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Summary of PBS Findings

Demographic indicators

- Perambalur had a sample size of 6,451 households, of which 67.20 percent of households were from rural areas and 32.80 percent of households were from urban areas.

- The district had a huge demographic dividend with almost half the population—about 46.62 percent—aged between 17 and 45 years.

- The BC social group was the largest in the district, constituting around 40 percent of the total households in the district.

Education

- The literacy rate in the district had increased from 74.32 percent (Census 2011) to 82.69 percent in 2018. Perambalur was ranked twenty-first among the then 32 districts in terms of this indicator.

- The difference between the urban and rural literacy rate was 13.16 percent in 2011, which reduced considerably to 4.37 percent in 2018, due to a higher growth in rural literacy rate. The gender gap in literacy rate was wider in rural areas at 12.68 percent than in urban areas at 9.23 percent.

- While more than 90 percent of the specified General category population in the district had received formal education, less than 80 percent of the MBC, DNC and SC population had done so.

Employment

- The percentage of employed population in the district—about 49.39 percent—was lower than the state estimate of 50.10 percent, while the share of unemployed population—4.11 percent—was higher compared to the state estimate of 3.50 percent. The rest were not in the labour force—about 46.46 percent.

- The percentage of population that was employed was higher in rural parts of the district than the urban areas.

- While 67.37 percent of the male population aged 14 and above was employed, the female work participation in the district was 33.98 percent.

- Around 63.46 percent of the female population aged 14 and above were not in the labour force, and among these, majority of them—about 68.59 percent—were associated with attending to domestic duties as a homemaker.

- Casual labour in agriculture was the predominant work type in rural as well as urban areas of the district. The industrial sector employed a very small part of the employed population.

- While the SC population was predominantly employed as casual labour in agriculture, the DNC, MBC, BC, and ST populations were self-employed in the same sector. The percentage of salaried workers in the private sector was higher among the General category compared to other social groups.

Land Ownership and Assets

- Perambalur district was ranked second in the state in terms of agricultural land ownership. A higher percentage of MBC category households owned agricultural land in the district compared to other social groups.

- Around 58 percent of the households that owned agricultural land in the district depended on rain-fed irrigation alone.

- Around 91 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares.

- More than a quarter of the households in the district owned at least one agricultural, allied agricultural or fishing asset, which was higher than the state estimate.

- While more than 90 percent of General and BC category households owned at least one household asset, only around 84 percent of the DNC households in the district owned any such asset.

Household Income

- The mean annual household income of Perambalur district was 31.63 percent lesser (₹97,593) than the state PBS estimate (₹1,42,752); in the urban areas it was ₹1,39,773 and in rural areas it was ₹86,555. The district was ranked twenty-fourth out of 32 districts with respect to this parameter.

- The mean income from salaried work (₹2,32,921) was the highest, while that from allied agricultural activities was the lowest (₹47,305).

- The Gini coefficient measuring income inequality across households in the district (0.543) was lower than the state PBS estimate (0.563).

Housing

- Perambalur district was ranked eleventh 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, 12.67 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 57 percent of the households in the district were living in pucca houses, which was 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 43.45 percent.

- The district witnessed increase in electrification in both rural and urban areas between 2011-2018.

- The primary cooking fuel in the district had undergone a drastic change from firewood to LPG between 2011-18. The district was ranked twelfth in terms of LPG use and twenty-first in terms of firewood use as the primary cooking fuel.

- While majority of the General category households used LPG as the primary cooking fuel, only around 82 percent of the SC households did so.

Sanitation

- The percentage of households with latrine within house premises had increased from 22.18 percent in 2011 (Census, 2011) to 53.82 percent in 2018 in the district. Perambalur was ranked twenty-ninth among the 32 districts in the state in terms of this parameter.

- While more than 90 percent of the General category households had latrine access within the house, more than half the SC households did not.

- The percentage of total households in the district following open defecation had declined from 73.48 percent in 2011 (Census, 2011) to 36.38 percent in 2018.

1. Introduction

1.1 Profile of Perambalur District

Perambalur district in Tamil Nadu was formed in the year 1995 from the trifurcation of Tiruchirappalli district into Tiruchirappalli, Perambalur and Karur districts. It is situated in the central region of the state, with Viluppuram and Cuddalore in the north, Ariyalur in the east, Tiruchirappalli in the south, and Tiruchirappalli and Salem in the west.

According to Census (2011), Perambalur had a total population of 5.65 lakhs, accounting for approximately 0.78 percent of Tamil Nadu's population, which was 7.21 crores. The district comprised 1.49 lakh households, with a majority of 82.81 percent residing in rural areas and only 17.19 percent residing in urban areas. The male population was 49.91 percent, and the female population was 50.09 percent. Perambalur demonstrated a child-sex ratio of 913.18, which is lower compared to the state average of 943.27. Within the social groups, 31.01 percent of the population belonged to the Scheduled Castes, while 0.45 percent belonged to the Scheduled Tribes. The literacy rate in Perambalur district stood at 74.32 percent, which is lower compared to the state's average of 80.09 percent. The male literacy rate was reported to be 82.87 percent, while the female literacy rate was reported to be 65.9 percent, highlighting the need for investment in women's education. These figures indicate that there is potential to improve education, especially among females.

In the fiscal year 2018-19 Perambalur's Net District Domestic Product was ₹5,23,810 lakhs, ranking last—thirty-second—among all districts. The district's per capita Net District Domestic Product was recorded at ₹ 84,293, maintaining its thirty-second rank among districts. 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, secondary and tertiary sectors contribute approximately 36 percent, 15 percent and 49 percent respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Perambalur ranked fifth in the Gender Inequality Index with a score of 0.057. This suggests that gender-based disparities in health, education, and labor market opportunities are relatively minimal in the district. However, the district lags in other areas of development. In terms of the Child Development Index, the district ranked thirteenth with a score of 0.656, highlighting that it needs to improve the health, nutrition, and education of children. It ranked thirty-first or second last in terms of the Human Development Index with a score of 0.447, indicating the

district performs poorly in terms of overall human development. Additionally, Perambalur ranked thirty-first in terms of the Multidimensional Poverty Index with a score of 0.63, indicating that a significant portion of the district's population face multiple deprivations in various aspects of life and there is a need for comprehensive interventions to address poverty and improve well-being.

Overall, Perambalur is one of the most 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 analyse 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 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 analyses data from the PBS for Perambalur district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent census data of Perambalur (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Perambalur district. The sample size for the district was 6,451 households, among which 4,335 households were from rural areas and 2,116 households were from urban areas. The blocks covered during the survey were: Alathur, Perambalur, Veppanthattai and Veppur.

2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 7,190 households in Perambalur district were selected using a multi-stage stratified sampling design[1]. The final sample size for PBS was 6,451 households, of which 67.20 percent of households were from rural areas and 32.80 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		Perambalur	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	4,335	89.90	2,116	89.36	6,451	89.72
Non-Response	165	3.42	136	5.74	301	4.19
Non-sample	322	6.68	116	4.90	438	6.09
Total	4,822	100	2,368	100	7,190	100

Perambalur district had a lower response rate—willingness of households to participate in the TNHPS-PBS—of 89.72 percent compared to the state response rate of 96.5 percent. Around 4.19 percent of households were not willing to participate in the survey. About 6.09 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 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 3.80 in 2011 (Census, 2011) to 3.42 in 2018. As per the PBS estimates, 52.36 percent of the population in the district were female, and 47.63 percent of the population were male. Around 23.92 percent of the households in the district were headed by females, which was higher than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

Chart 3.1 Age-wise Distribution of Population – Area-wise Percentages
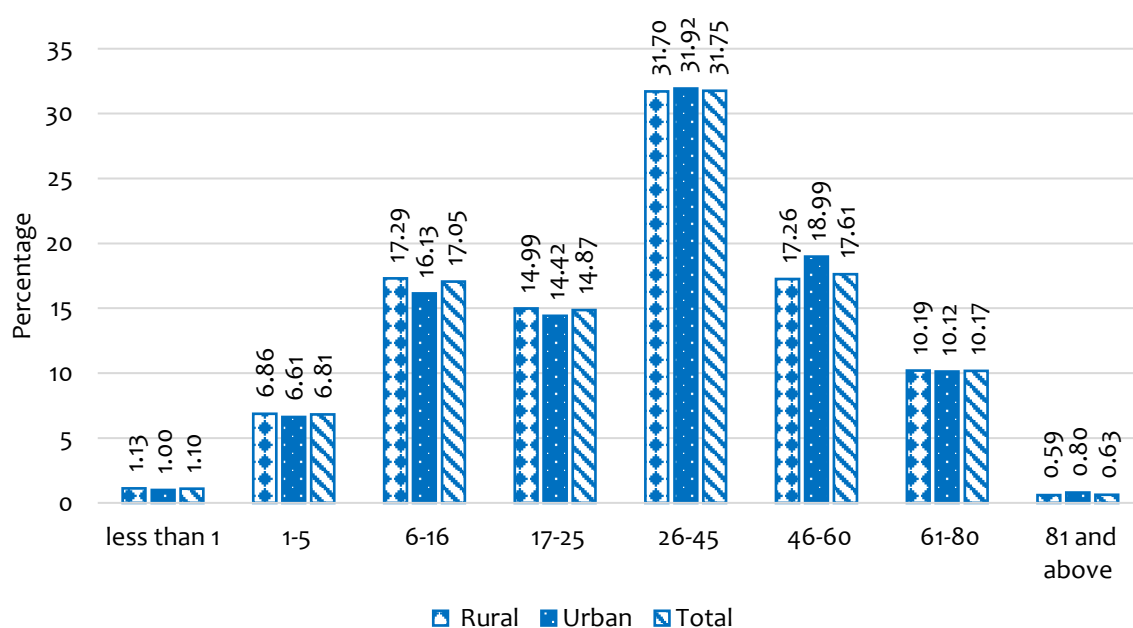
As per the PBS estimates, about 32 percent of the population in the district was in the age group of 26 to 45 years. The category between age 17 to 60 years in the district was 64.23 percent, which was lower than the state estimate of 66.00 percent (TNHPS-PBS, 2021).

