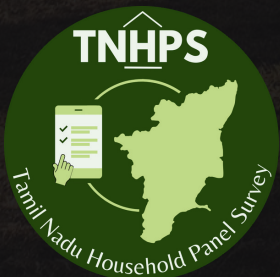


Department of
Economics
& Statistics



Dindigul



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**

Dindigul District

February 2024

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Suggested citation:

Ananthpur, K., Venkatachalam, L., & Jafar, K. (2024). 'Dindigul - Tamil Nadu Household Panel Survey (TNHPS): Pre-Baseline Survey (PBS) District Reports: 2018-19'. Chennai: Madras Institute of Development Studies, Government of Tamil Nadu. DOI: 10.5281/zenodo.10634781

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Acknowledgements

We would like to thank the Planning, Development and Special Initiatives Department (P&D) of the Government of Tamil Nadu (GoTN) for initiating the Tamil Nadu Household Panel Survey's Pre-Baseline Survey (TNHPS–PBS), coordinated by the Madras Institute of Development Studies (MIDS), Chennai, India.

Our gratitude goes to Dr. V. Irai Anbu, former Chief Secretary, GoTN and former Commissioner of Department of Economics and Statistics (DES), GoTN under whose guidance this project was conceptualised and implemented. We thank Mr. Ramesh Chand Meena, Additional Chief Secretary, P&D, GoTN; Dr. K. Gopal, former Additional Chief Secretary, P&D, GoTN; Mr. Vikram Kapur, former Additional Chief Secretary, P&D, GoTN and current Additional Chief Secretary, Tamil Nadu Small Industries Development Corporation, GoTN, and Mr. S. Krishnan, former Additional Chief Secretary, Industries, Investment Promotion & Commerce Department, GoTN, and current Secretary, Ministry of Electronics and Information Technology (MeitY), for giving us the opportunity to conduct the TNHPS–PBS to collect preliminary data for key socioeconomic variables. We are also thankful to the previous Planning and Development Secretaries—Dr. T. V. Somanathan, Ms. Jayashree Raghunandan and Mr. Ashish Vachhani—for their support and advice and to the Government of Tamil Nadu for providing the required funding for this survey.

We thank Mr. S. Ganesh, Director, DES, GoTN; Dr. Pinky Jewel, Dr. M. Karunakaran, Dr. Atul Anand, and Mr. Ashok Dongre, former Commissioners, DES, GoTN and Dr. P. Balasubramaniam, Additional Director, DES, GoTN for their support in planning and implementation of the survey. We thank Mr. Ramakrishnan, Additional Director, DES for his continued support. We are thankful to all the members of the Data Analytics Unit for their cooperation. We also extend our gratitude to the DES officials from Dindigul district who served during 2018-19—Mr. N. Karuppaiah, Deputy Director (DD); Assistant Directors (AD) and Statistical Officers (SO)—for their support in conducting the training, survey supervision and carrying out quality control mechanisms. The high quality of the data collected during the survey was ensured by the Block Statistical Investigators and Assistant Statistical Investigators from the Dindigul district. We thank them for their efforts.

We want to thank our colleagues from the Survey Research Center (SRC) at the University of Michigan for their continued methodological and technical support throughout the survey. Specifically, Prof. William G Axinn, Research Professor, Survey Research Center/Population Studies Center; Prof. Narayan Sastry, Research Professor, Survey

Research Center/Population Studies Center; Ms. Julie de Jong, Survey Methodologist, SRC; Dr. Raphael Nishimura, Director of Sampling Operations in Survey Research Operations; Prof. Dirgha J. Ghimire, Research Professor, Population Studies Center; and Dr. Emily Treleaven, Research Assistant Professor, SRC, Institute for Social Research.

Prof. P. G. Babu, former Director, MIDS deserves our gratitude for guiding the project team and providing insights on the key findings. We are thankful to Prof. Shashanka Bhide, Senior Advisor, Research Programmes, National Council of Applied Economic Research, New Delhi and former Director, MIDS, for initiating this project and for his continued guidance. We thank the Late Dr. Hukum Chandra, National Fellow, ICAR–Indian Agricultural Statistics Research Institute and sampling consultant for the TNHPS, for his guidance on the sampling and estimation. We thank Prof. Brinda Viswanathan, Professor, Madras School of Economics, for her insights and inputs on the estimation and analysis.

Lastly, the former and current members of the TNHPS Project team deserve thanks for their hard work, without which this mammoth task would not have been possible. We extend our gratitude to the former team members: Research Managers—Ms. Radhika Asrani, Mr. Vinod Ramanarayanan, Mr. Rishi Kishore, and Dr. Karthick V., Research Consultant—Dr. Vipin Valiyatoor, Data Analysts—Ms. Aditya Anand and Mr. Shrikrishna Bhat K., Research Investigators—Ms. Diksha Ramesh, Ms. Laya Zachariah, Ms. Bhavya Shrivastava and Ms. Sreekutty M. Balan, Research Assistants- Ms. Gopika Vipin, Ms. Srinidhi Ramakrishnan, Ms. Anjana Raj, Ms. Miya Kunhathu, Mr. Varun Ramgopal, Mr. Thangasamy P., and Mr. Srivatsan Mohan, and the Research Interns. We appreciate the hard work and contributions of the current team including the Research Manager- Ms. Jyotsna Rosario, Field Manager- Dr. G. V. Shanmugam, IT Consultant- Mr. G. Manivannan, Research Associates—Ms. Gargi Sridharan, Mr. Balamurugan S., Ms. Madhurambal S. and Mr. Balaram Vishnu S., and Research Assistant—Ms. Kanishka S. M., and the Research Interns. We are also grateful to the Regional and District level field managers who played a vital role in the training and data collection processes.

Summary of PBS Findings

Demographic Indicators

- Dindigul had a sample size was 6,628, among which 70.10 percent of households were from rural areas and 29.90 percent of households were from urban areas of the district.
- The district had a huge demographic dividend with 70.08 percent of the population in the age group up to 45 years. Around one-third of the population was between 26-45 years of age. The percentage of people above 60 years of age was 10.09 percent.
- Hinduism was followed by around 90 percent of the households in the district.
- The BC and MBC category were the largest in number, together constituting around 60 percent of the total population in the district and around 35 percent of the households belonged to SC category.

Education

- The district had literacy rate of 83.89 percent, which was lower than the state estimates of 85.40 percent.
- The gender gap in literacy rate of the district was higher in rural areas at 13.62 percent than urban areas at 8.14 percent.
- Around 80.79 percent of the population had formal schooling in the district. Among the population with no formal schooling, more than 80 percent did not have functional literacy.

Employment

- The unemployment rate was at 2.43 percent in the district, 53.87 percent of the total population was employed and 43.44 percent were not in the labour force.
- Around 75 percent of the males were employed and only around 34 percent of the females were employed, which shows the prevailing gender gap in employment.
- Most males —about 52.01 percent—who were currently not working were students, whereas most females—about 73.80 percent—in this category were homemakers.
- The majority of the population in the district were casual labourers in the agriculture sector.

- Around 20 percent of the population were salaried workers in the private sector among DNC, MBC and BC categories of the district.
- The majority of the SC population were casual labourers in the agriculture sector.
- The population self-employed in the non-agriculture sector dominated in urban areas, while casual labourers in the agriculture sector were higher in rural areas of the district.

Land Ownership and Assets

- Around 18 percent of households owned agricultural land, higher among rural households than urban households. BC and MBC category households were the predominant agricultural land owners in the district.
- Households that depended on rain-fed irrigation in the district were 40.09 percent. A higher percentage of urban households at 43.11 percent owned unirrigated land than rural households at 39.34 percent.
- Around 86.46 percent of the agricultural land owners had marginal or small (less than 2 hectares) land.
- Around 16 percent of the households owned agriculture, allied or fishing assets in the district, higher among rural households than urban households.
- Around 89 percent of the households in the district owned at least one household asset.

Household Income

- The annual mean income of the households in the financial year 2017-18 was Rs.1,11,764 in the district; in the urban areas, it was Rs.1,69,177 and in rural areas it was Rs. 89,551.
- The mean income from salaried work was the highest at Rs.1,68,214.
- The income inequality in the district (0.538) was lower than the state estimate (0.563).
- Around 56 percent of the households in the district expected their income to increase in the next five years. Less than 30 percent of the households expected their income to remain the same and more than one tenth expected income to decrease in the next five years. Rural households were more optimistic than urban households about the increase in their future income.

Housing

- In the district, 76.30 percent of households reside in their own houses. A higher percentage of rural households reside in their own houses compared to urban households in the district.
- Out of the 76.30 percent that owned houses in the district, only 15.15 percent of houses were built under a government scheme and SC households were the main beneficiaries of the government housing schemes.
- A little more than half of the households in the district lived in Pucca houses, around 30 percent lived in Semi-Pucca and less than 20 percent lived in Kutchcha houses.

Access to Drinking Water

- The most commonly used primary source of drinking water in the district was public tap or standpipe—around 34 percent.
- Piped water into the dwelling in urban areas—about 31.92 percent—and public tap/standpipe in rural areas—38.37 percent—were the primary water sources.

Electricity

- Around 95.89 percent of households in the district had domestic electricity connections as compared to the state estimate of 97.6 percent.

Cooking Fuel

- Around 80 percent of the households used LPG as primary cooking fuel.
- Less than 20 percent of the households in the district use firewood as primary cooking fuel.

Sanitation

- Around 60 percent of the households had a latrine within the premises of the household. Latrine facilities were higher among urban households than rural households of the district.
- The percentage of total households in the district following open defecation had declined from 58.71 percent in 2011 (Census, 2011) to 22.02 percent in 2018, as per the PBS estimates.
- Out of the 40.12 percent of households which did not have a latrine within the premises of the household, 54.88 percent of households practiced open defecation.

1. Introduction

1.1 Profile of Dindigul District

Dindigul district in Tamil Nadu was formed in the year 1985 from the bifurcation of Madurai district. It is in the Southern region of the State, with Karur and Tiruppur in the North, Tiruchirappalli and Madurai in the East, Madurai and Theni in the South, and Tiruppur and borders of Kerala in the West.

