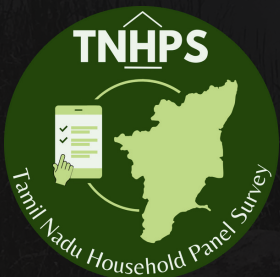


Department of
Economics
& Statistics



Vellore



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**

Vellore District

February 2024

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Summary of PBS Findings

Demographic Indicators

- Vellore had a sample size of 8,770 households, of which 64.99 percent of households were from rural areas and 35.01 percent of households were from urban areas.
- The district had a huge demographic dividend with almost half the population—about 48.54 percent—aged between 17 and 45 years.
- The BC social group was the largest in the district, constituting around 39 percent of the total households in the district.

Education

- The literacy rate in the district had increased from 79.17 percent (Census 2011) to 87.87 percent in 2018. The district was ranked eleventh among the then 32 districts in terms of this indicator. It had registered an 8.70 percent increase in literacy rate between 2011 and 2018 while the state had registered a 5.31 percent increase.
- The difference between the urban and rural literacy rate was 10.31 percent in 2011, which reduced only marginally to 9.47 percent in 2018. The gender gap in literacy rate was much higher in rural areas at 11.39 percent than in urban areas at 6.55 percent in 2018.
- While more than 80 percent of all social groups in the district had attained formal schooling, less than 60 percent of the ST population had done so.

Employment

- The percentage of employed population in the district at 45.33 percent was lower than the state estimate of 50.10 percent, while the share of unemployed population at 4.05 percent was higher compared to the state estimate of 3.50 percent. The rest were not in the labour force at 50.53 percent.
- The percentage of population that was employed was higher in rural parts of the district than the urban.
- While 71.30 percent of the male population aged 14 and above was employed, the female work participation in the district was only 20.40 percent, which was considerably lower than the state estimate of 29.96 percent.

- Around 77.26 percent of the female population aged 14 and above were not in the labour force, and among these, majority of them at 78.11 percent were associated with attending to domestic duties as a homemaker.
- Vellore district was ranked twenty ninth among the 32 districts in Tamil Nadu in terms of the employed population, and thirty first in terms of the employed female population.
- More than half of the employed population at 52.82 percent in Vellore district were casual labourers, with the largest share among them engaged in the service sector.
- The largest proportion of the rural employed population in the district was employed in casual labour in agriculture, while salaried work in the private sector was the biggest employer in the urban areas. The urban parts of Vellore district also had a sizeable proportion of the employed population working as casual labourers in the industrial sector.
- While the largest proportion of the ST and MBC populations in the district was employed as casual labourers in agriculture, most of the General and BC populations were engaged in salaried work in the private sector.

Land Ownership and Assets

- Vellore district was ranked eighteenth in the state in terms of agricultural land ownership. A higher percentage of ST and MBC category households owned agricultural land in the district compared to the other social groups.
- More than half the households that owned agricultural land in the district had access to irrigation, which was similar to the state estimate.
- Around 95.58 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares.
- Around 20.34 percent of the households in the district owned at least one agricultural, allied agricultural or fishing asset, which was lower than the state estimate of 20.92 percent.
- Ownership of at least one household asset was least among ST households, where around 14 percent of them did not even own a mobile phone. Around 12 percent of rural households in the district also did not own any household asset.
- Only around 77 percent of ST households in the district possessed a ration card, which was lower than the corresponding percentage of ST households at the state level estimate of 86.17 percent. The percentage of households possessing priority

ration cards in the district at 52.80 percent was considerably lower than the state PBS estimate of 71.14 percent.

Household Income

- The mean annual household income of Vellore district was 20.56 percent lesser (₹1,13,399) than the state PBS estimate (₹1,42,752); in the urban areas it was ₹1,53,237 and in rural areas it was ₹86,699. The district was ranked sixteenth out of 32 districts with respect to this parameter.
- The mean income from salaried work (₹1,90,794) was the highest, while that from allied agricultural activities was the lowest (₹38,804).
- The Gini coefficient measuring income inequality across households in the district (0.516) was lower than the state PBS estimate (0.563). Income inequality across households in rural areas of the district was found to be higher than the urban areas.

Housing

- Vellore district was ranked tenth among all the districts of Tamil Nadu in terms of the percentage of households living in their own house.
- Out of the households that lived in an own house in the district, 14.95 percent of houses were built under a government scheme. SC and ST households had the highest percentage of houses built under a government scheme in the district compared to other social groups.
- Around 70 percent of the households in the district were living in pucca houses, which was higher than the state level estimate of 63.42 percent.

Drinking Water, Electricity, and Cooking Fuel

- Piped water into the dwelling in urban areas at 41.05 percent and public tap/standpipe in rural areas at 45.56 percent were the primary water sources of households in the district.
- The district witnessed increase in electrification in both rural and urban areas between 2011-18, with the rate of growth being higher in rural areas. The district was ranked sixth in the state in terms of electrification.
- The predominant fuel in rural areas of the district had reversed drastically from firewood to LPG in the period 2011-18. The use of LPG as the primary cooking fuel had increased from 45.03 percent in 2011 to 86.73 percent in 2018, accompanied by

a reduction in the usage of firewood to just over 11 percent in 2018. The district was ranked eleventh in the state in terms of LPG use and twenty second in terms of firewood use.

- More than half the ST households in the district still used firewood as the primary cooking fuel.

Sanitation

- The percentage of households with latrine within the house premises had increased from 41.11 percent in 2011 (Census, 2011) to 67.86 percent in 2018 in the district. Vellore was ranked twenty second among the 32 districts in the state in terms of this parameter.
- Around 53 percent of ST households and 46 percent of SC households in the district did not have latrine facilities within the house premises.
- The percentage of total households in the district following open defecation declined from 56.49 percent in 2011 (Census, 2011) to 27.47 percent in 2018. Vellore district was ranked eleventh in the state in terms of the percentage of households practicing open defecation, with a rate higher than the state estimate of 23.02 percent.

1. Introduction

1.1 Profile of Vellore District

Vellore district in Tamil Nadu was formed in the year 1989 from the bifurcation of the erstwhile North Arcot district into the present-day Vellore and Tiruvannamalai districts. In the year 2019, Vellore district was trifurcated into Vellore, Ranipettai and Tirupattur districts. However, this report only includes data for the erstwhile Vellore district. It is in the Northern region of the state, bordering Andhra Pradesh and Tiruvallur in the north, Kanchipuram and Tiruvannamalai in the east, Tiruvannamalai and Krishnagiri in the south, and borders of Andhra Pradesh in the west.

According to Census (2011), Vellore had a total population of 39.36 lakhs, accounting for approximately 5.46 percent of Tamil Nadu's total population, which was 7.21 crores. The district comprised 9.29 lakh households, with 56.76 percent residing in urban areas. The male population was 49.85 percent, and the female population was 50.15 percent. Vellore demonstrated a child-sex ratio of 944.39 compared to the state estimate of 943.27. Within the social groups, 21.85 percent of the population belonged to the Scheduled Castes, while 1.85 percent belonged to the Scheduled Tribes. The literacy rate in Vellore district stood at 79.17 percent, compared to the state's average of 80.09 percent. The male literacy rate was reported to be 86.5 percent, while the female literacy rate was reported to be 71.95 percent, highlighting the need for investment in women's education.

In the fiscal year 2018-19, Vellore's Net District Domestic Product was ₹75,82,050 lakh, ranking at fifth highest amongst districts. The district's per capita Net District Domestic Product was recorded at ₹1,76,605, ranking it at thirteenth among districts. Nonetheless, the per capita Net District Domestic Product of the district was below the Tamil Nadu average of ₹1,83,884 (Department of Economics and Statistics, 2023). In terms of sectoral distribution, the primary sector (agriculture and allied) contributes approximately six percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 36 percent and 58 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017), Vellore ranked eleventh in terms of the Human Development Index with a score of 0.742, a relatively mediocre score. It ranked third in the Gender Inequality Index with a score of 0.051, highlighting good performance in closing the gender divide. In terms of the Child Development Index, the district ranked twenty ninth with a score of 0.523, calling for the need to invest more in developing the youth. Additionally, Vellore ranked seventh in terms of the

Multidimensional Poverty Index with a score of 0.43, pointing to a relatively good performance in the eradication and prevention of poverty.

Vellore district boasts a strong economy, placing high in Net District Domestic Product rankings, though its per capita income falls slightly below the state average. The district demonstrates commendable progress in gender equality, moderate advancement in human development, and a promising fight against poverty, although further attention to child development is required.