The percentage of currently married population in the district was 71.93 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 religion-wise distribution of the households in the district as per the PBS estimates shows that 95.72 percent of the households practiced Hinduism, 2.85 percent practiced Islam and 1.38 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 Social Group-wise Distribution of Households

Social Group	Percentage
SC	29.59
ST	0.18
BC	40.33
MBC	25.85
Denotified Communities (DNC)	2.62
General	0.94
DK/RF	0.50
Total	**100**

As per the PBS estimates, the highest percentage of households in Perambalur district belonged to the BC category. The percentages of SC and ST households in the district were 29.59 percent and 0.18 percent in 2018.

It is important to note that the percentages of ST households in Perambalur district was only 0.18 percent and only twelve 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 Perambalur district.

3.2.1 Education

The change in literacy rate of Perambalur 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) – Area-wise Percentages

Gender	District - Rural		District - Urban		Perambalur		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	81.28	88.54	90.53	91.01	82.87	89.05	86.77	90.97
Female	62.95	75.86	80.03	81.78	65.90	77.06	73.40	80.15
Total	**72.06**	**81.79**	**85.22**	**86.16**	**74.32**	**82.69**	**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 Perambalur district—about 74.32 percent—was lesser than the state estimate of 80.09 percent. The PBS estimates showed that in the year 2018, the literacy rate in Perambalur district had increased to 82.69 percent, which continued to be lower than the state estimate of 85.40 percent. Nevertheless, the district had registered an 8.37 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 Perambalur district was 5.77 percent in 2011, which had declined to 2.71 percent in 2018 as per the PBS estimates. In terms of literacy rate, Perambalur was ranked twenty-first among the then 32 districts in 2018 (TNHPS-PBS, 2021).

Both male and female literacy rates in Perambalur 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 16.97 percent in 2011 to 11.99 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. The difference between the urban and rural literacy rate was 13.16 percent in 2011, which reduced considerably to 4.37 percent in 2018, due to a higher growth in rural literacy rate. The gender gap in literacy rate was higher in rural areas at 12.68 percent than in urban areas at 9.23 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 Perambalur district.

Chart 3.2 Formal Schooling of the Population – Area-wise Percentages
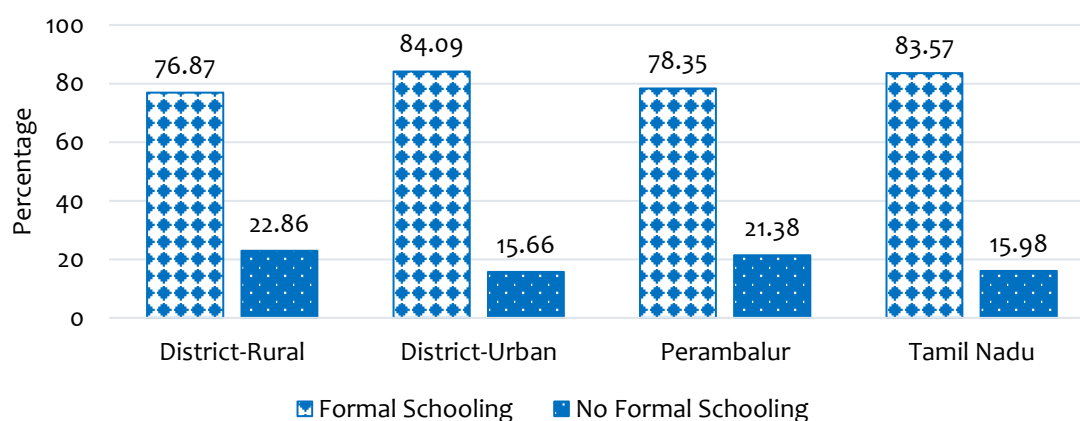
*Others and Don't Know/Refuse to Answer categories are not included in any chart, unless their value is substantially high. Therefore, the total might not add up to 100 percent.

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

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

Male

13.78%

85.94%

□ Formal Schooling ■ No Formal Schooling

Female

28.10%

71.64%

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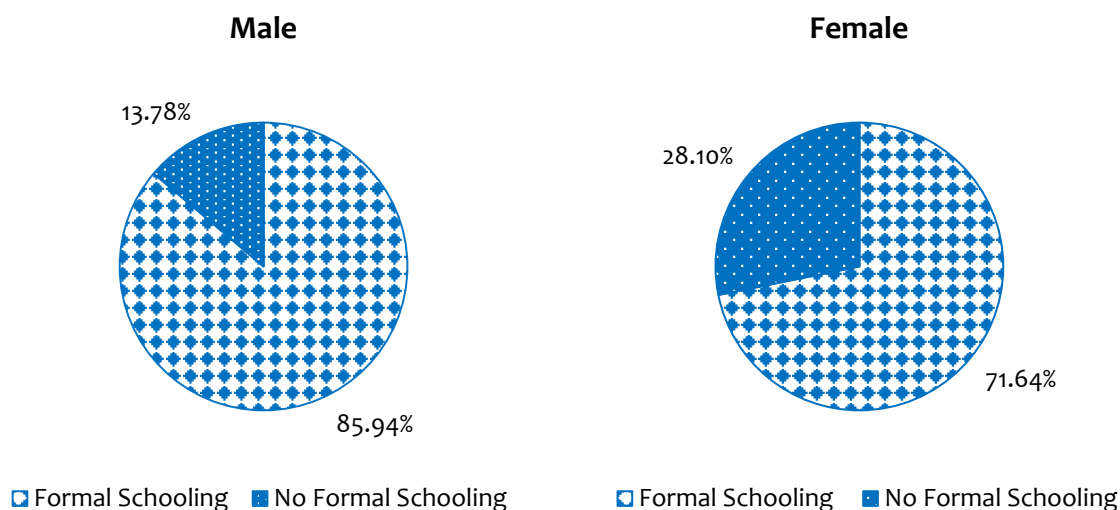
Chart 3.3 shows that the percentage of the population that had acquired formal education in the district was much higher among males compared to females, again denoting a wide gender gap, like in literacy.

A district level analysis of the PBS on education 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	Perambalur
Formal Schooling	77.83	68.90	81.13	74.46	75.41	94.25	78.35
No Formal Schooling	21.92	31.10	18.60	25.29	24.49	5.75	21.38
Others and DK/RF	0.25	0.00	0.27	0.25	0.10	0.00	0.27
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 80 percent of the MBC, DNC and SC 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 Qualification	Area Type		
	Rural	Urban	Perambalur
Primary (I to V)	23.92	19.22	22.89
Middle School (VI to VIII)	21.33	18.42	20.69
High School (IX to X)	20.72	23.83	21.40
Higher Secondary (XI to XII)	16.22	15.70	16.11
Bachelor's degree	9.52	10.82	9.81
Diploma Degree	4.16	5.28	4.41
Post Graduate Degree	3.78	6.43	4.36
Others/DK/RF	0.35	0.30	0.34
Total	**100**	**100**	**100**

The PBS estimates show that around 81.09 percent of the district's population with formal education had completed schooling up to higher secondary level. The percentage of population that had completed tertiary education—such as bachelor's degree, diploma or post graduate degree and above—was 18.58 percent. 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 Qualification	Gender		
	Male	Female	Perambalur
Primary (I to V)	22.77	23.02	22.89
Middle School (VI to VIII)	20.40	20.99	20.69
High School (IX to X)	21.89	20.88	21.40
Higher Secondary (XI to XII)	15.29	16.98	16.11
Bachelor's degree	8.73	10.95	9.81
Diploma Degree	6.51	2.18	4.41
Post Graduate Degree	4.10	4.64	4.36
Others/DK/RF	0.32	0.36	0.34
Total	**100**	**100**	**100**

Table 3.5 shows that a slightly higher percentage of females—about 81.87 percent—in the specified population had completed schooling up to higher secondary level compared to males—about 80.35 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.

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

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

Educational Qualification	Social Group						
	SC	ST	BC	MBC	DNC	General	Perambalur
Primary (I to V)	20.62	30.27	23.05	24.50	32.15	15.45	22.89
Middle School (VI to VIII)	19.16	25.73	21.75	20.97	18.48	19.31	20.69
High School (IX to X)	21.54	25.49	20.75	22.30	19.54	29.95	21.40
Higher Secondary (XI to XII)	15.59	18.51	16.80	15.59	17.23	17.14	16.11
Bachelor's degree	11.97	0.00	8.79	9.26	5.61	13.86	9.81
Diploma Degree	4.95	0.00	4.43	3.86	3.94	1.91	4.41
Post Graduate Degree	5.85	0.00	4.11	3.17	2.92	2.38	4.36
Others/DK/RF	0.32	0.00	0.33	0.34	0.13	0.00	0.34
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The social group-wise analysis in Table 3.6 shows that more than 80 percent of the population in BC, MBC, DNC, and General categories in the district had completed only schooling up to higher secondary level. The percentage of population with tertiary education—bachelor's degree and above—was quite high among the SC population at 22.77 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 21.38 percent of the population had not received formal education in Perambalur 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	Perambalur
Yes	21.54	13.24	20.30
No	76.79	82.93	77.71
DK/RF	1.67	3.83	1.99
Total	**100**	**100**	**100**

Table 3.7 shows the literacy status of the population with no formal schooling in the district. About 20 percent of the population without formal schooling had functional literacy. The specified population group in rural areas of the district had 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	Perambalur
Yes	24.06	17.64	15.12	24.02	4.25	19.32	20.30
No	74.12	82.36	82.73	73.73	95.75	80.68	77.71
DK/RF	1.82	0.00	2.15	2.24	0.00	0.00	1.99
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. The specified population in the SC and MBC categories had higher functional literacy compared to the other social groups, while it was quite low for the DNC category.