According to Census (2011), Dindigul had a total population of 21.5 lakhs, accounting for approximately 2.98 percent of Tamil Nadu's total population, which was 7.21 crores. The district comprised 5.6 lakh households, with 37.41 percent residing in urban areas. The male population was 50.05 percent, and the female population was 49.95 percent. Dindigul demonstrated a child-sex ratio of 934.49 as compared to the state average of 943.27. Within the social groups, 20.95 percent of the population belonged to the Scheduled Castes, while 0.37 percent belonged to the Scheduled Tribes. The literacy rate in the Dindigul district stood at 76.26 percent, compared to the state's average of 80.09 percent. The male literacy rate was 84.23 percent, while the female literacy rate was 68.33 percent, highlighting the need for investment in women's education.

In the fiscal year 2018-19, Dindigul's Net District Domestic Product was ₹34,58,711 lakhs, ranking twentieth among all districts. The district's per capita Net District Domestic Product was recorded at ₹1,47,641, ranking it twentieth 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 15 percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 30 percent and 55 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Dindigul ranked fourteenth in terms of the Human Development Index with a score of 0.691, a relatively mediocre score. It ranked eighth in the Gender Inequality Index with a score of 0.063, highlighting good performance in closing the gender divide. In terms of the Child Development Index, the district ranked twentieth with a score of 0.617, indicative of an average performance in developing the youth. Additionally, Dindigul ranked twenty third in terms of the Multidimensional Poverty Index with a score of 0.59. The district must invest heavily and address the below-average performance in poverty alleviation.

Dindigul district demonstrates moderate economic indicators and a balanced sectoral distribution. While its human development and gender equality efforts reflect average performance, focused investments are required to improve child development outcomes and enhance poverty alleviation initiatives for a more comprehensive growth trajectory.

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

The Tamil Nadu Household Panel Survey (TNHPS) has been designed as a longitudinal survey, beginning with a Pre-Baseline Survey (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. In the absence of Census 2021, the PBS estimates act as a valid benchmark for the Government of Tamil Nadu in terms of socio-economic development since 2011. . The PBS surveyed around 2,12,282 households in the erstwhile 32 districts of Tamil Nadu across 1476 Primary Sampling Units—684 rural PSUs and 792 urban PSUs.

This report analyses data from the PBS for the Dindigul district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent census data of Dindigul (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Dindigul district. The sample size for the district was 6,628 households, among which 4,646 households were from rural areas and 1,982 households were from urban areas. The blocks covered during the survey were: Dindigul, Kodaikanal, Nilakottai, Ottanchattiram, Palani, Reddiarchattiram, Shanarpatti, Thoppampatti and Vedasandur.

2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 7,483 households in Dindigul district were selected using a multi-stage stratified sampling design¹. The final sample size was 6,628 households for PBS, among which 70.10 percent of households were from rural areas and 29.90 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		Dindigul	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	4,646	88.8	1,982	88.05	6,628	88.57
Non-Response	138	2.64	105	4.66	243	3.25
Non-sample	448	8.56	164	7.29	612	8.18
Total	5,232	100	2,251	100	7,483	100

Dindigul district had a lower response rate—the willingness of households to participate in the TNHPS-PBS—of 88.57 percent compared to the state response rate of 96.5 percent (TNHPS-PBS, 2021). Around 3.25 percent of households were not willing to participate in the survey. About 8.18 percent of the selected samples were removed as they were not considered 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).

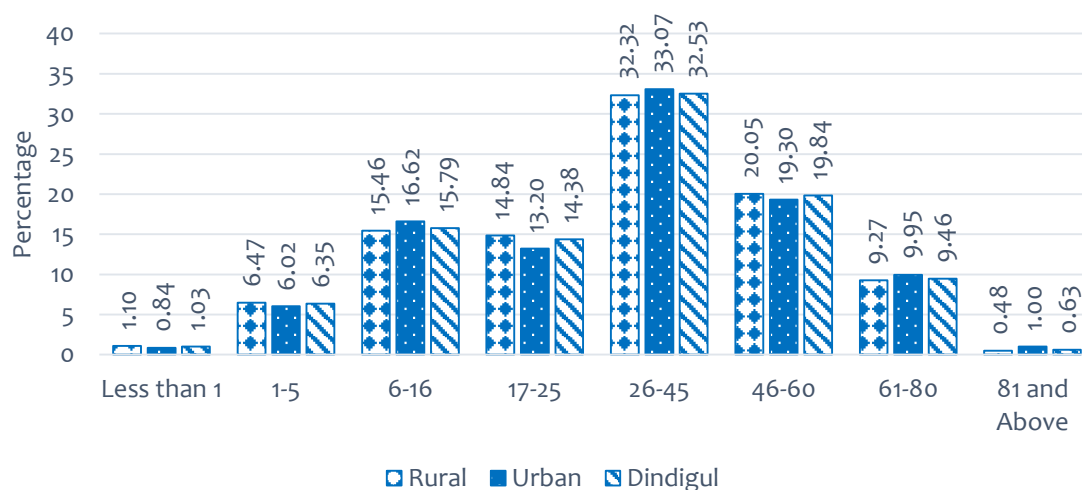
² A household is defined as a group of persons normally living together and taking food from a common kitchen. The category called non-sample consisted of institutions, houses of NRIs and other buildings where there was no kitchen.

3. Key Findings

3.1 Demographic Indicators

As per the PBS estimates (2018-19), the average household size³ in the district had reduced from 3.85 in 2011 (Census, 2011) to 3.44 in 2018. As per the PBS estimates, 51.05 percent of the population in the district was female, and 48.94 percent of the population was male. Around 17.93 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 Age-wise Distribution of Population



As per the PBS estimates in 2018-19, almost one-third of the population in the district were in the age group of 26 to 45 years. The population was lower in urban areas about 65.57 percent than in rural areas about 67.21 percent. The percentage of the currently married population in the district was 72.85 percent in 2018. A higher percentage of males were currently married as 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 88.58 percent of the households practised Hinduism, 2.17 percent practised Islam and 9.24 percent followed Christianity.

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	34.38
ST	0.22
BC	49.53
MBC	13.60
Denotified Communities (DNC)	1.54
General	0.53
DK/RF	0.20
Total	100

As per the PBS estimates, the highest percentage of households in the Dindigul district belonged to the BC category, followed by the SC category. The percentages of SC and ST households in the district were 34.38 percent and 0.22 percent respectively in 2018.

The percentage of ST category households in the Dindigul district was only 0.22 percent and only nine ST-category households were sampled in the district. Hence, the results of these social groups discussed in this report must be interpreted in this context.

3.2 Development Indicators

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

3.2.1 Education

The change in literacy rate of Dindigul district during the period 2011 and 2018 is given in Table 3.2. As per Census 2011, a person—age 7 and above—who can both read and write with understanding in any language, is treated as literate. In the PBS, literacy rate is measured including those that have formal schooling and those that can read and write a simple sentence.

Table 3.2 Literacy Rates between Census 2011 and PBS 2018*

Gender	Rural		Urban		Dindigul		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	80.98	89.02	89.68	92.73	84.23	90.06	86.77	90.97
Female	62.36	75.40	78.19	84.59	68.33	78.03	73.40	80.15
Total	71.67	82.07	83.89	88.52	76.26	83.89	80.09	85.40

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

As per Census 2011, the literacy rate in the Dindigul district was 76.26 percent, which was lesser than the state average of 80.09 percent. The PBS estimates show that in the year

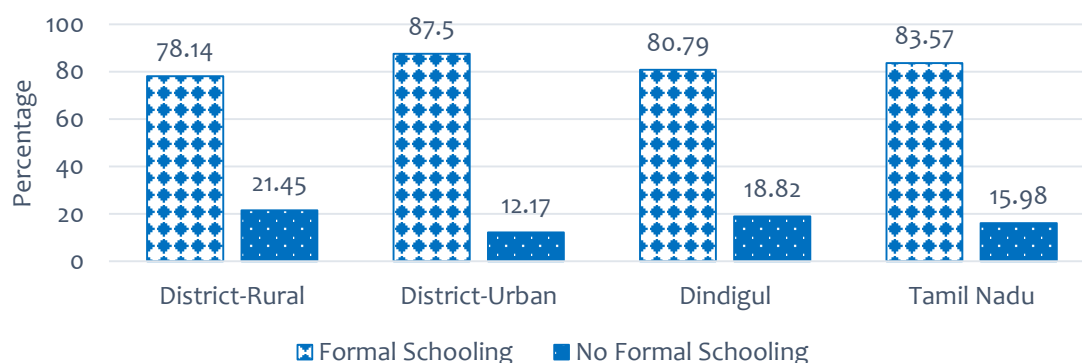
2018, the literacy rate in the Dindigul district had increased to 83.89 percent, which was lesser than the state estimate of 85.40 percent. Nevertheless, the Dindigul district registered a 7.63 percent growth rate in literacy rate between 2011 and 2018 while the state registered a 5.31 percent growth rate. The difference in literacy rate between the state average and the Dindigul district was 3.83 percent in 2011, which had reduced to 1.47 percent in 2018 as per the PBS estimates. Both male literacy as well as female literacy in the district recorded an increase during the period under consideration. The gender gap in literacy rate declined from 15.90 percent in 2011 to 12.03 percent in 2018. The district ranking on literacy rate had improved from twenty-second position among the then 32 districts in 2011 (Tamil Nadu State Planning Commission, 2017b) to seventeenth position in 2018 (TNHPS-PBS, 2021).

The literacy rate in rural areas of the district was 71.67 percent in the year 2011 (Census, 2011) which was lesser than the overall literacy rate of the district. According to the PBS estimates, the literacy rate in rural areas of the Dindigul district had increased to 82.07 percent. The rural male and female literacy rate had also recorded an increase during the period 2011-18. The literacy rate in urban areas of Dindigul district had also increased from 83.89 percent (Census, 2011) in the year 2011 to 88.52 percent in the year 2018. There had been an increase in both male literacy as well as female literacy in the urban areas of the district between 2011 and 2018. The urban literacy rate continued to be higher than the rural literacy rate in 2018. The gender gap in literacy rate was lower in urban areas compared to the rural areas of the district.