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. In the absence of Census 2021, the PBS estimates act as a valid benchmark for the Government of Tamil Nadu in terms of socio-economic development since 2011. The PBS surveyed around 2,12,282 households in the erstwhile 32 districts of Tamil Nadu across 1476 Primary Sampling Units—684 rural PSUs and 792 urban PSUs.

This report analyzes data from the PBS for Vellore district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent census data of Vellore (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Vellore district. The sample size for the district was 8,770 households, among which 5,700 households were from rural areas and 3,070 households were from urban areas. The blocks covered during the survey were: Anaicut, Arakonam, Gudiyatham, Jolarpet, K.V. Kuppam, Kandhili, Kaniyambadi, Kaveripakkam, Madhanur, Natrampalli, Nemili, Pernambut, Sholinghur, Timiri and Walajapet.

2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 9,152 households in Vellore district were selected using a multi-stage stratified sampling design¹. The final sample size for PBS was 8,770 households, of which 64.99 percent of households were from rural areas and 35.01 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		Vellore	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	5,700	97.55	3,070	92.78	8,770	95.83
Non-Response	102	1.75	230	6.95	332	3.63
Non-sample	41	0.70	9	0.27	50	0.55
Total	5,843	100	3,309	100	9,152	100

Vellore district had a slightly lower response rate—willingness of households to participate in the TNHPS-PBS—of 95.83 percent compared to the state response rate of 96.5 percent. Rural areas had a higher response rate compared to the urban areas. Around 3.63 percent of households were not willing to participate in the survey. About 0.55 percent of the selected samples were removed as they were not considered as households as per the definition used in the PBS².

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.

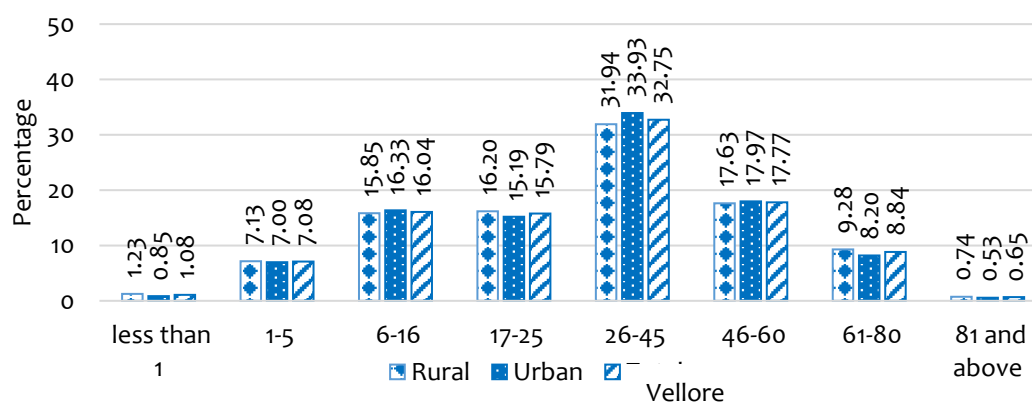
3. Key Findings

3.1 Demographic Indicators

As per the PBS estimates, the average household size³ in the district had reduced from 4.25 in 2011 (Census, 2011) to 3.84 in 2018. As per the PBS estimates, 50.70 percent of the population in the district were female, and 49.30 percent of the population were male. Around 16.59 percent of the households in the district were headed by females, which was lower than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

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

Chart 3.1 Age-wise Distribution of Population – Area-wise



As per the PBS estimates, almost one-third of the population in the district were in the age group of 26 to 45 years. Within the district, the population aged 17-60 was higher in urban areas at 67.09 percent compared to the rural areas at 65.77 percent. The proportion of senior citizens—above 60 years—in Vellore district's population at 9.49 percent was lower than that at the state level estimate of 11 percent (TNHPS-PBS, 2021).

The percentage of currently married population in the district was 68.55 percent. 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 86.57 percent of the households practiced Hinduism, 9.15 percent practiced Islam and 4.12 percent followed Christianity.

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

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	28.36
ST	0.60
BC	38.83
MBC	30.39
General	1.27
DK/RF	0.55
Total	100

As per the PBS estimates, the highest percentage of households in Vellore district belonged to the BC category. The percentages of SC and ST households in the district were 28.36 percent and 0.60 percent in 2018.

3.2 Development Indicators

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

3.2.1 Education

The change in literacy rate of Vellore 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		Vellore		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	83.39	89.77	90.59	96.82	86.50	92.64	86.77	90.97
Female	66.08	78.38	79.56	90.27	71.95	83.26	73.40	80.15
Total	74.70	84.00	85.01	93.47	79.17	87.87	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 Vellore district at 79.17 percent was lower than the state estimate of 80.09 percent. The PBS estimates showed that in the year 2018, the literacy rate in Vellore district had increased to 87.87 percent, which surpassed the state estimate of 85.40 percent. Also, Vellore district had registered an 8.70 percent increase in literacy rate between 2011 and 2018 while the state had registered a 5.31 percent increase. The literacy rate in the district was 0.92 percent lower than the state in 2011 but had

become 2.47 percent higher than the state estimate in 2018. As per the state PBS estimates, Vellore was ranked eleventh among the then 32 districts in terms of literacy rate (TNHPS-PBS, 2021).

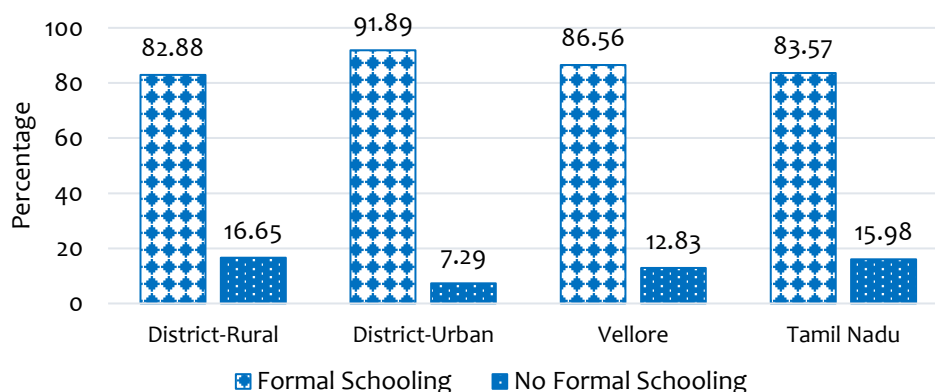
Both male and female literacy rates in Vellore district had recorded an increase during the period under consideration. The female literacy rate had increased at a higher rate than the male literacy rate but a wide gender gap still prevailed. The gender gap in literacy rate had declined from 14.55 percent in 2011 to 9.38 percent in 2018, which was lower than the state gender gap of 10.82 percent in 2018 (TNHPS-PBS, 2021).

Both rural and urban literacy rates recorded an increase between 2011 and 2018, with the former showing a larger increase. Yet, the rural literacy rate was 9.47 percent lesser than the urban literacy rate in 2018. The gender gap in literacy rate was much higher in rural areas at 11.39 percent than in urban areas at 6.55 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 Vellore district.

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



*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 86.56 percent of the specified population in Vellore district had attended formal schooling, which was higher 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

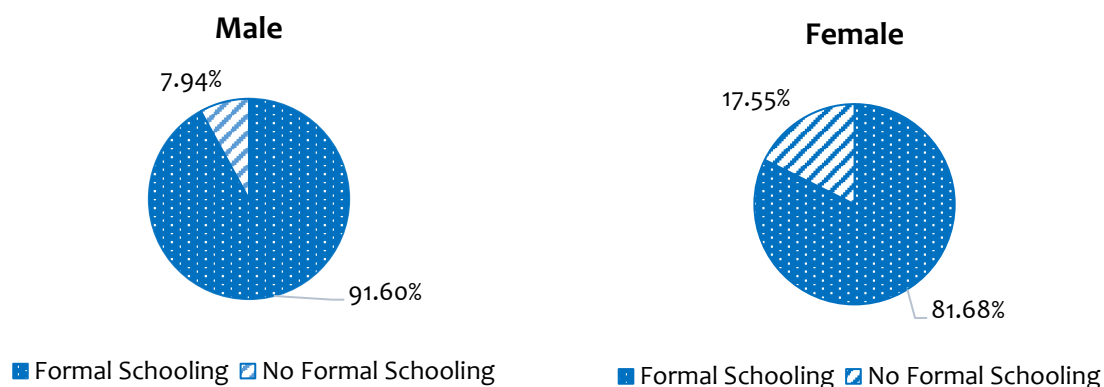


Chart 3.3 shows that the percentage of the population that had acquired formal education was higher among males compared to females, again denoting a wide gender gap like in literacy.