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,

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

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.).

Chart 3.4 Employment Status of Population (Age 14 years and above) – Area-wise Percentages
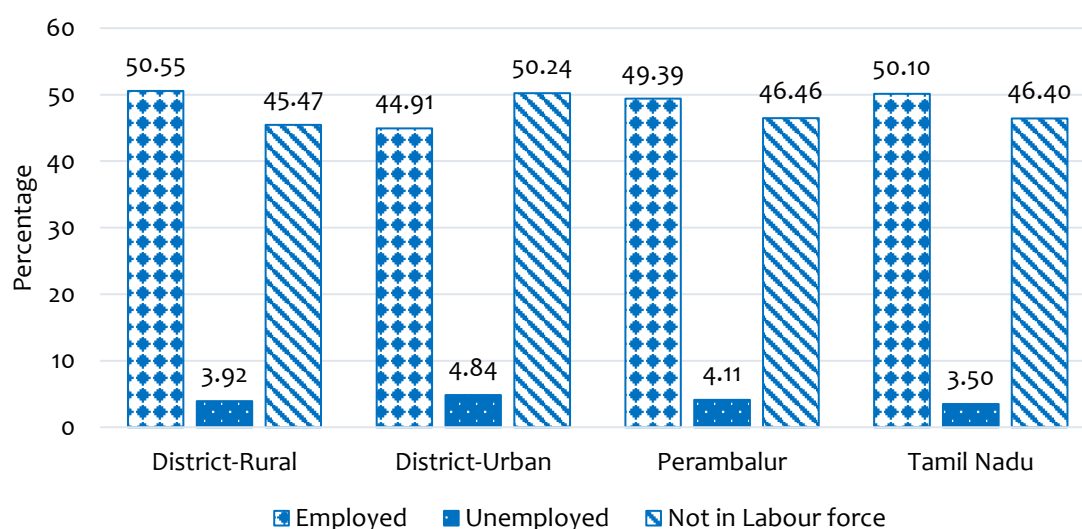
Chart 3.4 shows that the overall percentage of employed population—14 years and above—in the district was slightly lesser than the state estimate. The share of unemployed population was higher in the district compared to the state. The percentage of population that was employed was higher in rural parts of the district than the urban. The unemployment status in rural areas of the district at 3.92 percent was higher than the state's rural estimate of 3.6 percent, and the district urban unemployment status at 4.84 percent was also higher than the state urban estimate of 3.3 percent. Perambalur district

was ranked eighteenth among all districts in Tamil Nadu in terms of employed population and ranked ninth in terms of the unemployed population.

Chart 3.5 Employment Status of the Population – Gender-wise Percentages

Male

26.61%

5.92%

67.37%

◫ Employed   ◼ Unemployed
◪ Not in Labour Force

Female

33.98%

63.46%

2.56%

◫ Employed   ◼ Unemployed
◪ Not in Labour Force
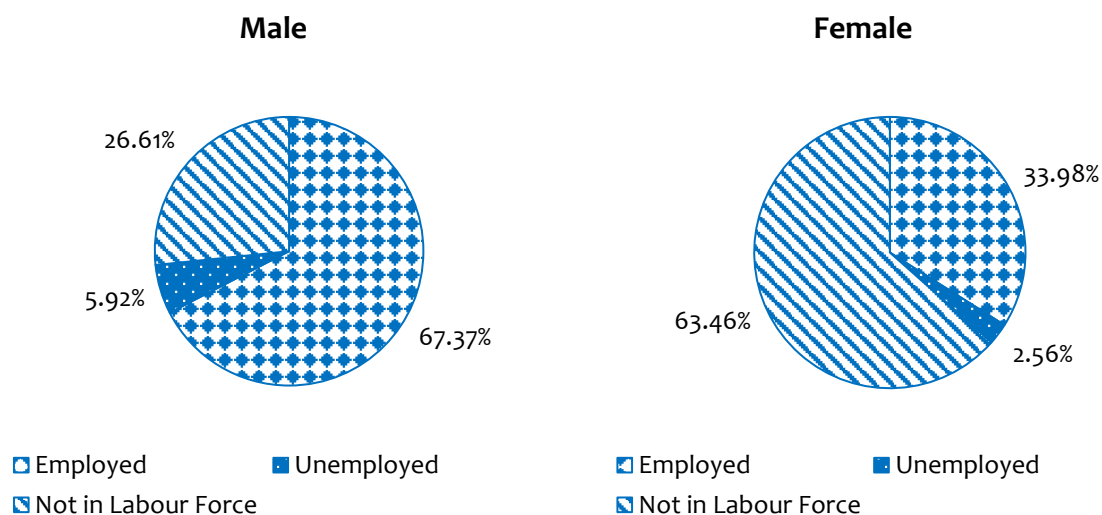
Chart 3.5 shows the gender-wise employment status of the population aged 14 years and above. While more than two-thirds of the specified male population was employed, the female work participation was a little over one-third of the female population. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). The district female work participation at 33.98 percent was higher than the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019), and also higher than the state estimate of 29.96 percent (TNHPS-PBS, 2021). Around 63.46 percent of the female population was not in the workforce, and among these, majority of them at 68.59 percent were associated with attending to domestic duties as homemakers (see Chart 3.7).

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

Work Type	Area Type		
	Rural	**Urban**	**Perambalur**
Self Employed Agriculture	27.34	10.64	24.21
Self Employed Non-Agriculture	7.78	17.96	9.69
Self Employed Allied Agriculture	1.65	0.88	1.50
Casual Labourer Agriculture	31.16	21.31	29.31
Casual Labourer Industry	3.62	4.69	3.82
Casual Labourer Service	6.17	13.98	7.64
Casual Labourer (Others)	0.78	1.10	0.84
Salaried Worker Government	4.79	7.80	5.35
Salaried Worker Private	12.14	19.94	13.60
Multiple Occupation	4.32	0.97	3.70
Other	0.21	0.62	0.29
DK/RF	0.05	0.11	0.06
Total	**100**	**100**	**100**

Since Perambalur is primarily a rural district, more than half the employed population depended on the agricultural sector for employment—both self-employed and casual labour. The greatest proportion of the working population in the state were salaried workers in the private sector at 21.82 percent (TNHPS-PBS, 2021). The majority of the working population in Perambalur district were casual labourers in agriculture. Casual labour in agriculture was the predominant work type in rural as well as urban 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**	**Perambalur**
Self Employed Agriculture	7.15	29.59	30.63	34.21	37.64	6.09	24.21
Self Employed Non-Agriculture	6.38	25.84	13.07	8.34	4.79	33.69	9.69
Self Employed Allied Agriculture	1.08	7.31	1.71	1.57	2.77	0.00	1.50
Casual Labourer Agriculture	43.64	11.73	20.01	27.16	20.93	11.78	29.31
Casual Labourer Industry	4.57	0.00	3.70	3.58	0.58	3.57	3.82
Casual Labourer Service	8.97	13.80	6.51	6.50	18.09	2.98	7.64
Casual Labourer (Others)	1.06	0.00	0.76	0.76	0.00	2.98	0.84
Salaried Worker Government	7.20	0.00	5.75	3.09	1.62	6.97	5.35
Salaried Worker Private	16.38	7.82	14.39	9.87	6.62	24.91	13.60
Multiple Occupation	3.43	3.91	3.07	4.62	6.95	1.19	3.70
Other	0.15	0.00	0.37	0.23	0.00	5.85	0.29
DK/RF	0.00	0.00	0.04	0.08	0.00	0.00	0.06
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Perambalur being a rural district, the agriculture sector employed the highest proportion of the specified population across all social groups, except the General category. While the

SC population was predominantly employed as casual labour in agriculture, the DNC, MBC, BC, and ST populations were self-employed in the same sector. The SC population involved as casual labour in agriculture in the district (43.64 percent) was considerably higher than the corresponding state estimate of 33.33 percent (TNHPS-PBS, 2021). The percentage of salaried workers in private sector was higher among the General category compared to among other social groups. The results for the ST social group 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 Percentages
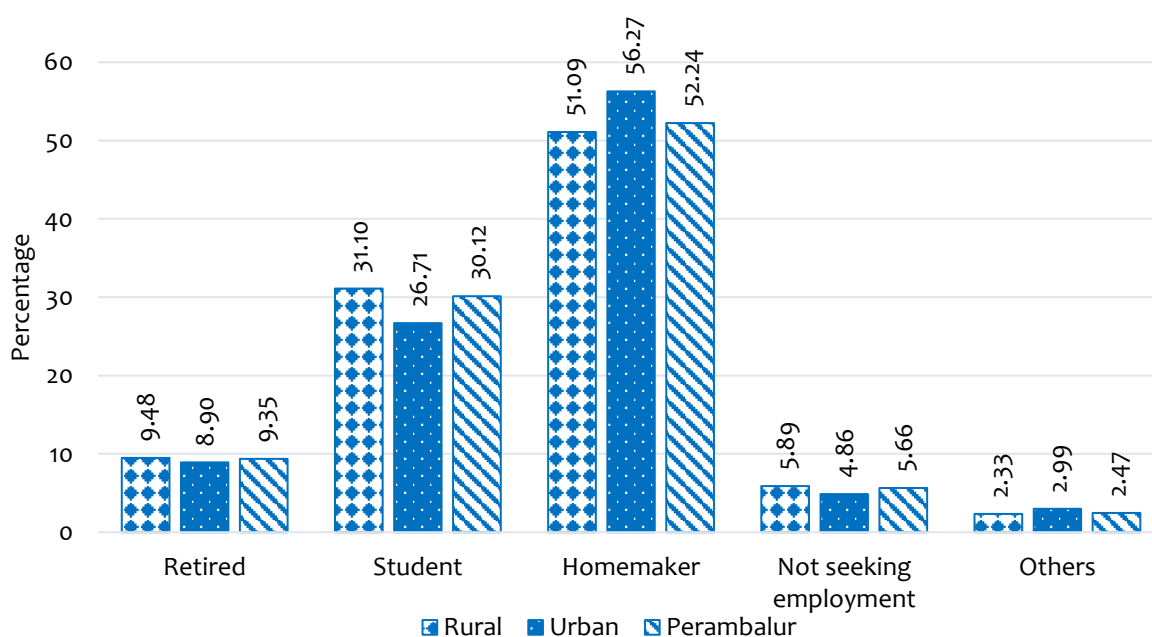
Chart 3.6 shows that, similar to the trend at the state level, more than half the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were not seeking employment or were students or had retired were higher in rural areas than urban areas, whereas the percentage of homemakers was higher in urban areas than rural areas.