3.2.2 Education Status of Population (Age 7 and above)

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

Chart 3.2 Formal Schooling of the Population – Area-wise



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

Chart 3.2 shows that 80.79 percent of the population in the Dindigul district had attended formal schooling compared to a higher state estimate of 83.57 percent. The percentage of the population with formal education in urban areas was significantly higher than in rural areas of the district.

Chart 3.3 Formal Schooling of the Population – Gender-wise

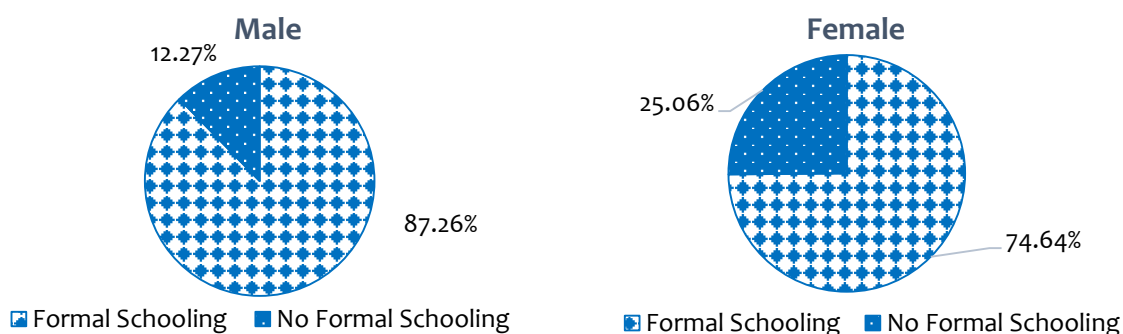


Chart 3.3 shows that the percentage of the population that acquired formal education was higher among the male population compared to the female population. More than one-tenth of the male population did not have formal education compared to a quarter of the female population.

A district-level analysis of education attainment status showed great divergence across various social groups.

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

Education Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Formal Schooling	77.27	69.27	83.46	80.29	81.11	95.39	80.79
No Formal Schooling	22.30	30.73	16.26	19.22	18.83	2.51	18.82
Others and DK/RF	0.42	0.00	0.29	0.49	0.05	2.11	0.39
Total	100	100	100	100	100	100	100

Table 3.3 shows the percentage of the population who had attended formal schooling across various social group categories in Dindigul district. A majority of the General population, followed by BC and DNC population in the district had formal education, while a higher percentage of SC households did not have formal education. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

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

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

Educational Attainment	Area Type		
	Rural	Urban	Dindigul
Primary (I to V)	29.64	20.60	26.88
Middle (VI to VIII)	22.12	19.10	21.19
High School (IX to X)	21.17	22.11	21.46
Higher Secondary (XI to XII)	13.46	16.39	14.35
Bachelor's degree	7.74	12.15	9.09
Diploma Degree	2.66	3.92	3.04
Post Graduate Degree	2.69	5.33	3.50
Other Higher Education	0.00	0.02	0.01
Others/DK/RF	0.52	0.38	0.48
Total	100	100	100

The PBS estimates show that around 83.88 percent of the district's population was either pursuing or had completed primary or secondary schooling. Around 15.64 percent of the population in the district were either pursuing or had completed tertiary education—such as a bachelor's degree, diploma, postgraduate degree and other higher education—compared to the higher state estimates of 20.02 percent. The percentage of the specified population, who were either pursuing or had completed tertiary education was higher in urban areas at 21.42 percent compared to the rural areas at 13.09 percent.

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

Educational Attainment	Area Type		
	Male	Female	Dindigul
Primary (I to V)	25.33	28.59	26.88
Middle (VI to VIII)	21.37	21.01	21.19
High School (IX to X)	23.47	19.21	21.46
Higher Secondary (XI to XII)	12.80	16.08	14.35
Bachelor's degree	9.31	8.84	9.09
Diploma Degree	4.18	1.78	3.04
Post Graduate Degree	2.98	4.08	3.50
Other Higher Education	0.01	0.00	0.01
Others/DK/RF	0.54	0.41	0.48
Total	100	100	100

Table 3.5 shows the percentage of males and females, who were either pursuing or had completed formal education. A higher percentage of males at 16.48 percent were either pursuing or had completed tertiary education compared to the females at 14.70 percent. However, a higher percentage of females were either pursuing or had completed post-graduation compared to males. There is a gender gap in terms of the level of educational attainment in the district.

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

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

Educational Attainment	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Primary (I to V)	28.76	25.00	25.52	28.51	21.46	9.39	26.88
Middle (VI to VIII)	21.28	21.66	21.01	22.08	21.42	8.21	21.19
High School (IX to X)	22.04	31.18	20.17	23.46	25.17	32.04	21.46
Higher Secondary (XI to XII)	13.88	17.76	14.67	13.73	20.98	13.47	14.35
Bachelor's degree	8.59	4.40	10.02	6.67	6.80	26.71	9.09
Diploma Degree	2.53	0.00	3.61	2.40	2.26	5.02	3.04
Post Graduate Degree	2.37	0.00	4.66	2.49	1.83	3.01	3.50
Other Higher Education	0.00	0.00	0.00	0.05	0.00	0.00	0.01
Others/DK/RF	0.55	0.00	0.34	0.61	0.07	2.16	0.48
Total	100	100	100	100	100	100	100

Table 3.6 shows that a high percentage of the population from all social groups were either pursuing or had completed primary or secondary school. The percentage of the population that was either pursuing or had completed tertiary education was higher among the General category at 34.74 percent, followed by BC at 18.29 percent. The DNC and MBC populations had lower percentages at (10.89 percent) 11.61 percent) respectively. The proportion of the population that was either pursuing or had completed tertiary education within all social groups in the district was substantially lower than the corresponding state-level estimates (TNHPS-PBS, 2021). The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

Around 18.82 percent of the population had not received formal education in the Dindigul district (refer to Chart 3.2). The PBS investigated the ability of those who could read and write a simple sentence with understanding—or functional literacy.

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

Functional Literacy	Area Type		
	Rural	Urban	Dindigul
Yes	18.31	8.35	16.49
No	81.36	91.44	83.20
DK/RF	0.33	0.21	0.31
Total	100	100	100

Table 3.7 shows the functional literacy status of the population with no formal schooling. Only 16.49 percent of the population without formal schooling had functional literacy. The functional literacy rate of the specified population group in rural areas was significantly higher than in urban areas of the district.

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	Dindigul
Yes	21.25	2.01	13.24	14.08	3.30	0.00	16.49
No	78.24	97.99	86.66	85.55	96.70	100.00	83.20
DK/RF	0.51	0.00	0.10	0.37	0.00	0.00	0.31
Total	100	100	100	100	100	100	100

Table 3.8 shows the functional literacy status of the population with no formal schooling, across various social group categories. Functional literacy was relatively higher among the SC category and lower among the BC category. None of the two General category respondents without formal schooling surveyed in the district possessed functional literacy. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

3.2.3 Employment Status

This section looks at the employment status of the household members, the types of employment that the household members are engaged in, the unemployment rate at the district level and compares the findings with state estimates. In the PBS, the population of 14 years and above is classified as employed, unemployed and not in the labour force⁴.

The category employed consists of the following categories:

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

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

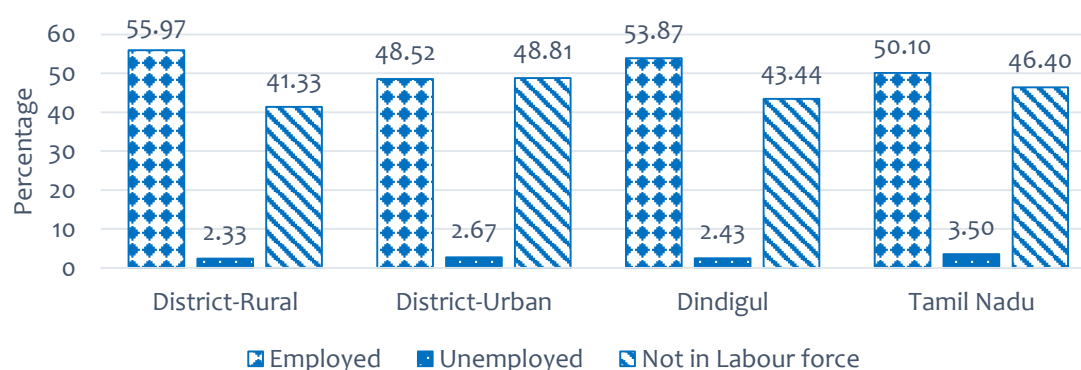
- (x) People who were involved in multiple occupations, and
- (xi) People who were involved in other types of work.

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

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

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

Chart 3.4 Employment Status of Population – Area-wise



The overall percentage of the employed population—14 years and above—in the district was higher than the state estimates. The percentage of the population employed in rural areas was higher than in the urban areas of the district. The percentage of the unemployed population in the district was lower than the state estimates. The unemployment status in rural areas of the district at 2.33 percent was lower than the state rural estimate of 3.60 percent, and the district urban unemployment status at 2.67 percent was also lower than the state urban estimate of 3.30 percent. Dindigul district was positioned seventh among all districts in Tamil Nadu in terms of employed population and positioned twenty-eighth in terms of unemployment status.