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	General	Vellore
Formal Schooling	87.84	58.92	88.31	83.42	93.49	86.56
No Formal Schooling	11.78	40.31	10.90	16.03	5.77	12.83
Others and DK/RF	0.38	0.77	0.79	0.55	0.74	0.61
Total	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 General Category population in the district had received formal education, less than 60 percent of the ST population had done so.

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	Vellore
Primary (I to V)	25.51	21.00	23.55
Middle School (VI to VIII)	21.16	17.91	19.75
High School (IX to X)	27.41	25.20	26.45
Higher Secondary (XI to XII)	14.74	13.31	14.12
Bachelor's degree	5.45	12.76	8.62
Diploma Degree	3.89	4.33	4.08
Post Graduate Degree	1.27	4.58	2.71
Other Higher Education	0.00	0.02	0.01
Others/DK/RF	0.57	0.88	0.70
Total	100	100	100

Around 83.87 percent of the district’s population—aged seven and above, with formal education—was either pursuing or had completed schooling upto 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 15.42 percent, which was considerably lower than the state estimate of 20.02 percent. Also, this figure was higher for urban areas at 21.69 percent than rural areas at 10.61 percent of the district.

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

Educational Attainment	Gender		
	Male	Female	Vellore
Primary (I to V)	21.35	25.93	23.55
Middle School (VI to VIII)	18.86	20.71	19.75
High School (IX to X)	28.10	24.68	26.45
Higher Secondary (XI to XII)	13.50	14.78	14.12
Bachelor's degree	9.57	7.60	8.62
Diploma Degree	5.64	2.39	4.08
Post Graduate Degree	2.47	2.96	2.71
Other Higher Education	0.01	0.00	0.01
Others/DK/RF	0.49	0.93	0.70
Total	100	100	100

Table 3.5 shows that a higher percentage of females at 86.10 percent in the specified population were either pursuing or had completed schooling upto higher secondary level compared to males at 81.81 percent. A higher percentage of males at 17.69 percent were either pursuing or had completed tertiary education in the district compared to females at 12.95 percent. However, a higher percentage of females had completed post-graduate degree compared to males.

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

Educational Attainment	Social Group					
	SC	ST	BC	MBC	General	Vellore
Primary (I to V)	22.58	24.03	22.73	26.00	17.47	23.55
Middle School (VI to VIII)	18.20	18.41	18.95	22.65	14.20	19.75
High School (IX to X)	28.64	21.59	26.12	24.87	21.59	26.45
Higher Secondary (XI to XII)	15.66	14.84	13.66	13.40	12.43	14.12
Bachelor's degree	7.73	12.67	10.31	6.64	19.28	8.62
Diploma Degree	4.39	4.71	3.91	3.93	6.59	4.08
Post Graduate Degree	2.37	2.45	3.43	1.85	7.10	2.71
Other Higher Education	0.00	0.00	0.00	0.00	0.56	0.01
Others/DK/RF	0.43	1.30	0.89	0.65	0.79	0.70
Total	100	100	100	100	100	100

The social group-wise analysis in Table 3.6 shows that more than 85 percent of the MBC and SC population in Vellore district were either pursuing or had completed only primary or secondary school. The percentage of population who were either pursuing or had completed tertiary education—bachelor’s degree and above—was quite high among the General category at 33.53 percent, but low for the MBC category at 12.42 percent and SC category at 14.49 percent categories. The proportions of the SC, BC, MBC, and General population with tertiary education in the district were lower than their respective state level estimates.

About 12.83 percent of the population had not received formal education in Vellore 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	Vellore
Yes	6.73	21.69	10.20
No	92.98	76.67	89.20
DK/RF	0.28	1.64	0.60
Total	100	100	100

Table 3.7 shows the functional literacy status of the population with no formal schooling in the district. Only 10.20 percent of the population without formal schooling had functional literacy. The specified population group in urban areas of the district had a better functional literacy rate than 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	General	Vellore
Yes	8.11	17.78	12.08	9.31	24.32	10.20
No	91.85	81.74	86.95	90.12	75.68	89.20
DK/RF	0.04	0.48	0.97	0.57	0.00	0.60
Total	100	100	100	100	100	100

Table 3.8 shows the functional literacy status of the population with no formal schooling, across various social groups. Functional literacy was relatively higher among the General category population, but only around 8 percent for the SC population.

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 force⁴.

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

- (i) People who are self-employed in agriculture,
- (ii) People who are self-employed in allied agricultural activities,
- (iii) People who are self-employed in non-agricultural activities,
- (iv) People who worked as casual labourers in agriculture,
- (v) People who worked as casual labourers in industry,
- (vi) People who worked as casual labourers in the service sector,
- (vii) People who worked as casual labourers in other domains,
- (viii) People who worked as salaried employees in the government sector,
- (ix) People who worked as salaried employees in the private sector,

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

- (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

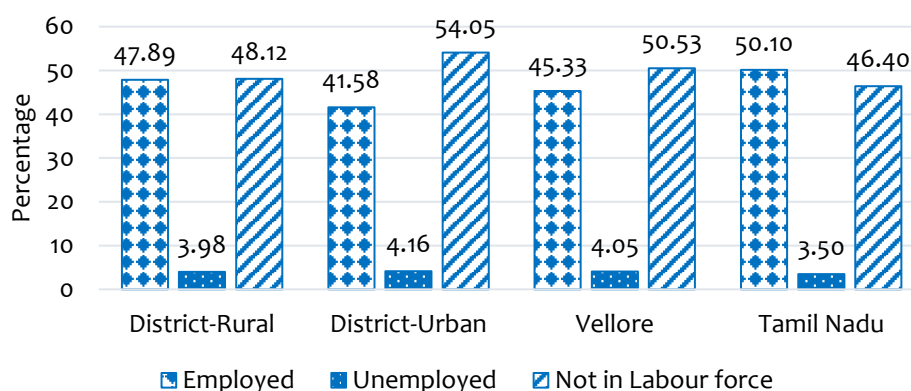
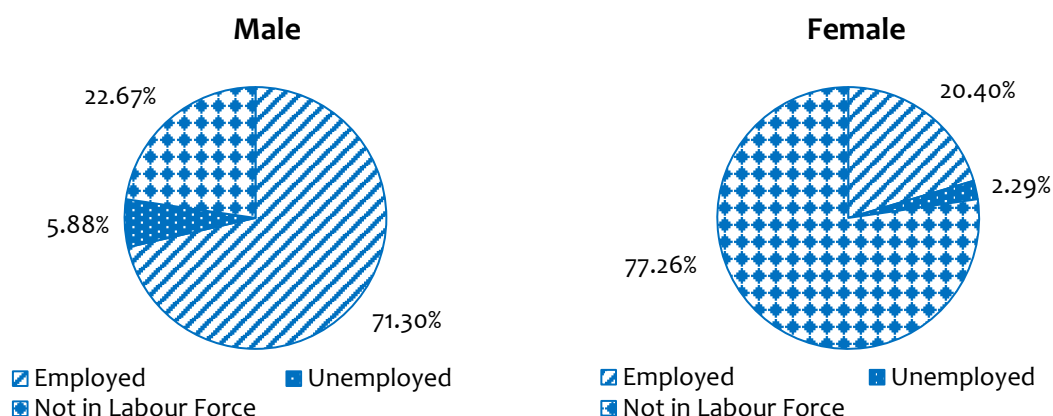


Chart 3.4 shows that the overall percentage of employed population—14 years and above—in the district was lower than the state estimate. The share of unemployed population was higher in the district compared to the state. The percentage of population that was employed was higher in rural parts of the district than the urban. The unemployment status in rural areas of the district at 3.98 percent was higher than the state rural estimate of 3.6 percent, and the district urban unemployment status at 4.16 percent was also higher than the state urban estimate of 3.3 percent. Vellore district was ranked twenty ninth among all districts in Tamil Nadu in terms of employed population and ranked tenth highest in terms of unemployed population.

Chart 3.5 Employment Status of the Population – Gender-wise



While 71.30 percent of the male population was employed, the female work participation in the district was only 20.40 percent, which was considerably lower than the state estimate of 29.96 percent (TNHPS-PBS, 2021), and the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019). Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). More than 77 percent of the female population was not in the workforce, and among these, majority of them at 78.11 percent were associated with attending to domestic duties as homemakers (see Chart 3.7). As per the state PBS estimates, Vellore district was ranked thirty first out of the 32 districts in the state in terms of employed female.