Chart 3.7 Composition of the Population Not in the Labour Force (Age 14 years and above) – Gender-wise Percentages
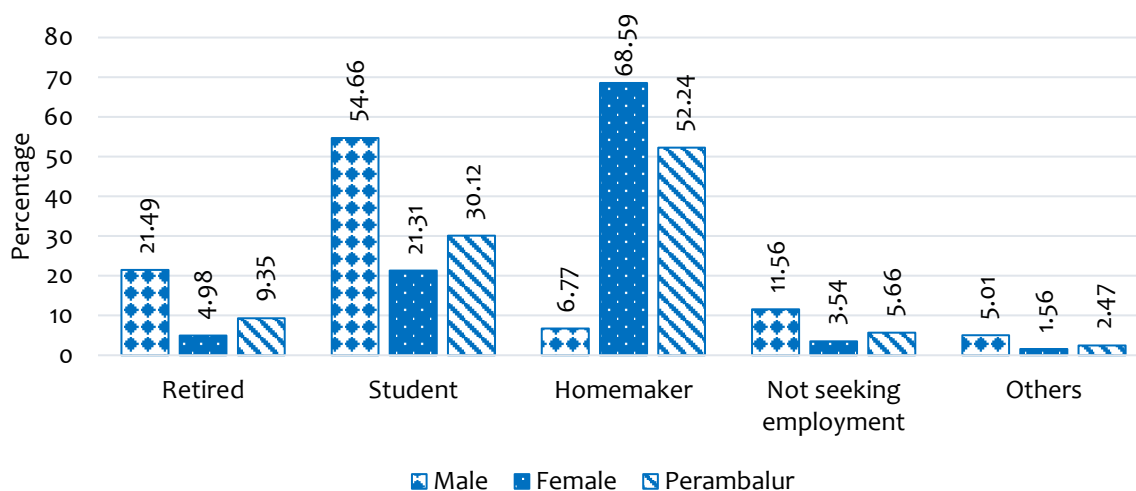
The gender-wise distribution of the population currently not in the labour force is given in Chart 3.7. While Chart 3.3 represents the lower female involvement in formal education, Chart 3.7 shows the staggeringly lower female involvement in higher education compared to men as only 21.31 percent of the 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	Perambalur
Retired	13.39	0.00	7.56	7.93	7.39	8.75	9.35
Student	33.69	24.07	28.16	30.22	28.39	23.02	30.12
Homemaker	46.29	33.58	55.38	53.19	51.64	60.53	52.24
Not seeking employment	3.89	42.35	6.40	6.00	10.84	2.02	5.66
Others	2.51	0.00	2.34	2.62	1.73	5.67	2.47
DK/RF	0.23	0.00	0.16	0.04	0.00	0.00	0.14
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The composition of the population not in the labour force in the district analysed 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. Specifically, around 60 percent of the specified population in the General category were homemakers, larger than in any other social group. The SC category had a higher percentage of not-working

population as students compared to the other social groups. There were only ten ST respondents 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 Perambalur 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 Perambalur district is 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 Percentages
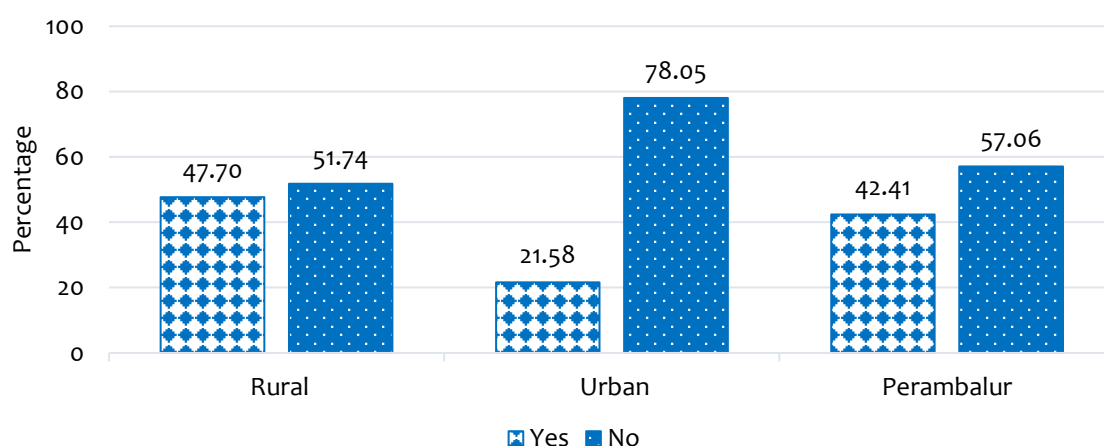
Perambalur is a predominantly rural and agricultural district. The percentage of households owning agricultural land in the district was significantly higher than that at the state level estimate of 19.41 percent. The district was ranked second in the state in terms of agricultural land ownership, after Ariyalur district (TNHPS-PBS, 2021). Such ownership was higher in rural areas than urban areas. A considerably higher proportion of households in rural and urban areas of the district owned agricultural land compared to the respective state level rural and urban estimates at 29 percent and 8.61 percent respectively (TNHPS-PBS, 2021).

Table 3.12 shows the percentage of agricultural land-owning households in the district that depended on irrigation or rain.

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

Type of Agricultural Land	Area Type		
	Rural	Urban	Perambalur
Only Irrigated Agriculture Land	30.73	60.35	33.77
Only Unirrigated Agriculture Land	60.56	35.86	58.02
Both Irrigated and Unirrigated Agriculture Land	8.28	3.65	7.80
DK/RF	0.43	0.14	0.40
Total	**100**	**100**	**100**

Table 3.12 shows that, as per the PBS estimates, more than half—about 58.02 percent—the households that owned agricultural land in Perambalur district depended on rain-fed irrigation alone. A higher percentage of urban households owned irrigated agricultural land compared to the rural households in the district. Wells and bore-wells are present in some places but with minimum water availability (Tamil Nadu State Planning Commission, 2017b). The proportion of households having irrigated agricultural land was lower in the district at 33.77 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	Perambalur
Yes	30.12	20.54	46.14	51.99	46.17	14.06	42.41
No	69.07	79.46	53.58	47.37	53.83	85.94	57.06
DK/RF	0.81	0.00	0.28	0.64	0.00	0.00	0.52
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 MBC, DNC and BC households owned agricultural land in the district. Around 14.06 percent of General category households owned agricultural land in the district compared to the state estimates of 10.81 percent (TNHPS-PBS, 2021).

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 Households – Area-wise Percentages

Size of Agricultural Land (in Hectares)	Area Type		
	Rural	**Urban**	**Perambalur**
Marginal (0.01 - 0.99)	70.54	76.13	71.11
Small (1 - 1.99)	20.24	16.64	19.87
Semi Medium (2 - 3.99)	7.07	5.43	6.90
Medium (4 - 9.99)	0.95	1.41	1.00
Large (10 and above)	1.20	0.39	1.11
Total	**100**	**100**	**100**

Table 3.14 shows that 90.98 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. The share of semi-medium and medium landholdings was lesser than that of the state—7.64 percent and 2.26 percent respectively—while that of large landholdings was higher than the state level estimate of 0.77 percent.

3.3.2 Ownership of Agricultural, Allied Agricultural and Fishing Assets

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

Chart 3.9 Ownership of Agricultural, Allied Agricultural and Fishing Assets – Area-wise Percentages
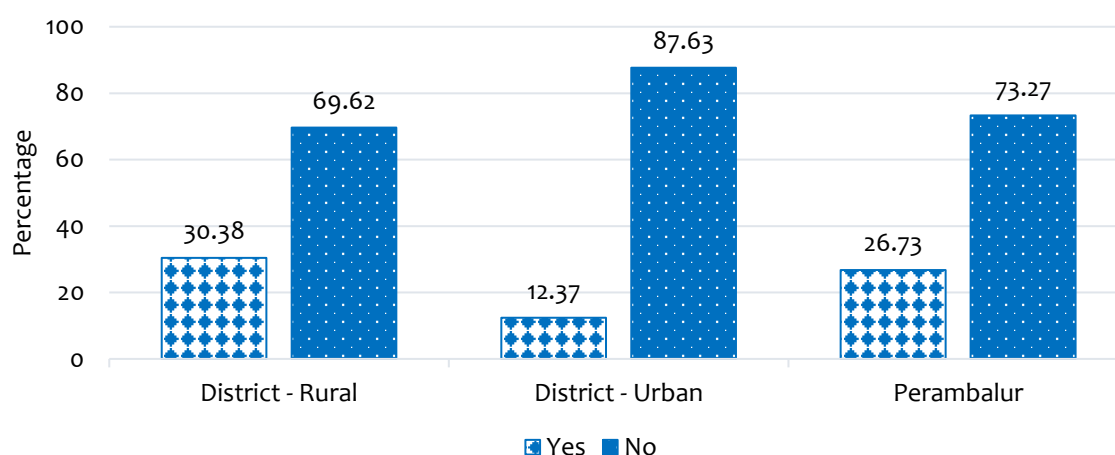
Chart 3.9 shows that 26.73 percent of the households in Perambalur district owned at least one agricultural, allied agricultural or fishing asset. This estimate was higher than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The ownership of such assets was higher in rural areas than urban areas. The ownership pattern was lower in rural areas of the district

compared to the state rural estimate of 32.69 percent, but the district urban estimate was higher than the state urban estimate of 7.67 percent (TNHPS-PBS, 2021).