Chart 3.5 Employment Status of the Population – Gender-wise

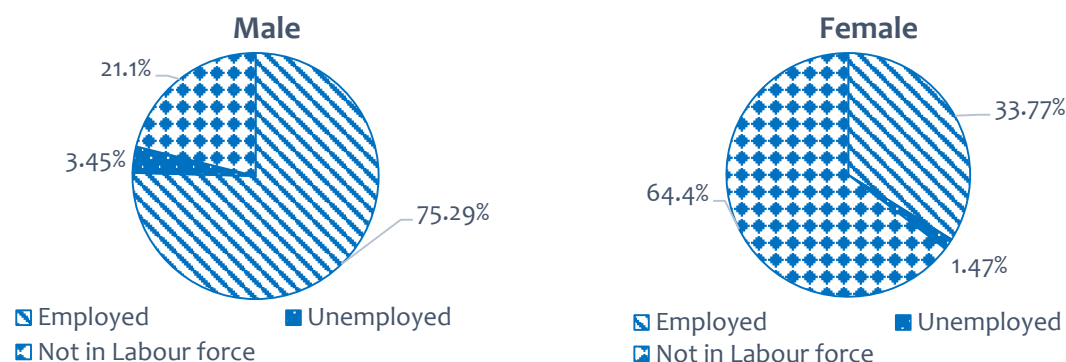


Chart 3.5 shows the gender-wise employment status of the population aged 14 years and above. While three-quarters of the male population were employed, only one-third of the female population was employed. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). Female work participation in the district was higher than the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019), and state estimates of 29.96 percent (TNHPS-PBS, 2021). Around 64.40 percent of the female population were not in the workforce, and the majority of them—about 73.80 percent—were associated with attending to domestic duties as homemakers (see Chart 3.7). Unemployment status was higher among males as compared to that of the female population. Dindigul district was positioned eleventh in terms of female work participation and positioned thirty-first in terms of female unemployment status.

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

Work Type	Area Type		
	Rural	Urban	Dindigul
Self Employed Agriculture	8.82	3.97	7.59
Self Employed Non-Agriculture	9.39	22.72	12.77
Self Employed Allied Agriculture	1.43	2.23	1.63
Casual Labourer Agriculture	27.29	6.37	21.98
Casual Labourer Industry	14.19	15.45	14.51
Casual Labourer Service	12.12	12.27	12.16
Casual Labourer (Others)	4.51	3.04	4.13
Salaried Worker Government	3.07	11.47	5.20
Salaried Worker Private	17.47	21.51	18.50
Multiple Occupation	1.62	0.90	1.44
DK/RF	0.09	0.08	0.09
Total	100	100	100

Table 3.9 shows that the highest proportion of the working population in the district were casual labourers in the agriculture sector at 21.98 percent, followed by salaried workers in the private sector at 18.50 percent. The highest proportion of the working population in the state were salaried private workers at 21.82 percent (TNHPS-PBS, 2021). While casual labourers in the agriculture sector were predominant in rural areas (27.29 percent) self-employment in the non-agricultural sector was predominant in urban areas (22.72 percent) in the district. The percentage of salaried workers in both the government and private sectors was higher in urban areas compared to the rural areas of the district.

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

Work Type	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Self Employed Agriculture	0.67	0.00	11.80	11.44	5.66	0.00	7.59
Self Employed Non-Agriculture	7.50	22.17	16.98	12.17	8.06	39.71	12.77
Self Employed Allied Agriculture	1.57	4.88	1.34	2.71	1.44	0.00	1.63
Casual Labourer Agriculture	33.90	17.93	14.87	17.10	16.78	0.87	21.98
Casual Labourer Industry	13.80	45.66	15.46	13.39	11.21	0.00	14.51
Casual Labourer Service	13.44	1.31	11.22	12.51	7.51	16.50	12.16
Casual Labourer (Others)	4.91	0.00	3.52	3.04	15.58	0.00	4.13
Salaried Worker Government	4.54	0.00	5.70	4.60	9.69	16.02	5.20
Salaried Worker Private	18.80	8.05	17.51	20.40	21.18	21.31	18.50
Multiple Occupation	0.82	0.00	1.50	2.63	2.88	0.00	1.44
DK/RF	0.06	0.00	0.11	0.01	0.00	5.59	0.09
Total	100	100	100	100	100	100	100

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

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

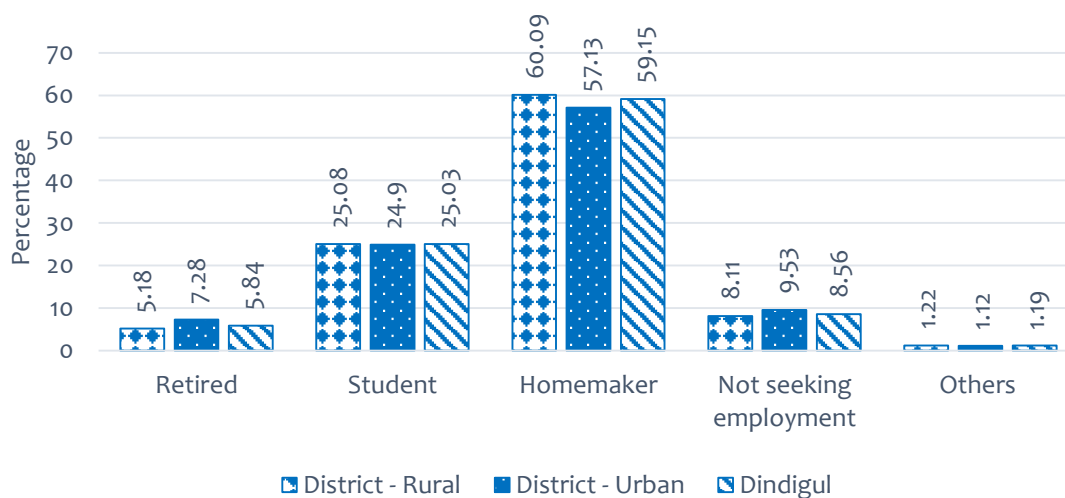
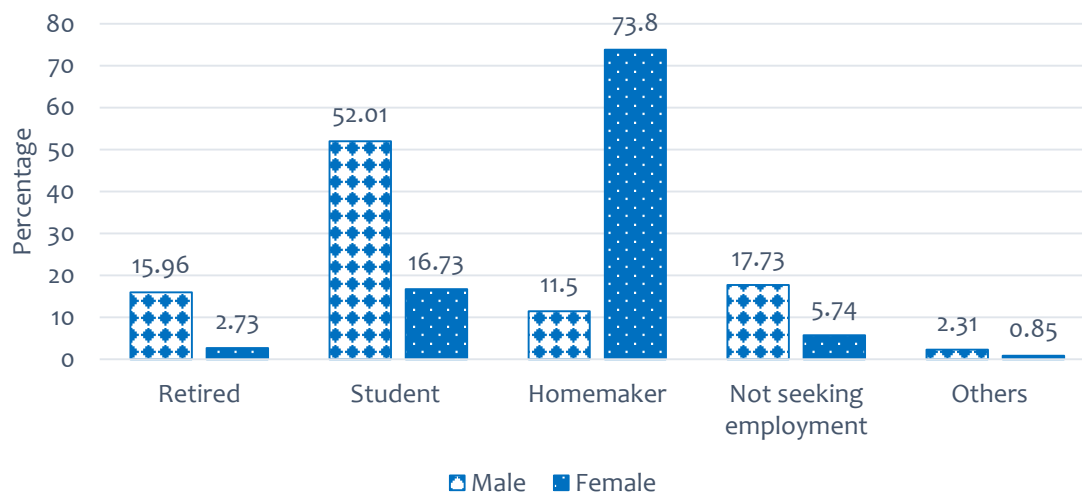


Chart 3.6 shows that similar to the trend at the state level (TNHPS-PBS, 2021), more than half the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were students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

Chart 3.7 Composition of the Population not in the Labour Force – Gender-wise



The gender-wise distribution of the population currently not in the labour force is given in Chart 3.7. While Chart 3.3 represents the lower female involvement in formal education, Chart 3.7 shows the staggeringly lower female involvement in higher education as compared to men as only 16.73 percent of the female not-in-labour-force population were students. Similar to the state trend, the majority of the male not-in-labour-force population

were students, whereas a whopping majority of females were homemakers. It must be noted that the study did not capture unpaid domestic labour or any other form of unpaid labour carried out by women.

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

Current Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Retired	6.52	0.00	6.00	3.49	2.16	16.45	5.84
Student	26.17	49.63	22.79	29.03	38.97	18.46	25.03
Homemaker	58.01	40.44	60.14	59.71	49.93	56.92	59.15
Not seeking employment	8.13	9.93	9.37	6.98	6.89	3.41	8.56
Others	0.95	0.00	1.50	0.42	1.98	3.41	1.19
DK/RF	0.22	0.00	0.19	0.37	0.07	1.34	0.23
Total	100	100	100	100	100	100	100

Table 3.11 shows that within all social groups in the district, the percentage of homemakers was highest compared to other categories except the ST category, which had a higher percentage of not-working population as students compared to the other social groups. However, the results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

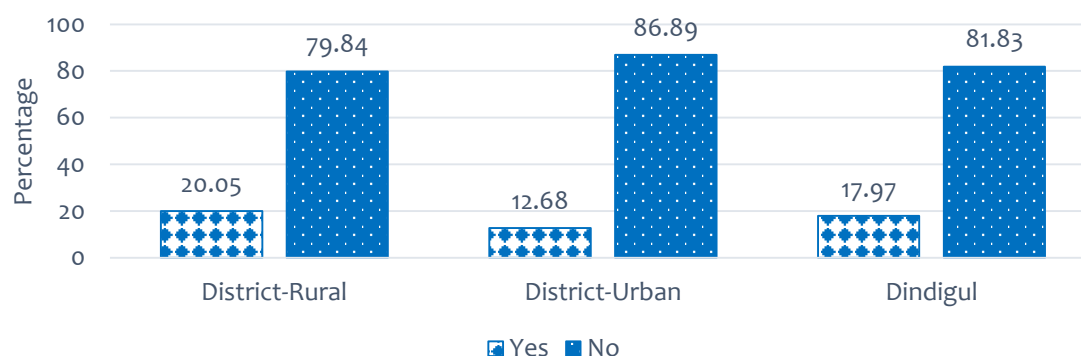
3.3 Socio-Economic Indicators

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

3.3.1 Ownership of Agricultural Land

The PBS estimates of ownership of agricultural land at the household level—namely irrigated, unirrigated or a combination of both—in the rural and urban areas of Dindigul district is given in Chart 3.8. The TNHPS PBS definition of land ownership does not include leased land or other forms of holdings. Data were collected only on the ownership of agricultural land. The fourth round of the National Family Health Survey (NFHS, 2015-16) was a secondary source of data that followed the same definition for ownership of agricultural land.