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

Work Type	Area Type		
	Rural	Urban	Vellore
Self Employed Agriculture	8.96	0.68	5.88
Self Employed Non-Agriculture	10.37	19.84	13.90
Self Employed Allied Agriculture	1.64	0.48	1.21
Casual Labourer Agriculture	23.25	1.66	15.21
Casual Labourer Industry	13.46	21.58	16.48
Casual Labourer Service	19.41	20.74	19.91
Casual Labourer (Others)	1.26	1.14	1.22
Salaried Worker Government	3.56	9.98	5.95
Salaried Worker Private	15.30	23.25	18.26
Multiple Occupation	2.73	0.52	1.90
Other	0.07	0.05	0.06
DK/RF	0.00	0.08	0.03
Total	100	100	100

More than half of the employed population at 52.82 percent in Vellore district were casual labourers, with the largest share among them engaged in the service sector. As per the

state PBS estimates, salaried workers in the private sector comprised the largest share at 21.82 percent among the state’s employed population (TNHPS-PBS, 2021). The largest proportion of the rural employed population in the district was employed in casual labour in agriculture, while salaried work in the private sector was the biggest employer in the urban areas. The urban parts of Vellore district also had a sizeable proportion of the employed population working as casual labourers in the industrial sector.

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

Work Type	Social Group					
	SC	ST	BC	MBC	General	Vellore
Self Employed Agriculture	1.80	17.19	5.60	9.73	12.47	5.88
Self Employed Non-Agriculture	9.08	0.89	19.57	11.93	24.60	13.90
Self Employed Allied Agriculture	1.12	2.52	1.25	1.28	0.00	1.21
Casual Labourer Agriculture	17.88	38.35	9.02	19.84	6.86	15.21
Casual Labourer Industry	19.08	3.68	13.86	17.69	5.29	16.48
Casual Labourer Service	21.88	17.70	19.40	18.99	7.76	19.91
Casual Labourer (Others)	1.32	0.84	1.93	0.24	0.00	1.22
Salaried Worker Government	5.98	14.17	6.12	5.22	11.57	5.95
Salaried Worker Private	19.86	2.78	21.43	12.84	30.80	18.26
Multiple Occupation	1.95	1.90	1.65	2.22	0.65	1.90
Other	0.04	0.00	0.13	0.01	0.00	0.06
DK/RF	0.01	0.00	0.04	0.01	0.00	0.03
Total	100	100	100	100	100	100

Table 3.10 shows that, more than half the employed ST population at 58.06 percent in the district was engaged in the agricultural sector. The highest percentages of the ST and MBC populations in the district were employed as casual labourers in agriculture, just like at the state level. Majority of the employed General and BC category population in the district were engaged in salaried work in the private sector, similar to the pattern at the state level (TNHPS-PBS, 2021). The largest share of the employed SC population in the state was engaged in casual labour in the agricultural sector, while the largest percentage of SC population in the district were employed as casual labourers in the service sector. The ST category also had a sizable population employed in salaried work in the government sector.

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

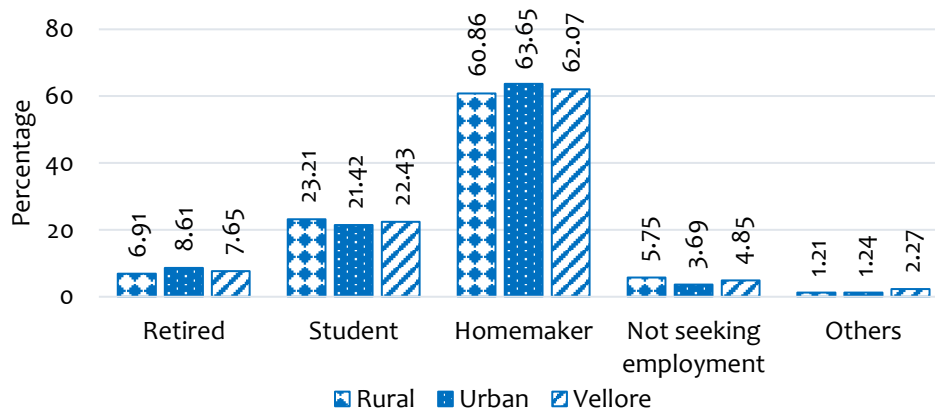
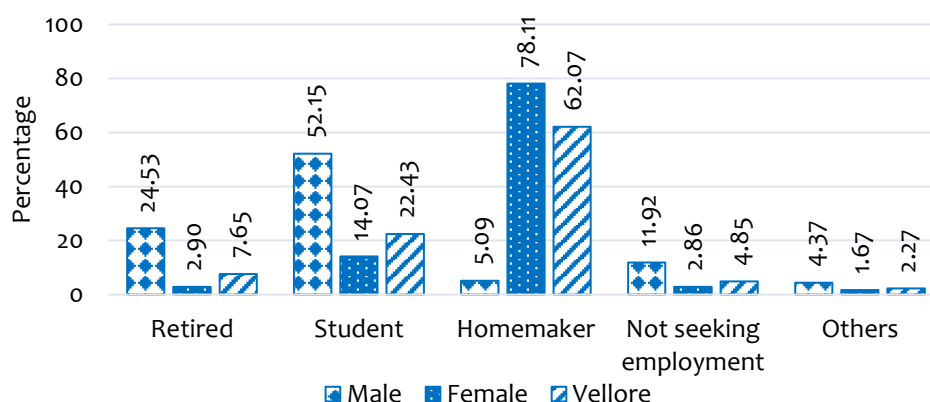


Chart 3.6 shows that, similar to the trend at the state level, more than 60 percent of the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household. Students comprised the second highest category in the specified population. 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 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 14.07 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. The number of retired males were significantly higher than females, probably indicating gender disparity in employment in the past. It must be noted that the study did not capture unpaid domestic labour or any other form of unpaid labour carried out by women.

Table 3.11 Composition of the Population Not in the Labour Force – Social Group-wise Percentages

Current Status	Social Group					
	SC	ST	BC	MBC	General	Vellore
Retired	7.53	2.70	9.25	4.89	18.28	7.65
Student	22.46	24.75	22.67	22.84	10.50	22.43
Homemaker	61.93	64.79	60.67	64.12	64.43	62.07
Not seeking employment	4.74	4.66	5.05	4.66	3.12	4.85
Others	3.02	1.04	1.49	2.72	2.26	2.27
DK/RF	0.31	2.07	0.88	0.77	1.41	0.72
Total	100	100	100	100	100	100

The composition of the population not in the labour force analysed according to social groups is given in Table 3.11. It shows that within all social groups, the percentage of homemakers was the largest compared to other categories in the district.

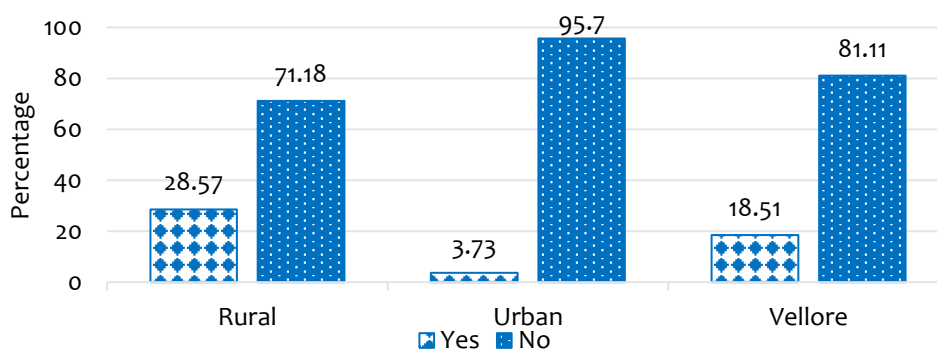
3.3 Socio-Economic Indicators

The PBS estimates for various socio-economic indicators of Vellore district such as ownership of agricultural land, household assets and income are discussed 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 Vellore 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



In Vellore district, the percentage of households owning agricultural land at 18.51 percent was lower than the state estimate of 19.41 percent. Vellore was ranked eighteenth in the

state in terms of agricultural land ownership. A significantly higher proportion of rural households owned agricultural land than urban households. The percentage of land-owning rural households in the district was similar to the state level rural estimate of 29 percent, while the district urban estimate 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	Vellore
Only Irrigated Agriculture Land	51.09	51.03	51.09
Only Unirrigated Agriculture Land	42.43	34.33	41.78
Both Irrigated and Unirrigated Agriculture Land	5.17	4.77	5.14
DK/RF	1.30	9.86	1.99
Total	100	100	100

Table 3.12 shows the percentage of agricultural land-owning households in the district that depended on irrigation or rain. As per the PBS estimates, more than half the households that owned agricultural land in the district had access to irrigation, which was similar to the state estimate of 50.03 percent. Dug wells, tube wells, tanks and canals are the major sources of irrigation in Vellore district (Department of Economics and Statistics, 2023). A higher percentage of agricultural land-owning households in rural areas depended on rain-fed irrigation alone compared to the urban areas.