3.3.3 Presence of Household Assets

Chart 3.10 shows the percentage of households in Perambalur district that owned at least one household asset. Household assets include Air Conditioners (AC), refrigerators, two-wheelers, four-wheelers, 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 the 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 Percentages
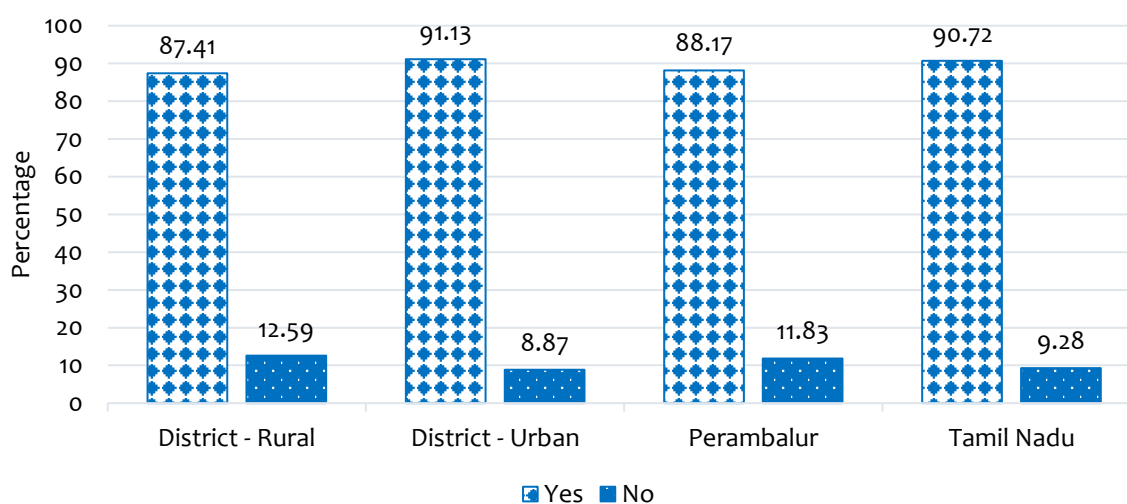
The percentage of households owning at least one household asset in Perambalur district was lower than the state estimate. Within the district, the urban areas had a higher percentage of households owning at least one household asset compared to the rural areas.

The social group-wise ownership of household assets in Perambalur district is given in Table 3.15.

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

Household Asset	Social Group						
	SC	ST	BC	MBC	DNC	General	Perambalur
Yes	86.12	75.11	90.55	87.16	84.42	93.48	88.17
No	13.88	24.89	9.45	12.84	15.58	6.52	11.83
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The PBS estimates showed that more than 90 percent of General and BC category households owned at least one household asset. Despite high agricultural land ownership among the DNC households, more than 15 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 twelve 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 subsidised items from the Public Distribution System and subsidised LPG connection, for instance. The percentages of households that possessed a ration card in rural and urban areas of Perambalur district are given in Chart 3.11.

Chart 3.11 Possession of Ration Card – Area-wise Percentages
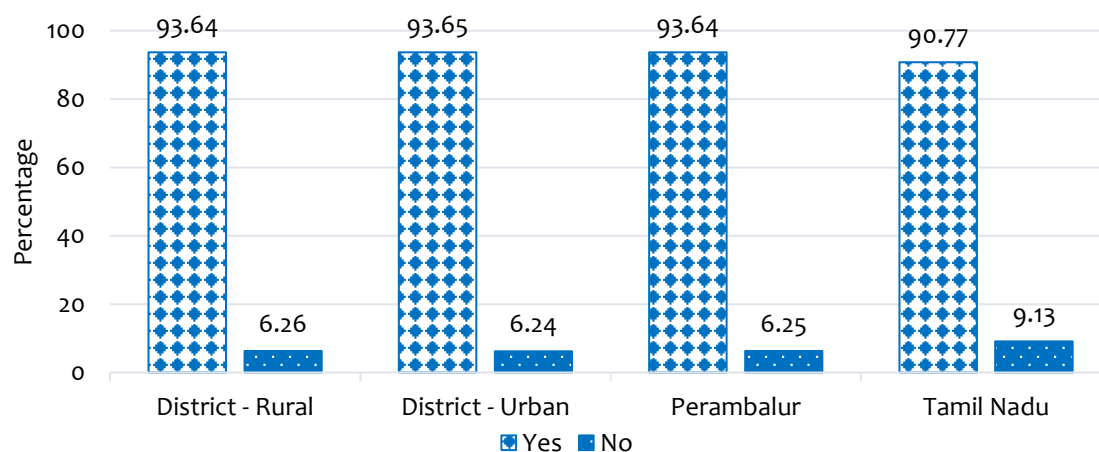
Chart 3.11 shows that the percentage of households that possessed a ration card in the district was higher than the state estimate. Within the district, a similar percentage of rural and urban households possessed ration cards.

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	Perambalur
Yes	93.64	94.35	93.65	94.01	91.90	98.90	93.64
No	6.25	5.65	6.20	5.95	8.10	1.10	6.25
DK/RF	0.11	0.00	0.15	0.04	0.00	0.00	0.10
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 possessed ration cards in the district. Possession of ration card was highest among the General category households compared to other social groups.

3.3.5 Type of Ration Card

According to the National Food Security Act (NFSA) 2013, ration cards are broadly categorised 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 Perambalur district are given in Chart 3.12.

Chart 3.12 Type of Ration Card at the Household Level – Area-wise Percentages
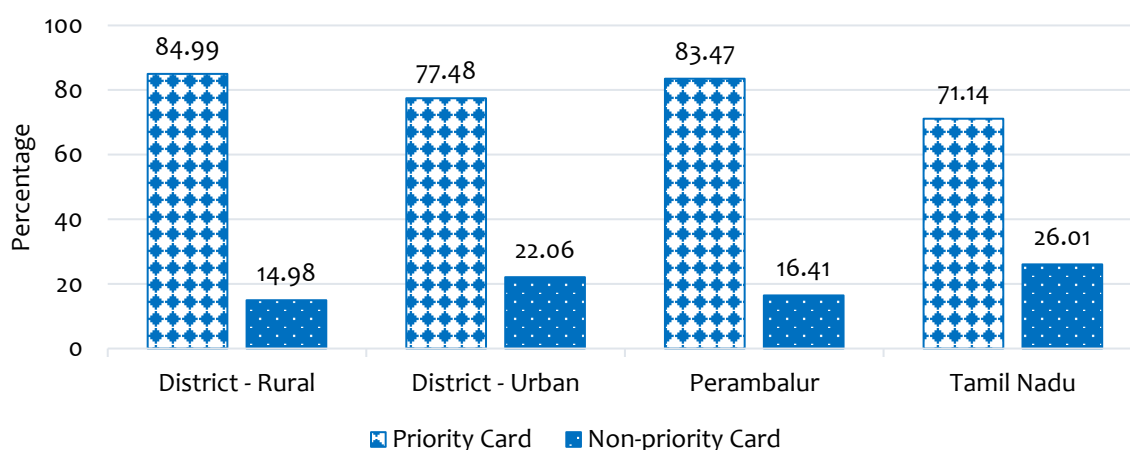
The percentage of households possessing priority ration cards in the district was higher compared to the state level estimate. A higher percentage of rural households possessed priority cards than urban households.

3.4 Household Income

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

In this section, we analyse the annual income of households in Perambalur 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 Perambalur district.

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

Source	Rural	Urban	Perambalur	Tamil Nadu
Agriculture	41,021	72,006	43,741	61,830
Allied Agriculture	20,482	45,1901	21,581	38,576
Salaried	1,50,116	2,11,627	1,68,477	2,29,857
Self Employed	99,536	1,44,291	1,14,941	1,47,403
Wage Labour	34,554	39,995	35,456	47,734
Other Sources	73,078	1,08,126	80,743	97,646
Income from all Sources	**86,555**	**1,39,773**	**97,593**	**1,42,752**

The mean annual household income of Perambalur district was 31.63 percent lesser than the state PBS estimate (₹1,42,752). Among the then 32 districts, Perambalur was ranked twenty-fourth in terms of mean annual household income (TNHPS-PBS, 2021). The mean household income was higher among the households with salaried income and lower among the households that depended on allied agricultural activities.

In rural areas of Perambalur district, the mean household income was ₹86,555, which was lower than the state rural estimate of ₹92,765 (TNHPS-PBS, 2021). Higher percentage of marginal land holders and failure of the monsoon were the main reasons for comparatively lower mean household income of the households in rural areas. The mean household income was higher among the households who depended on salaried income. Lower mean income was reported among the households that engaged in allied agriculture activities as a source of income.

In urban areas of Perambalur district, the mean household income was ₹1,39,773, 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 Perambalur 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 Perambalur district (0.543) was lower than the state estimate

(0.563)[5]. Income inequality across households in urban areas of the district was found to be higher than in rural areas.