Chart 3.8 Ownership of Agricultural Land



As per the state estimates, the percentage of total households owning agricultural land in Tamil Nadu was 19.41 percent. Dindigul was ranked nineteenth among the then 32 districts in 2018 on the percentage of total households owning agricultural land (TNHPS-PBS, 2021). Chart 3.8 shows that around 17.97 percent of the households in the Dindigul district owned agricultural land, whereas 81.83 percent of households did not own agricultural land. The percentage of households owning agricultural land was higher in rural areas than in urban areas of the district.

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

Type of Agriculture Land	Area Type		
	Rural	Urban	Dindigul
Only Irrigated Agriculture Land	49.74	48.18	49.43
Only Unirrigated Agriculture Land	39.34	43.11	40.09
Both Irrigated and Unirrigated Agriculture Land	10.45	7.69	9.90
DK/RF	0.48	1.01	0.59
Total	100	100	100

Table 3.12 shows that the majority of the households who owned agricultural land in the Dindigul district—about 49.43 percent—depended on various irrigation sources for cultivation. Dug wells, tube wells, canal irrigation and tank irrigation are the major sources of irrigation in Dindigul district (Tamil Nadu State Planning Commission, 2017b). Around 39.34 percent of agricultural land-owning households in rural areas and 43.11 percent of agricultural land-owning households in urban areas depended on rain-fed irrigation alone. Among the agricultural land-holding households, the percentage of households having irrigated agricultural land in the district was 49.43 percent, which was lower than the state estimate of 50.03 percent (TNHPS-PBS, 2021).

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

Agricultural Land Ownership	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Yes	5.28	0.00	25.02	24.67	23.21	6.81	17.97
No	94.55	100.00	74.73	75.33	76.79	93.19	81.83
DK/RF	0.17	0.00	0.25	0.00	0.00	0.00	0.20
Total	100	100	100	100	100	100	100

Table 3.13 shows that BC category households at 25.02 percent and MBC category households at 24.67 percent were the predominant agricultural landholders in the Dindigul district compared to other social groups. Only 6.81 percent of General category households and 5.28 percent of SC households owned agricultural land in the district. None of the nine ST households surveyed in the district-owned agricultural land.

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

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

Size of Agricultural Land (in Hectares)	Area Type		
	Rural	Urban	Dindigul
Marginal (0.01 - 0.99)	70.35	63.53	68.94
Small (1 - 1.99)	16.11	22.94	17.52
Semi Medium (2 - 3.99)	8.82	10.04	9.07
Medium (4 - 9.99)	3.76	1.90	3.38
Large (10 and above)	0.96	1.58	1.09
Total	100	100	100

Table 3.14 shows that 86.46 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands (less than 2 hectares). This estimate is lower than the state level estimate of 89.33 percent. The shares of semi-medium, medium and large landholdings were higher than that of the state- which was 7.64 percent, 2.26 percent and 0.77 percent respectively.

3.3.2 Ownership of Agriculture, Allied and Fishing Assets

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

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

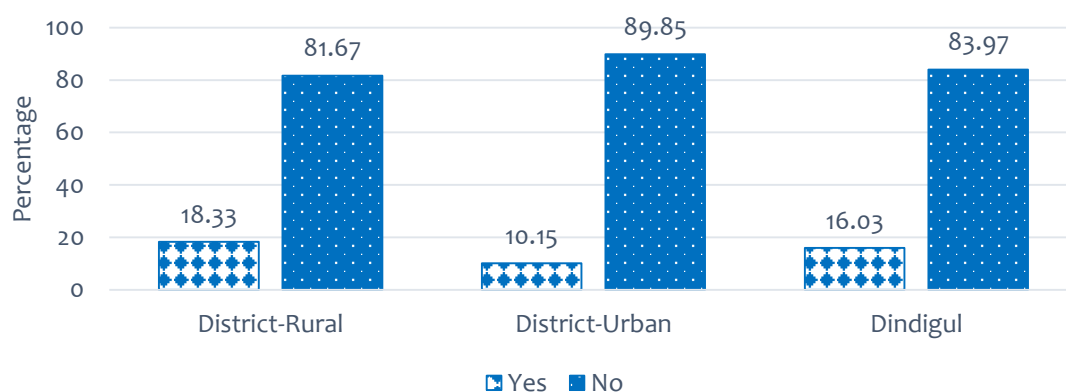
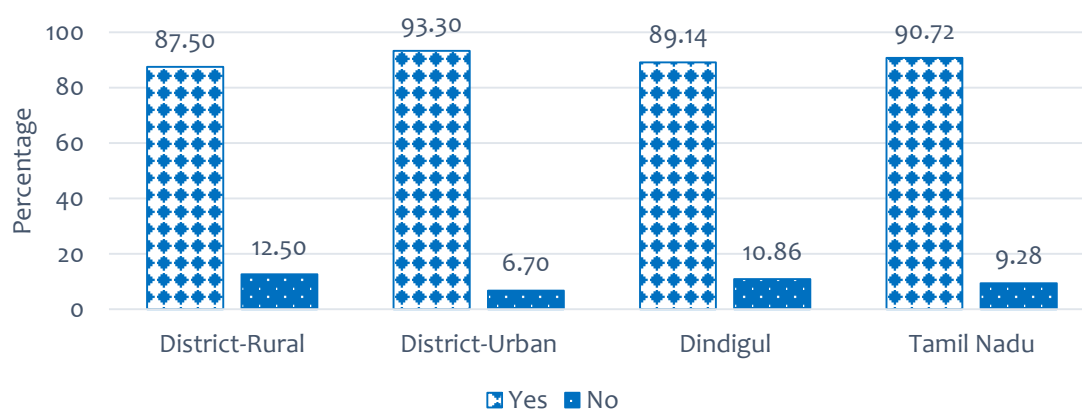


Chart 3.9 shows that 16.03 percent of the households in the Dindigul district owned at least one agricultural, allied agricultural and fishing asset. The estimate was lower than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The proportion of households owning at least one agricultural, allied agricultural and fishing asset was higher in rural areas—about 18.33 percent—than in urban areas about 10.15 percent—of the district.

3.3.3 Presence of Household Assets

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

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



The percentage of households owning at least one household asset in the Dindigul district was 89.14 percent, which was lower than the state estimate of 90.72 percent. Within the district, the urban areas had a higher percentage of households owning at least one household asset than the rural areas.

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

Presence of Household Assets	Social Group						Dindigul
	SC	ST	BC	MBC	DNC	General	
Yes	86.64	98.53	90.46	89.90	92.19	100.00	89.14
No	13.36	1.47	9.54	10.10	7.81	0.00	10.86
Total	100	100	100	100	100	100	100

The PBS estimates show that all the General category households owned at least one household asset. The SC category had the lowest percentage of households owning at least one household asset—about 86.64 percent—compared to other social groups in the district. Around 13.36 percent of the SC households did not even own a mobile phone. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

3.3.4 Possession of Ration Card

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

Chart 3.11 Possession of Ration Card

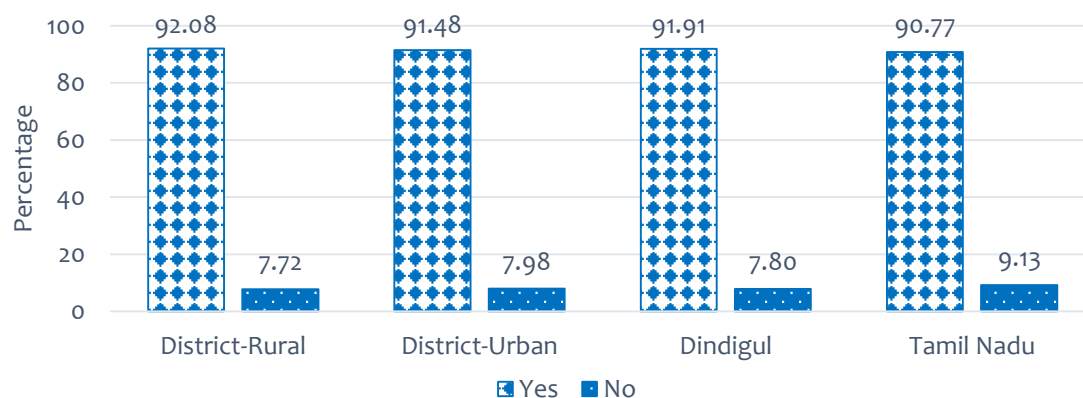


Chart 3.11 shows that the percentage of households in the Dindigul district that possessed a ration card was higher than the state estimate. A higher percentage of rural households possessed ration cards as compared to urban households.