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

Ownership of Agricultural Land	Social Group					
	SC	ST	BC	MBC	General	Vellore
Yes	8.63	32.15	16.55	29.92	26.92	18.51
No	91.18	67.85	82.92	69.76	73.08	81.11
DK/RF	0.20	0.00	0.53	0.32	0.00	0.38
Total	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 ST and MBC households owned agricultural land in the district compared to other social groups. Agricultural land ownership among the General category was also significant. Only less than ten per cent of SC households owned agricultural land.

Based on the size of agricultural land, the PBS had 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	Vellore
Marginal (0.01 - 0.99)	86.72	74.68	85.88
Small (1 - 1.99)	9.34	14.53	9.70
Semi Medium (2 - 3.99)	3.16	10.42	3.67
Medium (4 - 9.99)	0.21	0.37	0.22
Large (10 and above)	0.57	0.00	0.53
Total	100	100	100

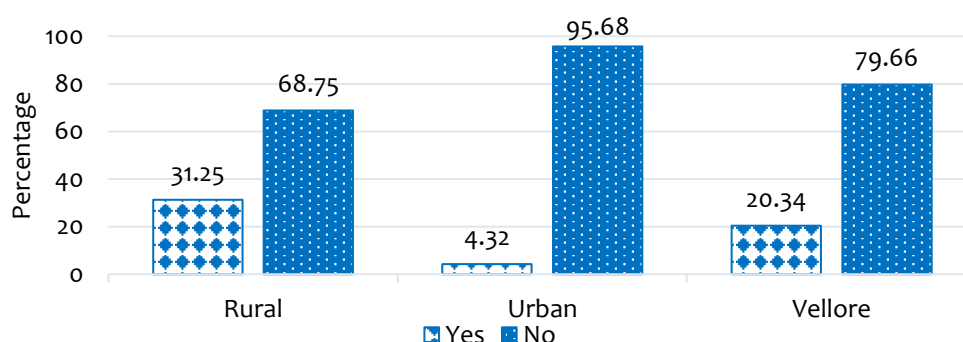
Table 3.14 shows that 95.58 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands—less than two hectares. This figure is higher than the state level estimate of 89.33 percent. The share of semi-medium, medium, and large landholdings was lesser than that of the state at 7.64 percent, 2.26 percent and 0.77 percent respectively. The percentage of marginal landholders was higher in rural areas whereas that of small landholders was relatively higher in urban areas.

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 Vellore district.

Chart 3.9 shows that 20.34 percent of the households in Vellore district owned at least one agricultural, allied agricultural or fishing asset. This was slightly lower than the state estimate of 20.92 percent. The ownership of such assets was considerably higher in rural areas than urban areas. The ownership pattern was lower in both rural and urban areas of the district compared to the state rural and urban estimates of 32.69 percent in rural and 7.67 percent in urban areas (TNHPS-PBS, 2021).

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



3.3.3 Presence of Household Assets

Chart 3.10 shows the percentage of households in Vellore 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

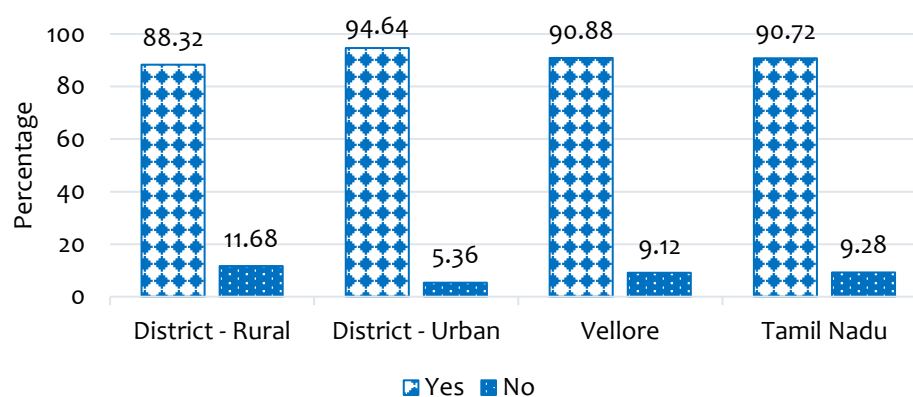


Chart 3.10 shows that the percentage of households owning at least one household asset in Vellore district at 90.88 percent was similar to the state estimate. Within the district, the urban areas had a higher percentage of households owning at least one household asset compared to the rural areas. Around 12 percent of rural households in the district did not even own a mobile phone.

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

Presence of Household Asset	Social Group					
	SC	ST	BC	MBC	General	Vellore
Yes	89.81	85.60	93.09	89.04	93.13	90.88
No	10.19	14.40	6.91	10.96	6.87	9.12
Total	100	100	100	100	100	100

The PBS estimates show that ownership of at least one household asset was high amongst all social groups, except ST category households. Almost 15 percent of ST households in the district did not even own a mobile phone.

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 ration card in rural and urban areas of Vellore district are given in Chart 3.11.

Chart 3.11 Possession of Ration Card – Area-wise

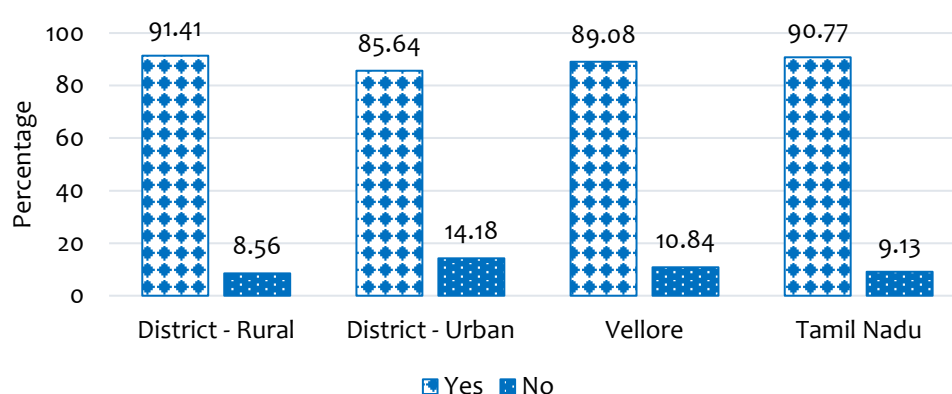


Chart 3.11 shows that the percentage of households that possessed a ration card in the district was slightly lower compared to the state estimate. A higher percentage of rural households possessed a ration card compared to urban households in the district.

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

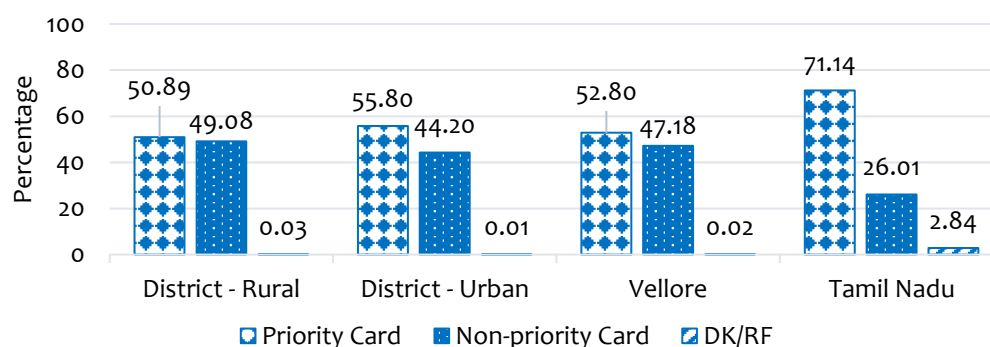
Possession of Ration Card	Social Group					
	SC	ST	BC	MBC	General	Vellore
Yes	90.33	76.51	88.30	90.12	84.02	89.08
No	9.67	23.49	11.63	9.75	15.98	10.84
DK/RF	0.00	0.00	0.06	0.14	0.00	0.09
Total	100	100	100	100	100	100

Table 3.16 shows a difference in the levels of possession of ration card among social groups. While more than 90 percent of SC and MBC households possessed ration cards, only 76.51 percent of ST households did so. This was lower than the percentage of ST households in the state at 86.17 percent that possessed a ration card, according to the state estimates (TNHPS-PBS, 2021).