Table 3.18 Gini Coefficient of Income Inequality- Area-wise

Area	Gini coefficient
Rural	0.525
Urban	0.563
Perambalur	0.543
Tamil Nadu	**0.563**

Chart 3.13 Lorenz Curve and Income Inequality
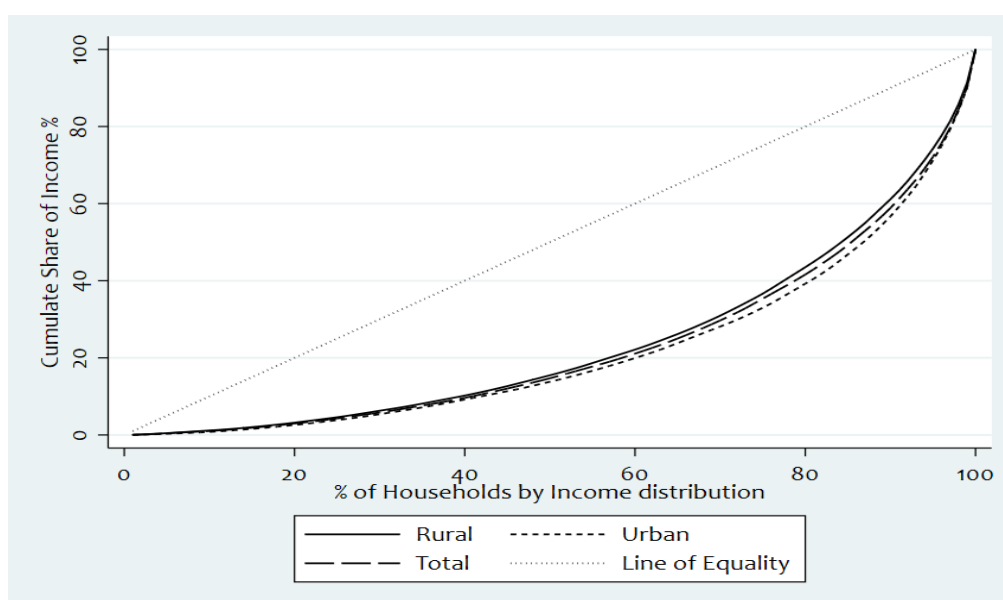
The Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of households. Chart 3.13 shows that in Perambalur, the bottom 60 percent of the households held around 20 percent of the total income; the bottom 80 percent of households held around 40 percent of the total income and the top 20 percent of households held around 60 percent of the total income. Both Chart 3.13 and Table 3.18 show that income inequality was higher in urban areas compared to the rural areas of the district.

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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).

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

Expectation of Future Income	Area Type			
	Rural	Urban	Perambalur	Tamil Nadu
Higher	53.14	62.17	54.97	50.06
Lower	7.03	5.14	6.65	8.17
About the same	31.23	27.20	30.41	31.66
DK/RF	8.61	5.49	7.98	10.11
Total	**100**	**100**	**100**	**100**

More than half of the households in Perambalur district—about 55 percent—foresaw an increase in income in their future. Majority of the households in both rural areas and urban areas were expecting that their income in future would increase in the coming five years. Compared to rural areas, higher percentage of urban households expected that their income would increase in future.

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

Expectation of Future Income	Social Group						
	SC	ST	BC	MBC	DNC	General	Perambalur
Higher	52.60	39.19	56.31	54.23	78.97	50.61	54.97
Lower	7.04	22.72	6.36	7.34	1.97	1.10	6.65
About the same	34.89	32.44	26.93	30.96	18.66	36.22	30.41
DK/RF	5.47	5.65	10.41	7.48	0.39	12.07	7.98
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.20 shows that while more than three-fourths of the DNC households in the district expected an increase in their future income, only a little more than half the SC, BC, MBC, and General category households expected the same. More than 30 percent of the General, SC and MBC households expected their future income to remain unchanged.

3.5 Basic Infrastructure

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

3.5.1 House Ownership Status

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

Chart 3.14 Ownership Status of the Households' Dwelling/House – Area-wise Percentages
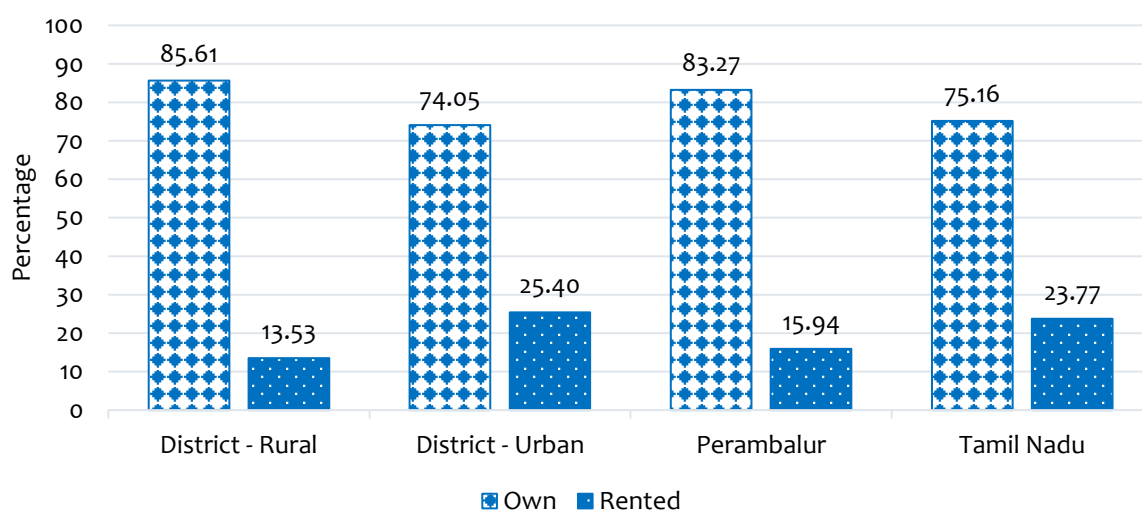
Chart 3.14 shows that the proportion of households living in their own house in the district was higher than the state level estimate. Perambalur district was ranked eleventh among the then 32 districts of Tamil Nadu in terms of percentage of households living in their own house (TNHPS-PBS, 2021). A larger proportion of rural households were living in their own house compared to urban households. Only 0.74 percent of households were living in other houses such as a relative's house, encroachments etc. This data does not capture the ownership of a house in a different geographical location.

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

Ownership Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Perambalur
Own	85.85	88.70	80.04	86.54	84.54	54.06	83.27
Rented	13.54	11.30	19.01	12.76	13.77	44.84	15.94
Others	0.55	0.00	0.85	0.68	1.69	1.10	0.74
DK/RF	0.06	0.00	0.10	0.02	0.00	0.00	0.06
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3.21 shows that while more than 80 percent of the households belonging to all social groups were living in their own house, only a little over half the General category households were doing so. The percentage of General category households living in their own houses was less than the state estimate of General category living in their own houses at 62.55 percent (TNHPS-PBS, 2021).

A detailed analysis of ownership of houses showed that out of the 83.27 percent households (see Chart 3.14) that lived in an own house in the district, 12.67 percent of houses were built under a government scheme, which was lower 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	Perambalur
Yes	23.88	21.69	7.03	8.73	5.81	15.78	12.67
No	75.63	78.31	92.94	91.27	94.19	84.22	87.17
DK/RF	0.49	0.00	0.03	0.00	0.00	0.00	0.16
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

In Perambalur district, SC households had the highest percentage of houses built under a government scheme compared to other social groups. There were only ten house-owning ST households and 32 house-owning General category households surveyed in the district, hence the results for these two social groups must be interpreted accordingly.

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.

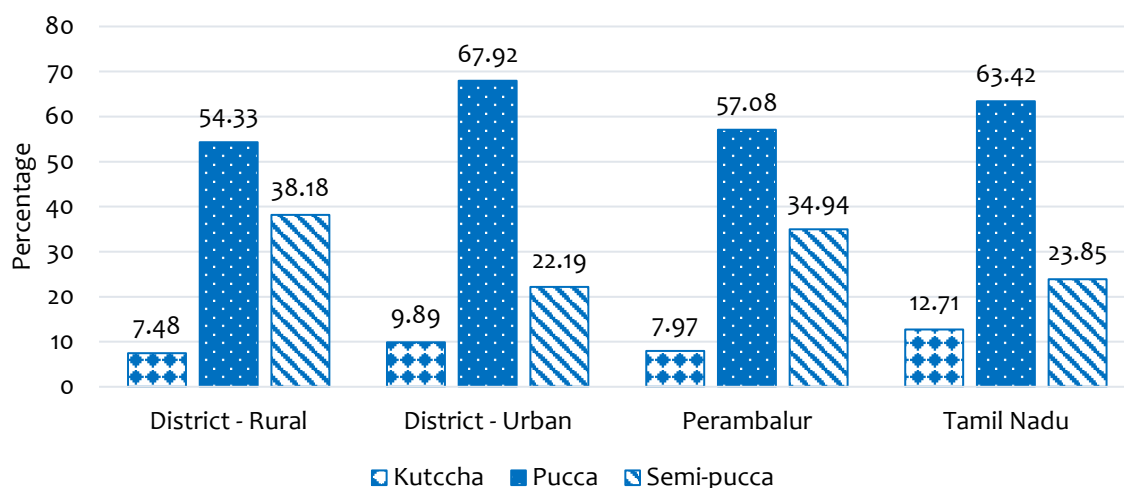*Chart 3.15 Type of House – Area-wise Percentages*

Chart 3.15 shows that majority of households in the district were living in pucca houses. This was lower compared to the state estimate. The percentage of urban households living in pucca houses in the district was higher than rural households. However, a greater percentage of rural households in the district lived in pucca houses compared to the state rural estimate of 52.93 percent (TNHPS-PBS, 2021).

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).