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

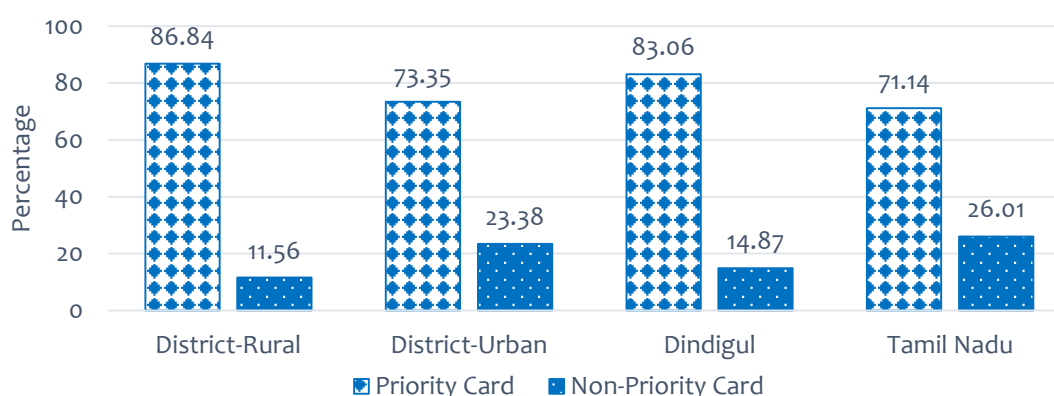
Possession of Ration Card	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Yes	90.03	73.64	93.10	93.47	85.99	96.57	91.91
No	9.52	26.36	6.71	6.53	14.01	3.43	7.80
DK/RF	0.45	0.00	0.20	0.00	0.00	0.00	0.29
Total	100	100	100	100	100	100	100

Table 3.16 shows that more than 85 percent of households belonging to almost all social groups except the ST category possessed a ration card. Possession of ration cards was highest among the General category households at 96.57 percent and lowest among DNC category households at 85.99 percent. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

3.3.5 Type of Ration Card

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

Chart 3.12 Type of Ration Card at the Household Level



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

3.4 Household Income

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

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

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

Source	Rural	Urban	Dindigul	Tamil Nadu
Agriculture	58,801	1,07,086	65,933	61,830
Allied Agriculture	37,493	67,714	44,861	38,576
Salaried	1,28,733	2,37,503	1,68,214	2,29,857
Self Employed	1,28,050	1,40,995	1,33,627	1,47,403
Wage Labour	40,567	49,471	42,243	47,734
Other Sources	73,459	1,49,589	99,464	97,646
Income from all Sources	89,551	1,69,177	1,11,764	1,42,752

The mean household income was higher among the households with salaried income and lower among the households that depended on wages. On the whole, the mean annual household income of the Dindigul district was 21.71 percent lower than the state estimates. Among the then 32 districts, Dindigul was ranked eighteenth in terms of mean annual household income (TNHPS-PBS, 2021).

In the rural areas of Dindigul district, the mean household income was lower compared to the rural state estimate of ₹92,765 (TNHPS-PBS, 2021). The mean annual household income was comparatively lesser in rural areas of the district as the majority of the agricultural land-owning households were marginal landholders (see Table 3.14). The mean household income was higher among the households who depended on salaried income and self-employment. Lower mean income was reported among the households that engaged in allied agriculture activities as a source of income.

In the urban areas of Dindigul district, the mean household income was lower compared to the urban state estimate of ₹1,99,629 (TNHPS-PBS, 2021). The mean household income was higher among the households who depended on salaried income. Lower mean income was reported among the households that engaged in wage labour.

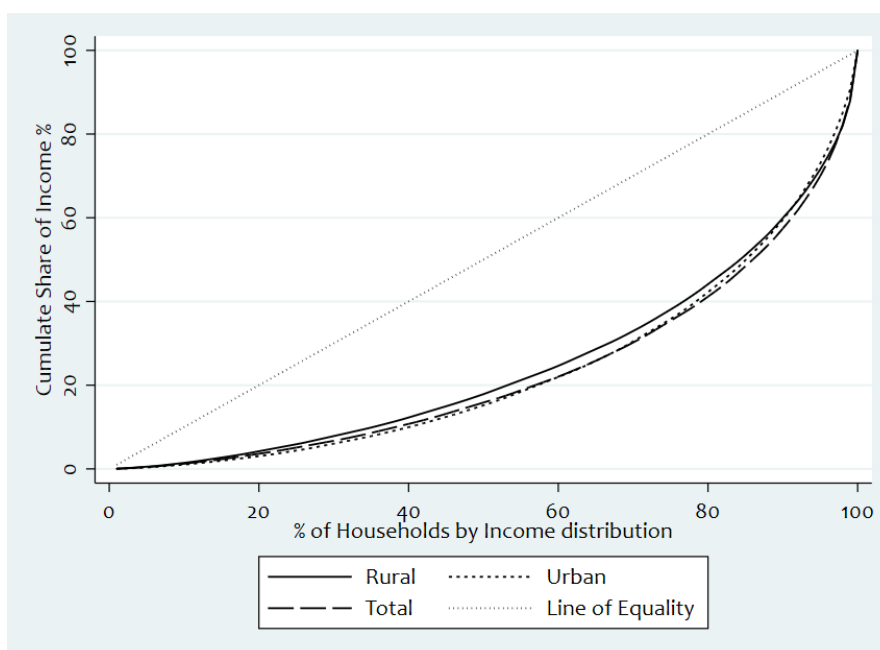
3.4.2 Income Inequality in Dindigul District

Table 3.18 represents the area wise Gini coefficient values. The Gini coefficient measures the inequality levels where the Gini coefficient value of 0 represents perfect equality and 1—or 100 percent—represents perfect inequality across households. The income inequality in Dindigul district (0.538) was lower than the state estimate (0.563)⁵. The income inequality across households in urban areas of the district was found to be higher than in the rural areas of the district.

Table 3.18 Gini Coefficient of Income Inequality- Area-wise

Area	Gini Coefficient
Rural	0.506
Urban	0.535
Dindigul	0.538
Tamil Nadu	0.563

Chart 3.13 Lorenz Curve and Income Inequality



Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of the population. Chart 3.13 represents that the bottom 60 percent of the

⁵Other 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).

households have around 20 percent of total income; the bottom 80 percent of households have around 40 percent of total income and the top 20 percent of households have around 60 percent of total income. Both Chart 3.13 and Table 3.18 show that income inequality was higher in urban areas compared to the rural areas of the district.

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

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

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

Expectation of Change in Future Household Income	Area Type			
	Rural	Urban	Dindigul	Tamil Nadu
Higher	58.73	50.73	56.47	50.06
Lower	12.03	12.26	12.10	8.17
About the same	27.55	31.86	28.76	31.66
DK/RF	1.69	5.15	2.67	10.11
Total	100	100	100	100

More than half of the households in rural areas and urban areas of the district expected that their household income would increase in the coming five years. A higher percentage of rural households expected an increase in income compared to rural households. Around 28.76 percent of the households in the district foresaw that their future income would remain the same.

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

Expectation of Change in Future Household Income	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Higher	62.55	11.54	54.57	51.80	27.46	76.45	56.47
Lower	11.19	27.83	12.95	10.94	10.80	9.50	12.10
About the same	24.65	58.81	29.18	33.90	61.73	14.04	28.76
DK/RF	1.60	1.83	3.30	3.35	0.00	0.00	2.67
Total	100	100	100	100	100	100	100

The majority of the General category households—about 76.45 percent—and SC households—about 62.55 percent—in the district were expecting an increase in income. A higher percentage of BC households were expecting a decrease in income compared to other social categories. The largest proportion of DNC households expected their income to remain the same. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

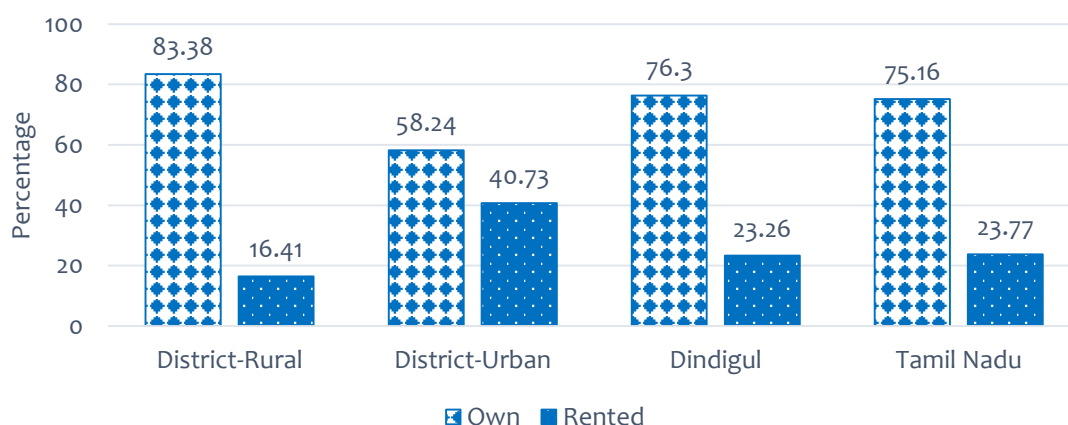
3.5 Basic Infrastructure

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

3.5.1 House Ownership Status

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

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



More than three-quarters of the households lived in their own houses and, less than a quarter of the households lived in rented houses in the Dindigul district. The percentage of households living in their own houses in the district is slightly higher than the state estimates. The district was ranked twentieth among all districts of Tamil Nadu in terms of percentage of households living in their own houses (TNHPS-PBS, 2021). There existed a wide range disparity between the ownership of houses in rural and urban areas. While most of the households living in their own houses in rural areas—about 83.38 percent—a larger portion of urban households were relying on rented houses for their stay in the urban areas—about 40.73 percent. A meagre 0.39 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	Dindigul
Own	80.79	14.83	73.73	76.54	75.85	62.73	76.30
Rented	18.87	85.17	25.81	23.28	20.52	37.27	23.26
Others	0.33	0.00	0.40	0.18	3.63	0.00	0.39
DK/RF	0.00	0.00	0.06	0.00	0.00	0.00	0.05
Total	100	100	100	100	100	100	100

Table 3.21 shows that the percentage of households living in their own house was higher among SC households at 80.79 percent compared to other social groups. On the other hand, only 62.73 percent of the General category households were doing so. The estimate on the percentage of General category households living in rented houses was higher than the state estimates for General category households at 36.4 percent (TNHPS-PBS, 2021). The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

A detailed analysis of the ownership of houses showed that out of 76.30 percent of households that owned houses in the Dindigul district, 15.15 percent of houses were built under a government scheme (See Table 3.22).

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

House Constructed Under a Government Scheme	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Yes	30.23	0.00	5.65	9.84	5.64	0.00	15.15
No	69.55	100.00	94.27	90.13	94.36	100.00	84.73
DK/RF	0.22	0.00	0.07	0.03	0.00	0.00	0.12
Total	100	100	100	100	100	100	100

Among the owned houses, the percentage of houses constructed under a government scheme was higher in the Dindigul district—about 15.15 percent—compared to the state estimate of 14.12 percent (TNHPS-PBS, 2021). In Dindigul, SC households at 30.23 percent had the highest percentage of houses built under a government scheme compared to other social groups. None of the four house-owning ST households and twenty-one house-owning General category households surveyed in the district were found to have built houses under a government scheme, compared to 34.7 percent of ST and 1.7 percent of General category households as per the state estimates (TNHPS-PBS, 2021).