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.

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



The percentages of households possessing priority and non-priority ration cards in rural and urban areas of Vellore district are given in Chart 3.12. The percentage of households possessing priority ration cards in the district was considerably lower than the state estimate. Interestingly, a higher percentage of urban households possessed priority cards than rural households in the district.

3.4 Household Income

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

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

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

Source	District - Rural	District - Urban	Vellore	Tamil Nadu
Agriculture	51,097	1,46,403	55,703	61,830
Allied Agriculture	37,821	42,707	38,804	38,576
Salaried	1,40,926	2,38,681	1,90,794	2,29,857
Self Employed	79,869	1,55,739	1,18,610	1,47,403
Wage Labour	40,408	54,251	45,091	47,734
Other Sources	63,921	1,21,618	82,579	97,646
Income from all Sources	86,699	1,53,237	1,13,399	1,42,752

The mean annual household income of Vellore district was 20.56 percent lower than the state PBS estimate of ₹1,42,752. Among the then 32 districts in the state, Vellore was at sixteenth place 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 Vellore district, the mean household income was ₹86,699, which was lower than the state rural estimate of ₹92,765 (TNHPS-PBS, 2021). The mean household income was higher among the households who depended on salaried income and lower among the households that engaged in allied agricultural activities.

In urban areas of Vellore district, the mean household income was ₹1,53,237, 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 engaged in allied agricultural activities.

3.4.2 Income Inequality in Vellore 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 Vellore district (0.516) was lower than the state PBS estimate (0.563)⁵. Interestingly, income inequality across households in rural areas of Vellore district was found to be higher than its urban areas, as shown in Table 3.18.

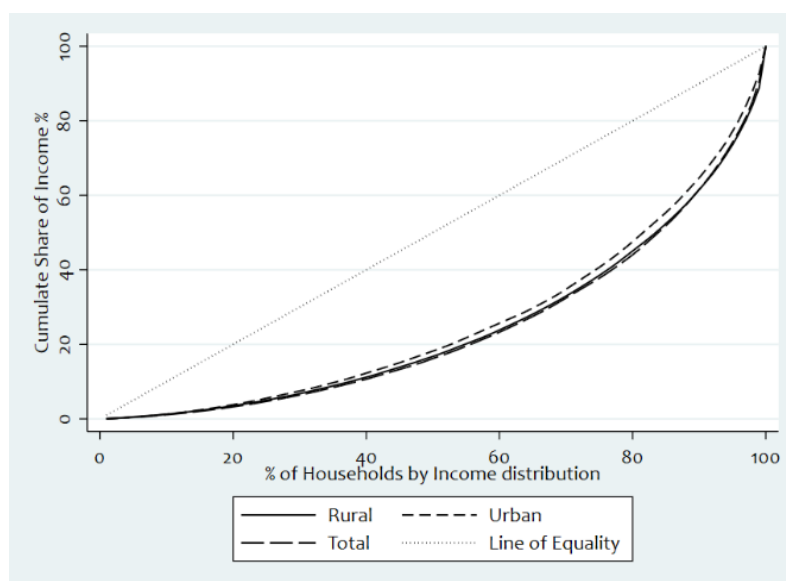
Table 3.18 Gini Coefficient of Income Inequality- Area-wise

Area	Gini coefficient
District-Rural	0.509
District-Urban	0.480
Vellore	0.516
Tamil Nadu	0.563

The Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of households. Chart 3.13 shows that 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 total income.

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).

Chart 3.13 Lorenz Curve and Income Inequality



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 has about their future economic status.

Table 3.19 shows the area-wise percentage of households expecting an increase, decrease or no change in their income in Vellore district.

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

Expectation of Change in Household Income	Area Type			
	District-Rural	District-Urban	Vellore	Tamil Nadu
Higher	30.12	42.90	35.29	50.06
Lower	2.01	3.23	2.50	8.17
About the same	49.88	40.92	46.25	31.66
DK/RF	17.99	12.95	15.95	10.11
Total	100	100	100	100

Majority of the households in the district at 46.25 percent expected their income to remain the same in the five years following 2018. While maximum percentage of households in urban areas expected their income to increase in the future, almost half of the rural households expected their future income to remain the same.

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

Expectation of Change in Household Income	Social Group					
	SC	ST	BC	MBC	General	Vellore
Higher	33.34	33.78	39.32	31.69	47.77	35.29
Lower	2.39	2.57	3.24	1.70	2.66	2.50
About the same	47.00	44.57	40.35	53.86	33.42	46.25
DK/RF	17.26	19.08	17.09	12.75	16.15	15.95
Total	100	100	100	100	100	100

Table 3.20 shows that while around 48 percent of the General category households and 39 percent of the BC households expected an increase in future income, less than 35 percent of the SC, ST and MBC households expected the same. More than half the MBC households expected their future 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 live in their own house or stay at a rented house are given in Chart 3.14.

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

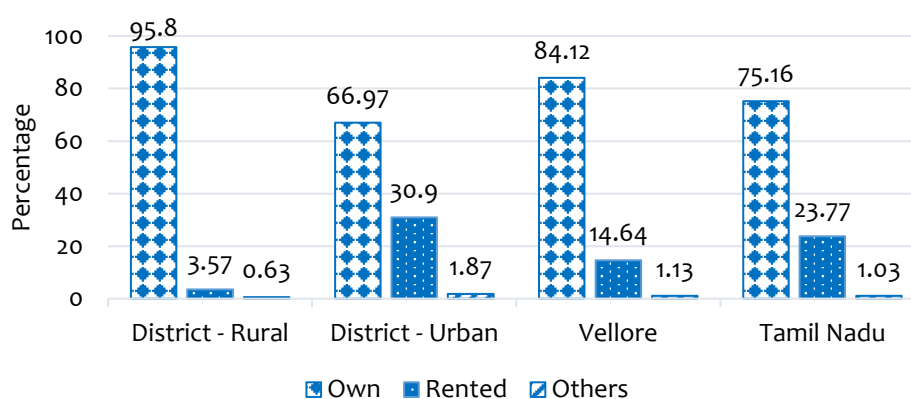


Chart 3.14 shows that the proportion of households living in their own house in the district at 84.12 percent was higher than the state level estimate of 75.16 percent. The district was ranked tenth among Tamil Nadu's then 32 districts in terms of percentage of households living in their own house (TNHPS-PBS, 2021). While almost 96 percent of the rural

households lived in their own house, more than 30 percent of urban households relied on rented houses for their stay. Only around one percent of households lived in other houses such as relative's house, encroachments etc. This data does not capture the ownership of a house in a different geographical location.

Table 3.21 Ownership Status of the Respondents' House - Social Group-wise Percentages

Ownership Status	Social Group					
	SC	ST	BC	MBC	General	Vellore
Own	89.01	82.59	78.03	88.55	73.01	84.12
Rented	10.32	14.14	20.31	10.39	26.99	14.64
Others	0.53	3.27	1.49	1.05	0.00	1.13
DK/RF	0.14	0.00	0.17	0.01	0.00	0.03
Total	100	100	100	100	100	100

Table 3.21 shows that more than 80 percent of the SC, MBC and ST households in the district lived in their own house. The corresponding figures for the General and BC households were relatively lower, probably because these two social groups were more concentrated in urban areas (see Table 3.1).

A detailed analysis of ownership of houses shows that out of the 84.12 percent households that lived in an own house in the district (refer Chart 3.14), 14.95 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 Government Scheme	Social Group					
	SC	ST	BC	MBC	General	Vellore
Yes	28.40	23.13	8.56	9.96	2.23	14.95
No	71.50	76.87	91.17	89.99	97.77	84.90
DK/RF	0.10	0.00	0.28	0.05	0.00	0.15
Total	100	100	100	100	100	100

In Vellore district, SC and ST households had a higher percentage of houses built under a government scheme compared to other social groups.