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[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 Percentages
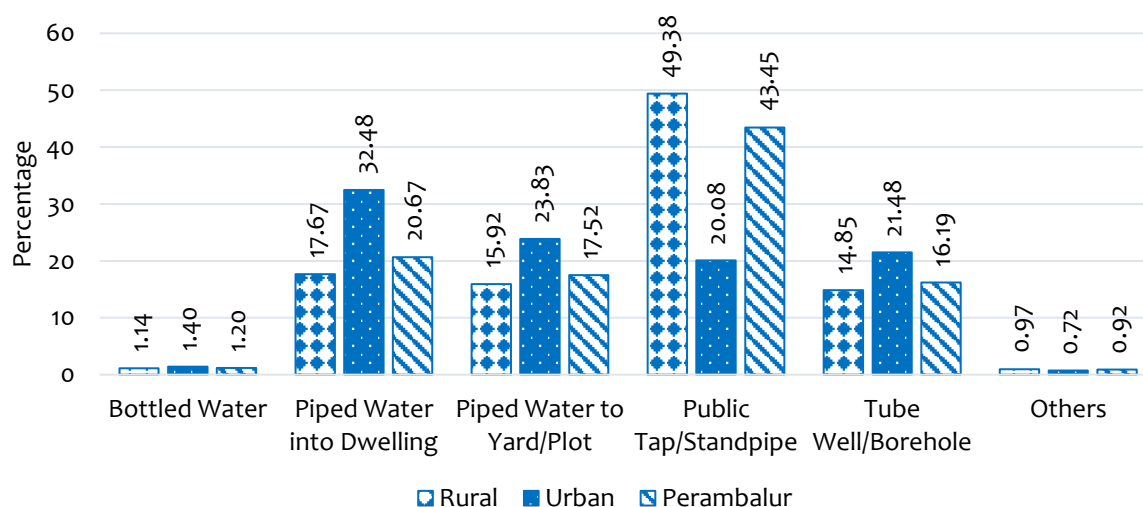

Chart 3.16 shows that 43.45 percent of households in Perambalur district were using public tap or standpipe as their primary source of drinking water, which was higher than the state estimate of 32.84 percent (TNHPS-PBS, 2021). The state estimates showed that piped water into the dwelling in urban areas—about 37.02 percent—and public tap/standpipe in rural areas—about 44.51 percent—were the primary water sources of households (TNHPS-PBS, 2021), and a similar pattern was observed in Perambalur 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 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 Perambalur 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) – Area-wise Percentages
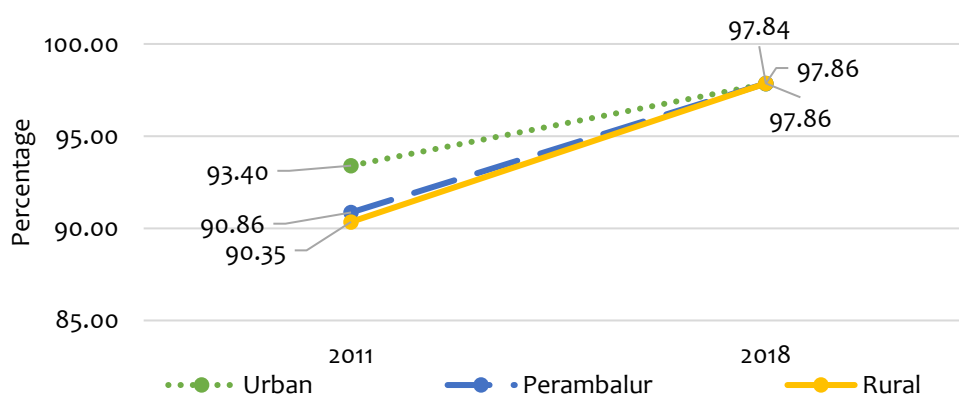
The percentage of households with electricity connection had increased in both rural and urban areas of the district during the period from 2011 to 2018 where the rate of growth of households with electricity was higher in rural areas. Interestingly, the percentage of houses with electricity connection was slightly higher in rural areas—about 97.86 percent—compared to the urban areas at 97.84 percent of the district in the year 2018. Perambalur district was ranked thirteenth among the then 32 districts in terms of electrification as per the state estimates (TNHPS-PBS, 2021). The district estimates on electrification at 97.86 percent was marginally higher than the state estimate of 97.6 percent (TNHPS-PBS, 2021).

3.5.5 Main Fuel for Cooking

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 – Perambalur and Tamil Nadu

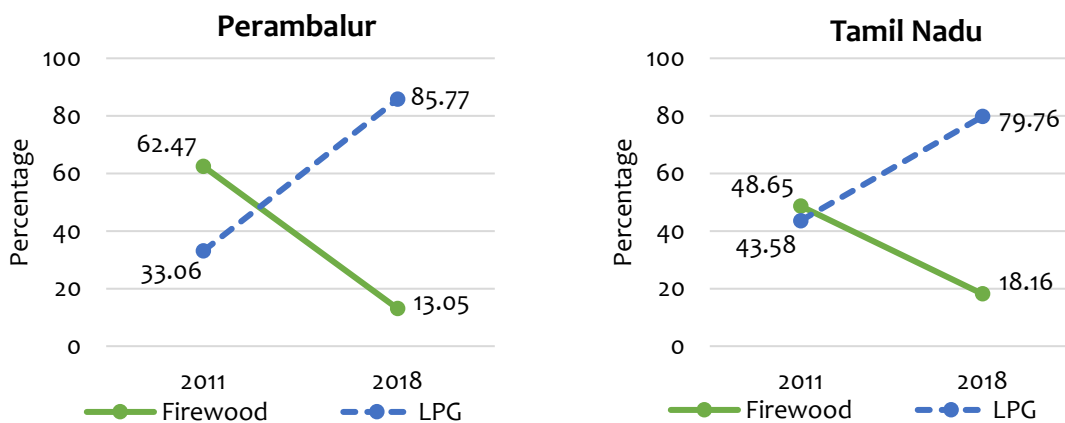Chart 3.18 shows that the main fuel used for cooking in the district had undergone a drastic change from firewood to LPG. Compared to other districts of Tamil Nadu, Perambalur district was ranked twelfth in terms of percentage of households using LPG as the primary cooking fuel and twenty-first in terms of those using firewood (TNHPS-PBS, 2021).

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

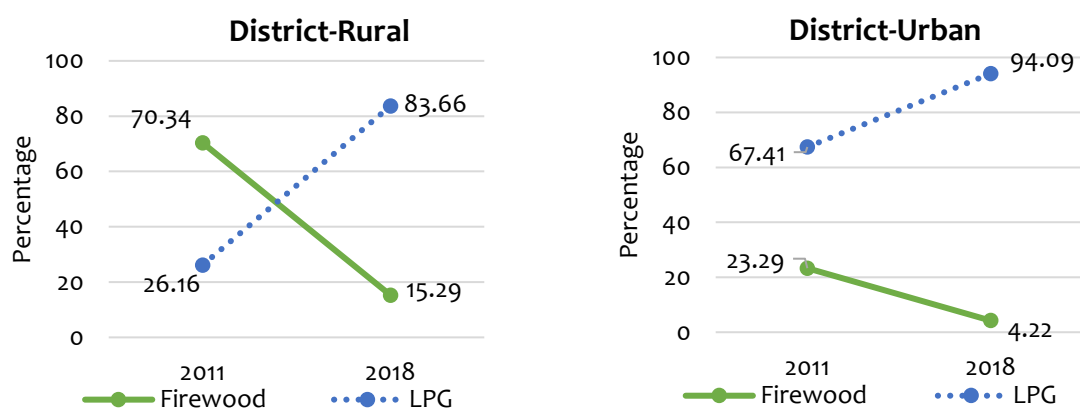## Chart 3.19 Comparison of Primary Cooking Fuel – Area-wise Percentages

Chart 3.19 shows that the predominant fuel in rural areas in the district had changed drastically from firewood to LPG in the period 2011-18. LPG uptake had increased further in urban areas, and that of firewood had dropped to a minuscule amount during the same period.

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

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

Primary Cooking Fuel	Social Group						
	SC	ST	BC	MBC	DNC	General	Perambalur
Firewood	16.51	47.61	11.17	13.34	3.52	0.60	13.05
Kerosene	0.75	0.00	0.49	0.79	0.00	2.93	0.65
LPG	81.91	52.39	87.86	85.64	96.48	96.47	85.77
Others	0.51	0.00	0.37	0.15	0.00	0.00	0.34
DK/RF	0.33	0.00	0.12	0.08	0.00	0.00	0.19
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

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

Table 3.23 shows that, while the majority of General category households used LPG as the primary cooking fuel, only around 82 percent of the SC households did so. However, a large percentage of SC households in the district were using LPG as the primary cooking fuel compared to the state estimates of 70.00 percent (TNHPS-PBS, 2021). The results for the ST category must be interpreted in the context of their sample size being just twelve households in the district.