3.5.2 House Type

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

Chart 3.15 Types of Houses - Area wise

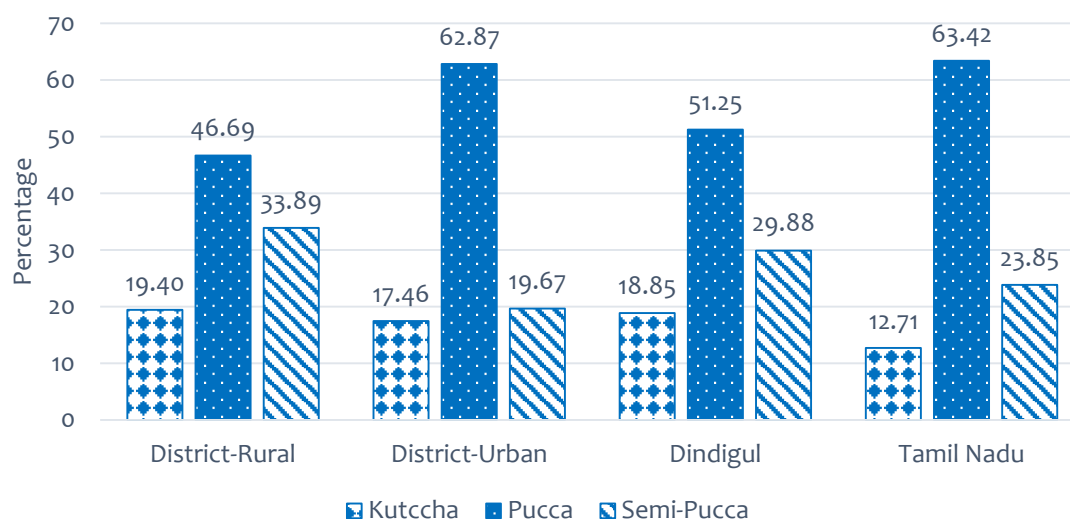


Chart 3.15 shows that the majority of households—about 51.25 percent—in the Dindigul district were living in pucca houses. The percentage of households living in pucca houses was lower than the state estimates of 63.42 percent. The percentage of people living in pucca houses was higher in urban areas compared to the rural areas of the district. While 75.22 percent of state urban households lived in pucca houses (TNHPS-PBS, 2021), only 62.87 percent of urban households in the district lived in pucca houses. The percentage of people living in Kutccha houses was almost one-fifth in rural areas. In urban areas, the percentage of people living in semi-pucca and kutccha houses was similar.

3.5.3 Primary Drinking Water Source

In this section, we discuss the findings of the PBS on the primary source of drinking water of the households in Dindigul district. The primary sources⁶ of water are bottled water, piped water into dwelling, piped water to yard or plot, public tap or standpipe, tube well and borehole. Other water sources include protected wells, unprotected wells, rainwater collection, and surface water (tank/pond/river/dam).

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

Chart 3.16 Primary Source of Drinking Water of Households

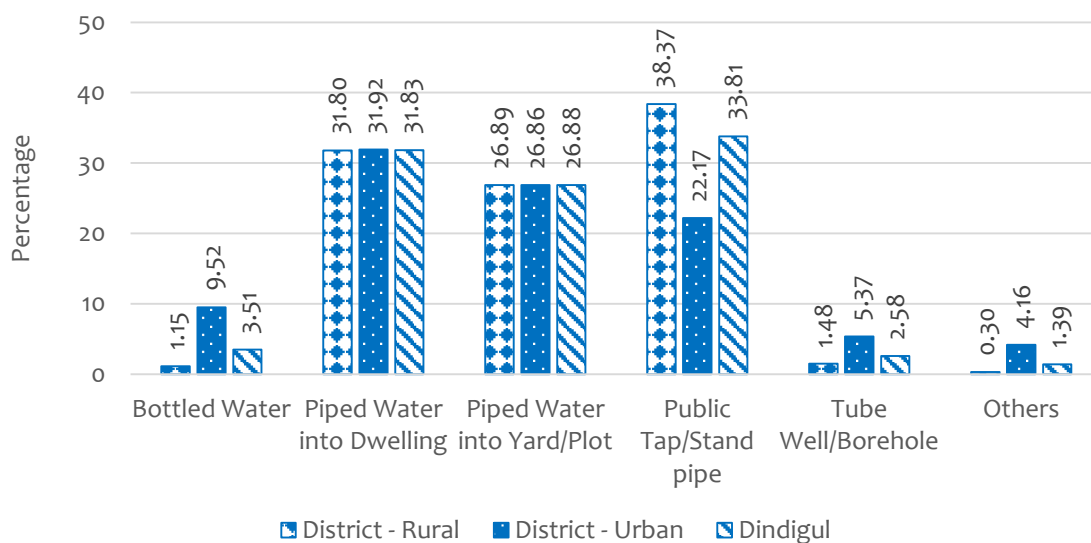


Chart 3.16 shows that 33.81 percent of households in the Dindigul district were using public tap or standpipe as their primary source of drinking water followed by piped water into dwelling, whereas 32.84 percent of households in the state were using public tap or standpipe and 32.00 percent were using piped water into the dwelling (TNHPS-PBS, 2021). The state estimates show that piped water into the dwelling in urban areas—about 37.02 percent—and public tap/standpipe in rural areas—about 44.51 percent—were the primary water sources of households (TNHPS-PBS, 2021). A similar pattern was observed in the Dindigul district too, piped water into the dwelling in urban areas—about 31.92 percent—and public tap/standpipe in rural areas—about 38.37 percent—were the primary water sources.

3.5.4 Electricity

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

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

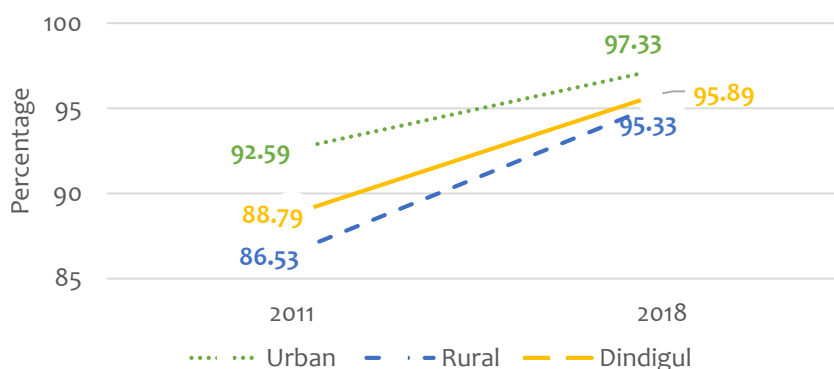


Chart 3.17 shows that a mass electrification had happened in both rural and urban areas of Dindigul district during the period from 2011 to 2018 where the rate of growth of households with electricity was higher in rural areas. Although Dindigul district was ranked thirtieth among the then 32 districts in terms of electrification, around 95.89 percent of households in the district had domestic electricity connection compared to the state estimate of 97.6 percent (TNHPS-PBS, 2021).

3.5.5 Primary Cooking Fuel

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

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

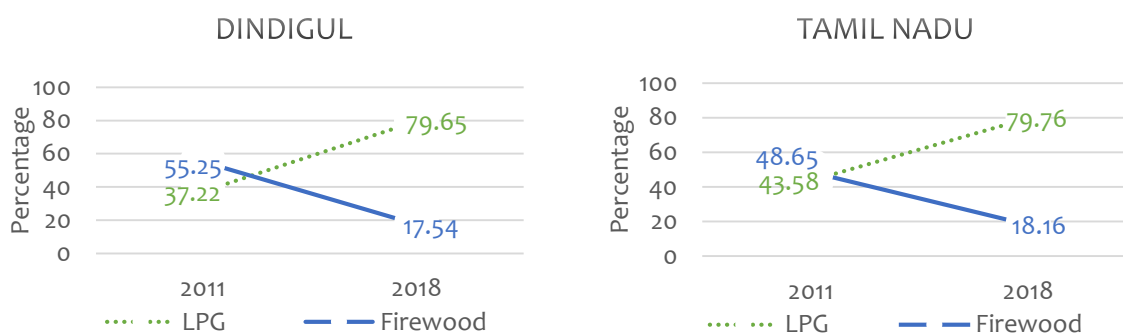


Chart 3.18 shows that, although the use of LPG as primary cooking fuel in the Dindigul district had increased tremendously from 37.22 percent in 2011 (Census 2011) to 79.65 percent in 2018, and about 17.54 percent of households in the district still used firewood as the primary fuel for cooking. Compared to other districts of Tamil Nadu, Dindigul district was ranked sixteenth^h in terms of LPG use and seventeenth in terms of firewood used as primary cooking fuel (TNHPS-PBS, 2021).

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

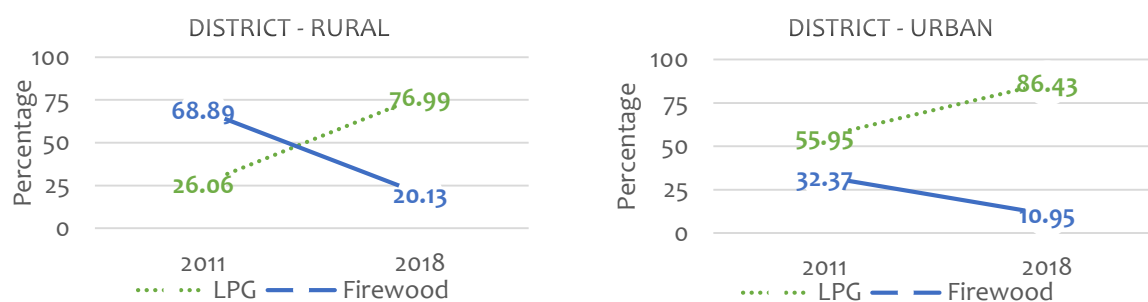


Chart 3.19 indicates that the majority of the households in both rural—about 76.99 percent—and urban areas—about 86.43 percent—used LPG as the primary cooking fuel. The percentage of households using LPG as primary fuel was higher in urban areas of the district compared to rural areas. The usage of firewood had reduced drastically and there was a notable increase in LPG as primary fuel for cooking in both urban and rural areas.