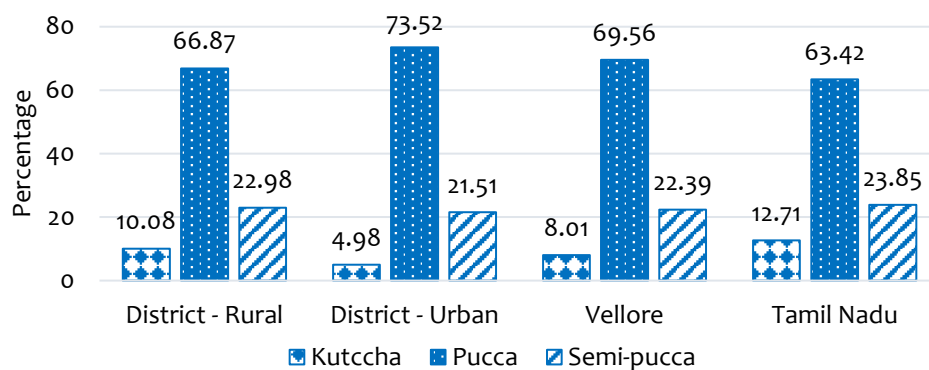
3.5.2 House Type

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 shows that majority of households in Vellore district were living in pucca houses, at a proportion higher than the state estimate. The percentage of urban households living

in pucca houses in the district was higher than rural households, but lower than the state urban estimate of 75.22 percent. The percentage of rural households living in pucca houses was considerably higher than the state rural estimate of 52.93 percent (TNHPS-PBS, 2021).

Chart 3.15 Type of House – Area-wise



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 Vellore district. The primary sources⁶ 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).

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

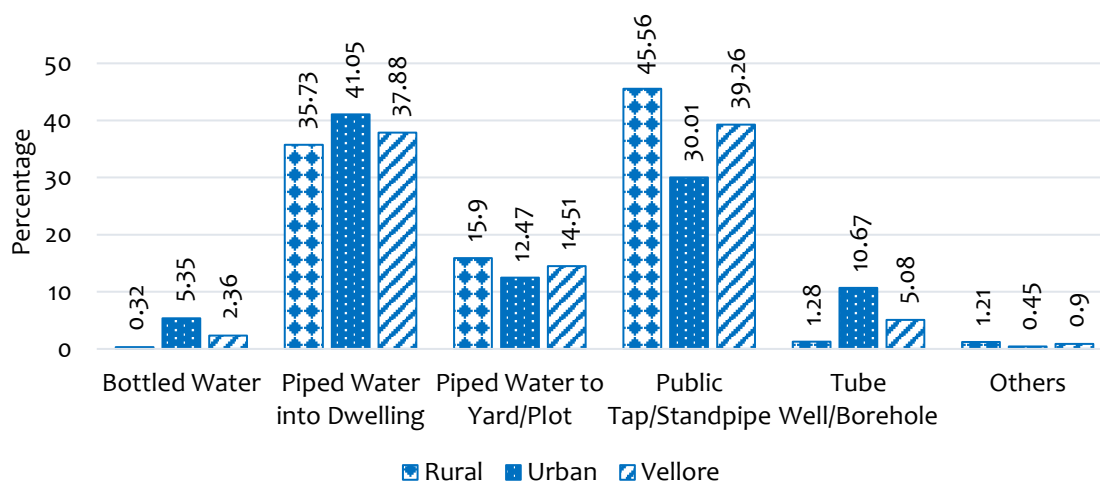


Chart 3.16 shows that maximum percentage of households in Vellore district were using public tap/standpipe as their primary source of drinking water, similar to the state level pattern. The state estimates showed that piped water into the dwelling in urban areas at

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

37.02 percent and public tap/standpipe in rural areas at 44.51 percent were the primary water sources of households. A similar pattern was found in Vellore district as well. The percentage of urban households with piped water into the dwelling in the district at 41.05 percent was higher than the corresponding state urban estimate of 37.02 percent (TNHPS-PBS, 2021).

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 in case of rural and urban areas.

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

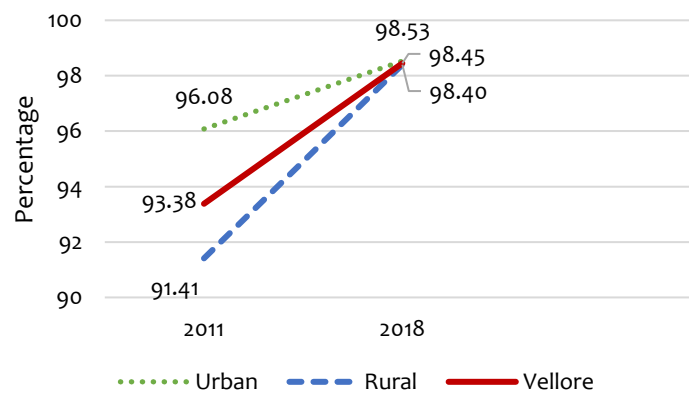


Chart 3.17 shows that the percentage of households with electricity connection had increased in both rural and urban areas of Vellore district during the period 2011 to 2018, with the rate of growth of electrification higher in rural areas than urban areas. The electrification status in the district at 98.45 percent was higher than the state estimate of 97.6 percent. The district was ranked sixth among the then 32 districts in terms of electrification (TNHPS-PBS, 2021).

3.5.5 Primary Cooking Fuel

A comparison of Census (2011) and the PBS estimates on the Primary Cooking Fuel⁷ used by the households in the district is given in Chart 3.18.

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

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

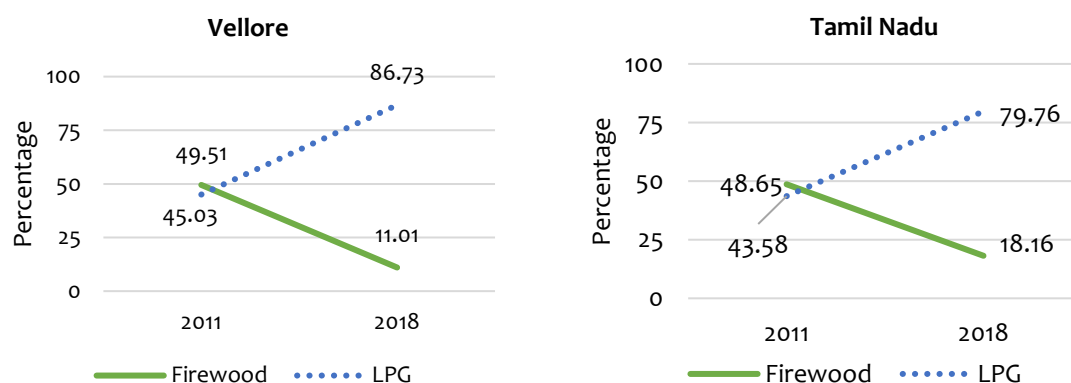


Chart 3.18 shows that the use of LPG as the primary cooking fuel had increased tremendously in the district between 2011 and 2018 encompassing 86.73 percent of the households, which was higher than the state estimate. This was also accompanied by a reduced usage of firewood to just over 11 percent in the same period. Compared to other districts of Tamil Nadu, Vellore district was ranked eleventh in terms of LPG use and ranked twenty second in terms of firewood use as the primary cooking fuel (TNHPS-PBS, 2021).

Chart 3.19 Comparison of Primary Cooking Fuel - Rural and Urban

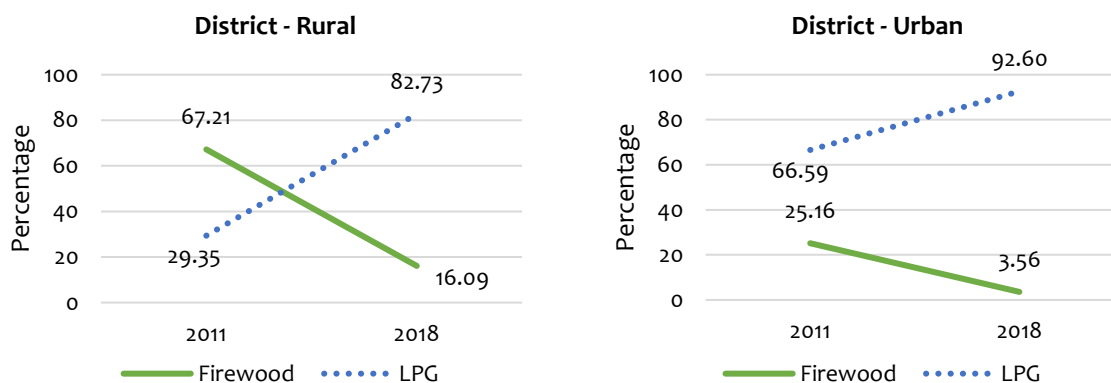


Chart 3.19 shows that the predominant fuel in rural areas in the district had reversed drastically from firewood to LPG in the period 2011-18. LPG uptake had increased further in urban areas, and that of firewood had dropped to a minuscule amount during the same period.