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 Percentages
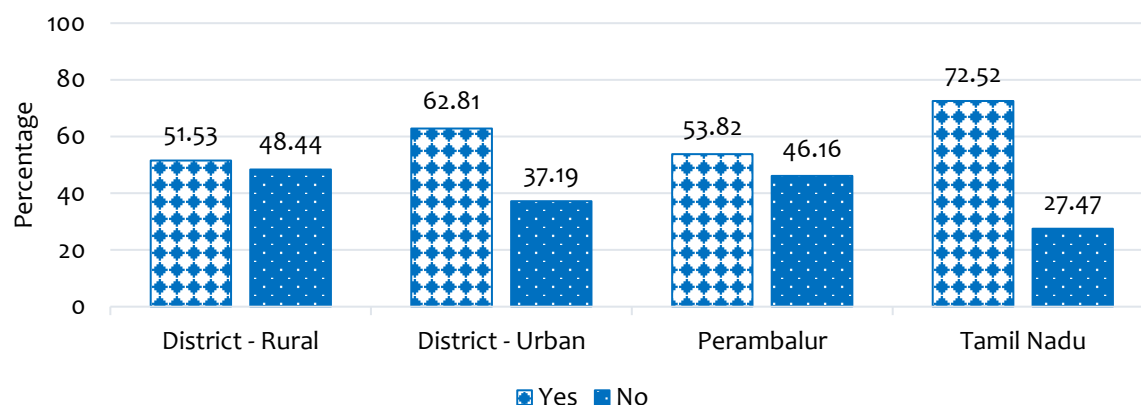
The percentage of households with latrine within house premises had increased from 22.18 percent in 2011 (Census, 2011) to 53.82 percent in 2018. Perambalur district was positioned twenty-ninth in the state among the 32 districts in terms of this indicator (TNHPS-PBS, 2021). The percentage of households equipped with latrine facilities in the district was considerably lower than the state level estimate. Latrine facilities within the house premises was higher in urban areas than the rural areas of the district. It is pertinent to note that almost 48 percent of the rural 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	Perambalur
Yes	44.46	51.20	60.97	52.05	50.55	92.44	53.82
No	55.50	48.80	39.03	47.91	49.45	7.56	46.16
DK/RF	0.04	0.00	0.00	0.04	0.00	0.00	0.02
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 more than 90 percent of the General category households had latrine access within the house, more than half the SC households did not. The percentages of SC and MBC households with latrine access in the district were lower than their

respective state level estimates- 52.20 percent and 67.50 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 Perambalur district are compared in Chart 3.21.

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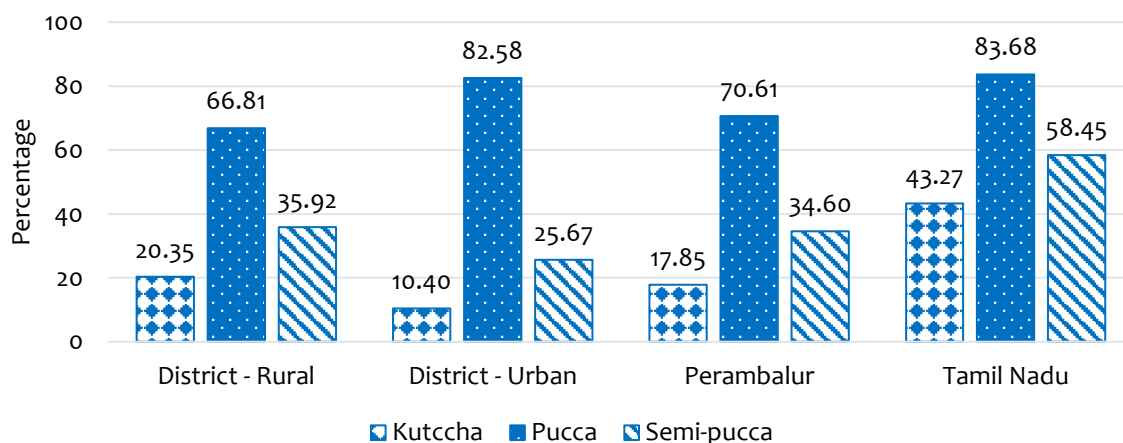

Chart 3.21 shows that the percentage of pucca houses with latrine facilities was higher than for semi-pucca and kutccha houses in the district. The percentages of latrine facilities in kutccha, pucca and semi-pucca houses in the district were lower than their respective state estimates. A higher percentage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

The percentage of total households in the district following open defecation had declined from 73.48 percent in 2011 (Census, 2011) to 36.38 percent in 2018 (TNHPS-PBS, 2021). The alternative practices of defecation followed by 46.16 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.

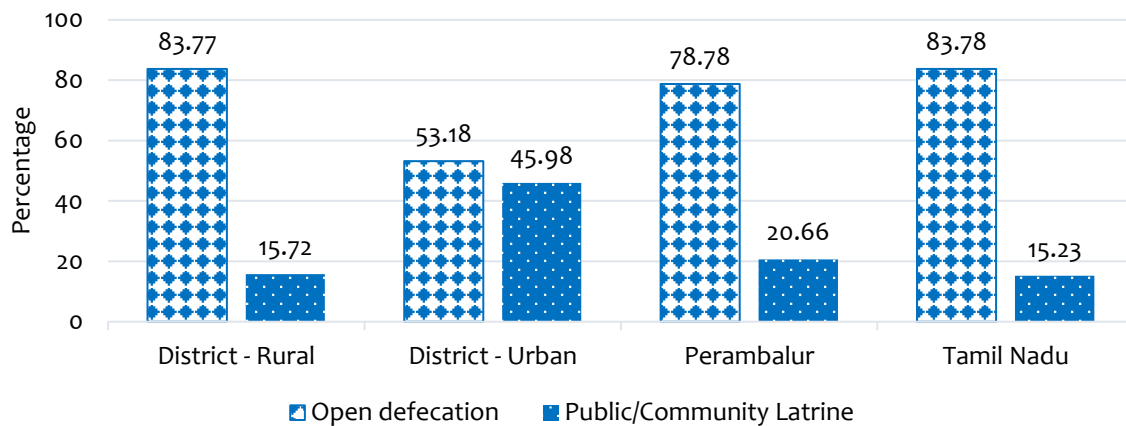*Chart 3.22 Alternate Practices of Defecation by the Households without Latrine – Area-wise Percentages*

Chart 3.22 shows that more than three quarters of the households without latrine within the premises of the house in the district were following open defecation, which was lower 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. As per the state report, Perambalur district was ranked seventh in terms of the percentage of total households following open defecation.

4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Perambalur district was conducted from the sample of 6,451 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.

Perambalur is a district of importance in the agricultural sector of Tamil Nadu that ranks poorly in terms of development and basic access to sanitation. Being a predominantly rural district, a major portion of the population possesses agricultural land, and ranks second in terms of land ownership in Tamil Nadu. Casual labour agriculture and self-employed agriculture are the most common forms of employment in the district, but this sector is riddled with social disparities. The BC, MBC and DNC groups are primarily engaged in self-employed agriculture, whereas members from the SC category are dependent on casual-labour agriculture. Since around one-third of the population of Perambalur belong to the Scheduled Caste community, it is concerning that they are constrained to lower-income labour. Intervention in the form of providing access to resources and skill sets to enable marginalised communities to generate better income is recommended. The Scheduled Caste community has a disproportionately lower share of the agricultural land, therefore policies that aim at providing them with skills to move out of the agricultural sector and into industry and service sectors to increase economic mobility.

Perambalur is one of the least urbanised districts in the state, with only around 20 percent of the population living in urban areas. The district is below the state average in terms of percentage share of Pucca houses. It ranks 29th in latrine presence within the household, with over three-fourths of the population without latrines in their households practising open-defecation. While the General category has higher latrine presence, the other communities do not fare well with respect to this parameter. Targeted schemes focusing on providing functional latrines to the under-performing groups or providing community toilets could improve Perambalur's sanitation situation.

The district is ranked 10th in terms of its employed female population, above the state average but unfortunately it also ranks 10th in female unemployed population. More industrialisation of the district could provide this potent female labour market with more diversified employment opportunities, which would lower female unemployment rates. Schemes promoting MSMEs could help urbanise the district and increase involvement in the industrial sector, which has the potential to increase the mean-annual income of the district.

In conclusion, Perambalur district has the potential to perform better if a holistic rural development approach is taken, paired with the development of a locally specific industrial sector. More employment opportunities need to be created to elevate the economic conditions of Perambalur. At the household level, policies that intervene in the establishment of Pucca houses with latrine facilities in the premises could greatly improve the well-being of the people of Perambalur.

References

Census. (2011). *District Census Handbook - Perambalur*. Directorate of Census Operations. Government of Tamil Nadu.https://censusindia.gov.in/nada/index.php/catalog/1109

Chandrasekhar, S., Naraparaju, K., & Sharma, A. (2021). Spatial Disparities in Household Earnings in India: Role of Urbanization, Sectoral Inequalities, and Rural-Urban Differences. *Indira Gandhi Institute of Development Research*, WP-2021-009.http://www.igidr.ac.in/pdf/publication/WP-2021-009.pdf

Das, S., Jain-Chandra, S., Kochhar, K., & Kumar, N. (2015). Women Workers in India: Why So Few Among So Many?. *International Monetary Fund*, WP/15/55.https://www.imf.org/external/pubs/ft/wp/2015/wp1555.pdf

Department of Economics and Statistics. (2017). *Statistical Hand Book of Tamil Nadu-2016-17*. Government of Tamil Nadu.

Department of Economics and Statistics. (2023). *Statistical Hand Book of Tamil Nadu-2020-21*. Government of Tamil Nadu.

Desai, S. (2017, March 7). *Declining female labour force participation in rural India: The demand side*. Ideas for India.https://www.ideasforindia.in/topics/social-identity/declining-female-labour-force-participation-in-rural-india-the-demand-side.html

Desai, S., & Joshi, O. (2019). The Paradox of Declining Female Work Participation in an Era of Economic Growth. *The Indian Journal of Labour Economics*, 62, 55–71.https://doi.org/10.1007/s41027-019-00162-z

National Statistical Office. (2019). *Annual Report, Periodic Labour Force Survey, July 2017-June 2018*. https://mospi.gov.in/sites/de-fault/files/publication_reports/Annual%20Report%2C%20PLFS%202017-18_31052019.pdf?download=1

Tamil Nadu State Planning Commission. (2017a). *Tamil Nadu Human Development Report - 2017*. Government of Tamil Nadu.https://spc.tn.gov.in/tnhdr2017.html

Tamil Nadu State Planning Commission. (2017b). *District Human Development Report – 2017, Perambalur District*.https://spc.tn.gov.in/DHDR/Perambalur.pdf

TNHPS-PBS. (2021). *Tamil Nadu Household Panel Survey- Pre-Baseline Survey: 2018-19*. Draft report submitted to the Government of Tamil Nadu.

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.