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

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

Primary Cooking Fuel	Social Group						
	SC	ST	BC	MBC	DNC	General	Dindigul
Firewood	21.20	26.36	13.69	20.73	38.13	0.00	17.54
LPG	74.83	48.75	83.84	78.21	61.87	100.00	79.65
Kerosene	3.08	24.89	1.72	0.92	0.00	0.00	2.11
Others	0.59	0.00	0.63	0.14	0.00	0.00	0.53
DK/RF	0.29	0.00	0.12	0.00	0.00	0.00	0.16
Total	100	100	100	100	100	100	100

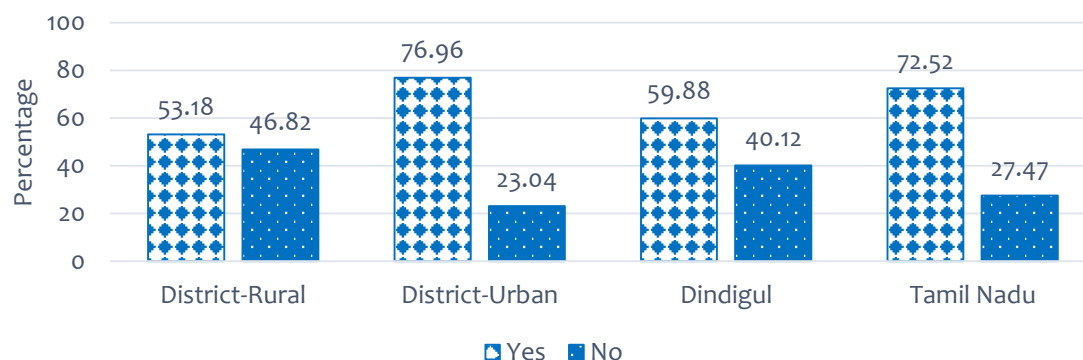
*Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that the majority of BC, MBC and SC households used LPG as a primary fuel for cooking, similar to the state estimates of 85.90 percent, 78.20 percent and 70.00 percent respectively (TNHPS-PBS, 2021). All General category households used LPG as the primary cooking fuel. Whereas almost 38 percent of DNC households and about 21 percent of SC households used firewood as the primary cooking fuel, which was higher than the DNC state estimate of 34.00 percent but lower than the SC state estimate of 27.60 percent (TNHPS-PBS, 2021). The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

3.5.6 Sanitation

The PBS estimates on households with and without a latrine are given in Chart 3.18.

Chart 3.20 Presence of Latrine within the Premises of the Household



The percentage of households with a latrine within house premises had increased from 33.28 percent in 2011 (Census, 2011) to 59.88 percent in 2018, as per the PBS estimates. Dindigul district was positioned twenty-fourth among the 32 districts in terms of the presence of latrine facilities within the premises of the household (TNHPS-PBS, 2021). The households equipped with latrine facilities in the district were lower than the state estimate. However, the rural-urban disparity in sanitation was prevailing as the percentage of rural households equipped with latrine facilities was only 53.18 percent compared to the percentage of urban households with latrine facilities of 76.96 percent.

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	Dindigul
Yes	39.92	73.28	73.02	60.50	59.71	96.49	59.88
No	60.08	26.72	26.98	39.50	40.29	3.51	40.12
Total	100	100	100	100	100	100	100

The estimates show that the majority of General and BC households had a latrine within the premises of the household in the district, the percentages were lower than the state estimates for the respective categories (TNHPS-PBS, 2021). Around 60.08 percent of the SC households in the district did not have a latrine within the premises, compared to state estimates of 47.70 percent (TNHPS-PBS, 2021). The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

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

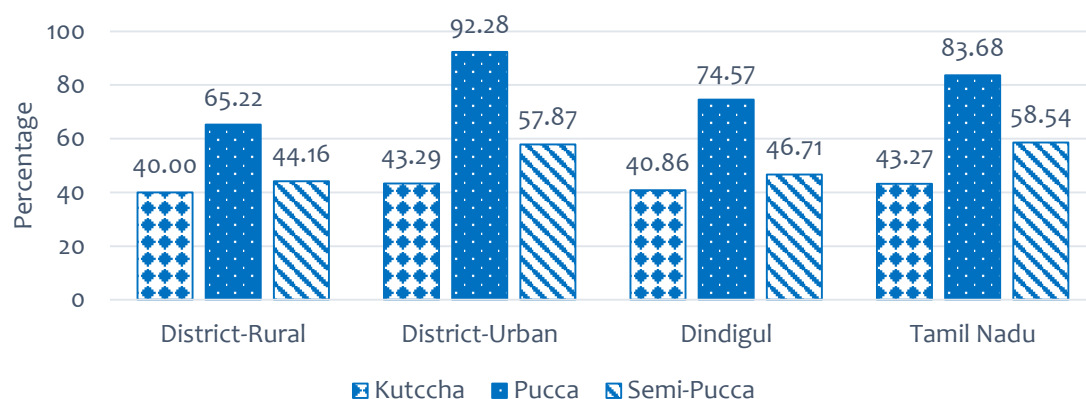
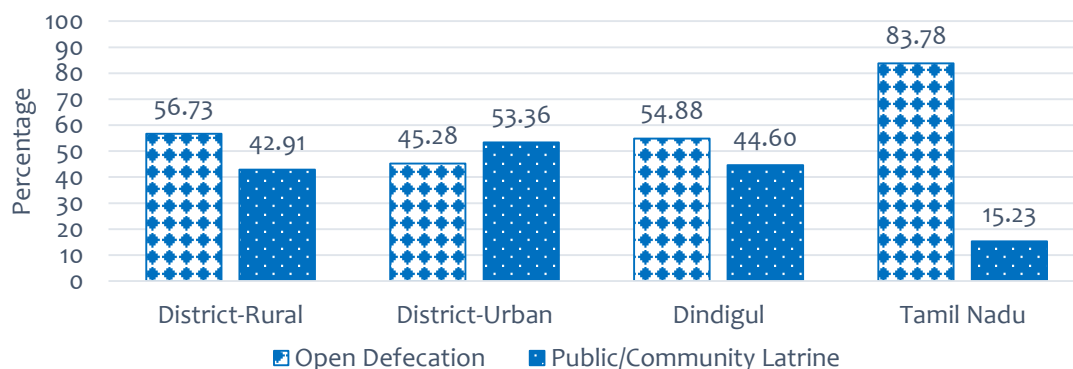


Chart 3.21 depicts the presence of a latrine in the premises of different types of houses. The majority of the pucca houses had latrine facilities within the premises of the house. The percentage of semi-pucca and kutccha houses with latrine facilities within the premises of the house was lower compared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

Chart 3.22 Alternate Practices of Defecation by the Households without Latrine



The percentage of total households in the district following open defecation had declined from 58.71 percent in 2011 (Census, 2011) to 22.02 percent in 2018, as per the PBS estimates. Chart 3.22 shows that 54.88 percent of households without a latrine within the premises of the houses in the Dindigul district were following open defecation. The practice of open defecation was higher in rural areas compared to urban areas of the district. The percentage of households without a latrine within the premises of the houses following open defecation was significantly lower than the state estimates. Compared to other districts of Tamil Nadu, Dindigul district was positioned eighteenth in terms of the percentage of total households following open defecation.

4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of the Dindigul district was conducted from a sample of 6,628 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.

Dindigul district exhibits significant standing among Tamil Nadu districts, securing the seventh position in terms of the percentage of the working population. Remarkably, the district demonstrates a lower percentage of unemployed individuals in both rural and urban areas compared to state estimates. The district also surpasses state estimates in terms of female work participation.

In the realm of agriculture, Dindigul performs on par with the state, with similar percentages of households possessing irrigated agricultural land among agricultural landholders. The ownership of at least one household asset aligns with state estimates. Dindigul district further reflects state averages in terms of LPG usage as the primary cooking fuel and the percentage of households residing in their own houses.

Despite being ranked thirtieth in electrification among the then 32 districts, the district's electrification rate of 95.89 percent is only marginally lower than the state average of 97.6 percent. These findings highlight the Dindigul district's favourable position in workforce participation, asset ownership, and essential amenities, with minor disparities in electrification.

Given these findings, the district must prioritize a set of indicators. Firstly, there is an urgent need for an upgraded educational infrastructure to promote the improvement of literacy rates in Dindigul. The district's literacy rate is below the state average, with around 18.82 percent of the population lacking formal education, and a significant portion of this demographic experiencing functional illiteracy. Particularly within vulnerable minorities such as STs, functional literacy remains low.

Dindigul also presents an intriguing case, where the percentage of employed individuals exceeds the state average. However, the mean annual household income lags by 21.70 percent. This conundrum can be attributed to a predominant reliance on casual labour in the district, as opposed to formal employment that typically offers higher earnings. Without advancements in literacy rates within the district, the prospect of effecting a structural transition from subsistence labour to formal employment would remain unattainable in Dindigul.

The district also needs to focus on the third challenge which is in terms of addressing housing disparities. Dindigul's estimate of households in pucca houses (51.25 percent) is significantly lower than the state estimate (63.42 percent). Additionally, there is a visible deficiency in latrine facilities compared to state estimates. Furthermore, the district ranks eighteenth in the percentage of households practising open defecation within Tamil Nadu. Immediate policy interventions are required to mitigate the challenges posed by the high prevalence of open defecation and the widespread use of firewood as the primary cooking fuel, particularly in rural areas. Simultaneously, efforts to diminish open defecation should prioritize the expansion of household-level latrine facilities.

To foster comprehensive development, the district should adopt a multifaceted policy approach to address educational infrastructure, employment generation and housing amenities to foster holistic development.

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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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