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

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

Primary Cooking Fuel	Social Group					
	SC	ST	BC	MBC	General	Vellore
Firewood	11.57	51.51	6.93	15.38	1.40	11.01
Kerosene	2.55	1.17	1.36	0.76	0.84	1.50
LPG	85.26	42.93	90.87	83.35	97.76	86.73
Others	0.60	3.23	0.79	0.44	0.00	0.69
DK/RF	0.01	1.17	0.05	0.06	0.00	0.07
Total	100	100	100	100	100	100

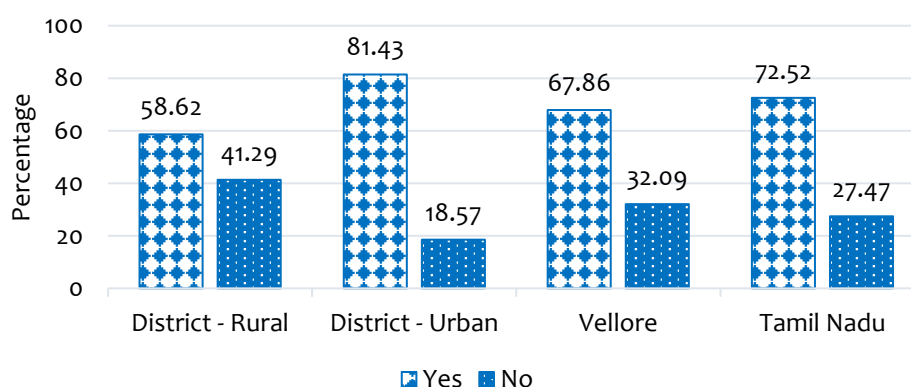
*Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that, while more than 90 percent of the General and BC category households used LPG as the primary cooking fuel, more than half the ST households still 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 house premises had increased from 41.11 percent in 2011 (Census, 2011) to 67.86 percent in 2018. As per the state estimates, Vellore district was positioned twenty second among the 32 districts in terms of the presence of latrine facilities within the house premises (TNHPS-PBS, 2021). The percentage of households equipped with latrine facilities in the district was lower than the state level estimate. A greater percentage of urban households were equipped with latrine facilities compared to rural households. It is pertinent to note that 41.29 percent of rural households 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	General	Vellore
Yes	54.27	46.67	84.15	58.58	94.03	67.86
No	45.68	53.33	15.73	41.42	5.97	32.09
DK/RF	0.05	0.00	0.12	0.00	0.00	0.06
Total	100	100	100	100	100	100

Table 3.24 shows the presence of latrine within the premises of the household across various social groups. A relatively higher percentage of General and BC households in the district had latrine facilities within the house. Latrine access within the house was very low among the ST, SC and MBC households. The percentages of ST and MBC households in the district with latrine facilities were lesser than their respective state level estimates of 56.0 percent and 67.5 percent respectively.

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

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

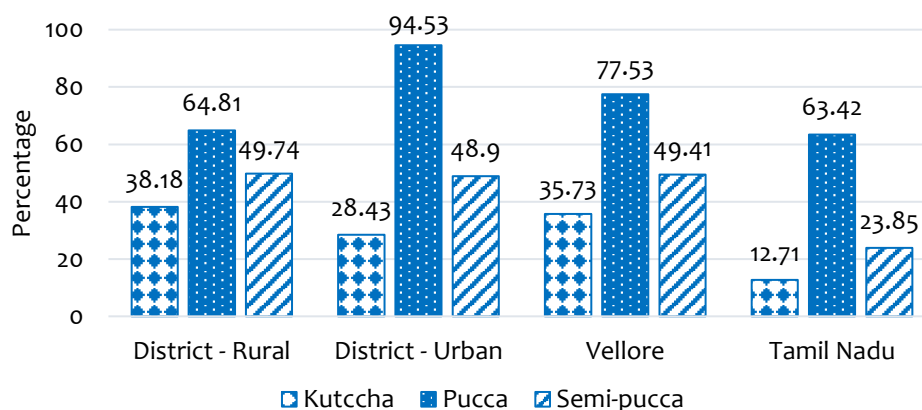
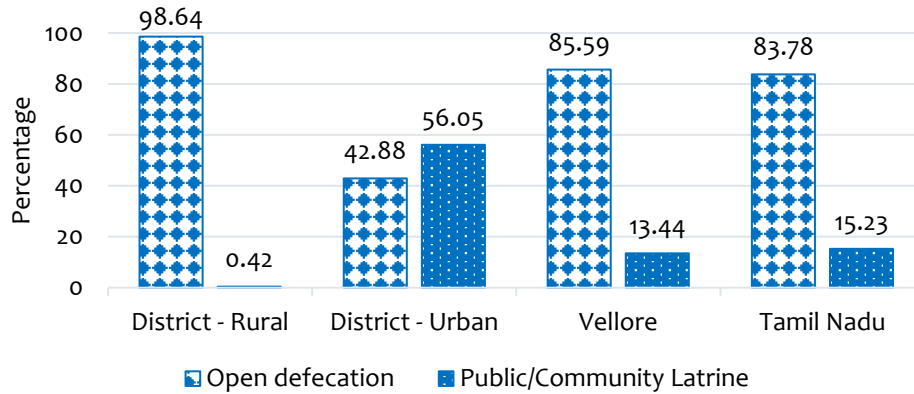


Chart 3.21 shows that the percentage of pucca houses with latrine facilities in the district was higher than for semi-pucca and kutccha houses. The percentages of latrine facilities in kutccha, pucca and semi-pucca houses in the district were higher than their respective state estimates. Almost all urban pucca houses had latrine within the house premises. While a significantly greater percentage of urban pucca houses had latrine facilities than rural pucca houses, a higher proportion of rural kutccha and semi-pucca houses had latrine facilities compared to urban kutccha and semi-pucca houses respectively.

The percentage of total households in the district following open defecation declined from 56.49 percent in 2011 (Census, 2011) to 27.47 percent in 2018. As per the state PBS report,

Vellore district was ranked eleventh in terms of the percentage of total households practicing open defecation.

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



The alternative practices of defecation followed by 32.09 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. More than 85 percent of the households without latrine within the house premises in the district were practicing open defecation. This was higher than the state estimate. Almost all rural households without latrine facilities in the house were practicing open defecation.

4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Vellore district was conducted from the sample of 8,770 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.

Although the literacy rate in Vellore district was lower than the state estimate as per Census 2011, the PBS estimates showed that in the year 2018, the literacy rate in Vellore district had overtaken the state estimate. The district registered 8.70 percent growth rate in literacy rate between 2011 and 2018 compared to the state growth rate of 5.31 percent. The district was ranked tenth among all districts of Tamil Nadu in terms of percentage of households living in their own house. The district estimates on the percentage of households living in pucca houses were higher compared to the state estimates. Vellore district was ranked sixth among the then 32 districts in terms of electrification. The district estimates on the percentage of households using LPG as primary source of fuel for cooking was higher than the state estimates.

Vellore district was ranked twenty-ninth in the state in terms of the percentage of employed population. The overall employed population is lesser than the state estimates, more employment opportunities can be generated through skill development programmes to increase the income of the households. Female work participation continued to be significantly lower than that for males, with the district being ranked thirty-first in the state in terms of female employed population. More than half the SC, ST and MBC population were employed as casual labourers. Policy interventions targeted at these marginalized sections may help reduce these disparities.

The mean annual household income of Vellore district was 20.56 percent lesser than the state estimate. Vellore was ranked sixteenth in the state in terms of mean annual household income. Income inequality was higher in rural areas of the district compared to the urban areas. Efforts to improve agricultural incomes by investing in allied agricultural activities and cottage industries could be explored.

More than half the ST households in the district were still using firewood as the main cooking fuel. Policies targeted specifically towards these sections could help increase their sustained adoption of LPG. The percentage of households equipped with latrine within house premises in the district was lower than the state estimate, and the open defecation

rate was higher than the state estimate. Attention should be given to increase the availability of latrine facilities at the household level to reduce open defecation. Social group-wise targeting of policy might also be essential for promoting latrine facilities within the house premises as its absence was relatively high among ST and SC households in the district.

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

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

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



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