

Department of  
Economics  
& Statistics



**Karur**



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**

***Karur District***

**February 2024**

**Principal Investigator  
& Project Coordinator**

**Prof. Kripa Ananthpur**

**Principal Investigator**

**Prof. L. Venkatachalam**

**Principal Investigator**

**Dr. K. Jafar**

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

Cover page image source: <http://tinyurl.com/3kxu57up>

This work is licensed under a Creative Commons  
Attribution-NonCommercial-NoDerivatives 4.0  
International License



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

Suggested citation:

Ananthpur, K., Venkatachalam, L., & Jafar, K. (2024). 'Karur - 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.10634806

## Table of Contents

List of Tables	2
List of Figures	2
Acknowledgements	4
Summary of PBS Findings	6
1. Introduction	9
1.1 Profile of Karur District	9
1.2 About the TNHPS and Pre-Baseline Survey (PBS)	10
2. Survey Response	11
3. Key Findings	12
3.1 Demographic Indicators	12
3.2 Development Indicators	13
3.2.1 Education	13
3.2.2 Education Status of Population (Age 7 and above)	14
3.2.3 Employment Status	18
3.3 Socio-Economic Indicators	24
3.3.1 Ownership of Agricultural Land	24
3.3.2 Ownership of Agricultural, Allied Agricultural and Fishing Assets	26
3.3.3 Presence of Household Assets	26
3.3.4 Possession of Ration Card	27
3.3.5 Type of Ration Card	28
3.4 Household Income	29
3.4.1 Annual Household Income from Various Sources in the year 2017-2018	29
3.4.2 Income Inequality in Karur District	30
3.4.3 Households' Expectation of Change in their Income in the Next 5 Years	31
3.5 Basic Infrastructure	32
3.5.1 House Ownership Status	33
3.5.2 House Type	34
3.5.3 Primary Drinking Water Source	35
3.5.4 Electricity	35
3.5.5 Primary Cooking Fuel	36
3.5.6 Sanitation	38
4. Conclusion and Recommendations	41
References	42

## List of Tables

Table 2.1	Distribution of Sample Households – Response-wise	11
Table 3.1	Social Group-wise Distribution of Households	13
Table 3.2	Literacy Rates between Census 2011 and PBS 2018	13
Table 3.3	Formal Schooling of the Population - Social Group-wise Percentages	15
Table 3.4	Highest Formal Educational Attainment of Population - Area-wise Percentages	16
Table 3.5	Highest Formal Educational Attainment of Population: Gender-wise Percentages	16
Table 3.6	Highest Formal Educational Attainment of Population - Social Group-wise Percentages	17
Table 3.7	Functional Literacy of Population with No Formal Schooling – Area-wise Percentages	18
Table 3.8	Functional Literacy of Population with No Formal Schooling - Social Group-wise Percentages	18
Table 3.9	Work type of Employed Population – Area-wise Percentages	21
Table 3.10	Percentage of Employed Population Engaged in Different Types of Livelihood Activities – Social Group-wise Percentages	22
Table 3.11	Composition of Population Not in the Labour Force - Social Group-wise Percentages	23
Table 3.12	Type of Agricultural Land Owned by the Households – Area-wise Percentages	24
Table 3.13	Ownership of Agricultural Land - Social Group-wise Percentages	25
Table 3.14	Size of Agricultural Land Owned by the Households – Area-wise Percentages	25
Table 3.15	Presence of at least one Household Asset - Social Group-wise Percentages	27
Table 3.16	Possession of Ration Card at the Household Level - Social Group-wise Percentages	28
Table 3.17	Mean Annual Household Income from Different Sources in the FY 2017-2018 (INR)	29
Table 3.18	Gini Coefficient of Income Inequality- Area-wise	30
Table 3.19	Households' Expectation of Change in Income in the Next 5 Years – Area-wise Percentages	32
Table 3.20	Households' Expectation of Change in Income in the Next 5 Years - Social Group-wise Percentages	32
Table 3.21	Ownership Status of the Households' Dwelling/House - Social Group-wise Percentages	33
Table 3.22	House Constructed Under a Government Scheme - Social Group-wise Percentages	34
Table 3.23	Primary Fuel for Cooking in the Household - Social Group-wise Percentages	37
Table 3.24	Presence of Latrine within the Premises of the Household - Social Group-wise Percentages	38

## List of Figures

Chart 3.1	Age-wise Distribution of Population	12
Chart 3.2	Formal Schooling of the Population – Area-wise	14
Chart 3.3	Formal Schooling of the Population – Gender-wise	15
Chart 3.4	Employment Status of the Population (Age 14 years and above) – Area-wise	20
Chart 3.5	Employment Status of the Population – Gender-wise	20
Chart 3.6	Composition of Population Not in the Labour Force -Area-wise	22
Chart 3.7	Composition of Population Not in the Labour Force – Gender-wise	23
Chart 3.8	Ownership of Agricultural Land – Area-wise	24
Chart 3.9	Ownership of Agricultural, Allied Agricultural and Fishing Assets – Area-wise	26
Chart 3.10	Ownership of at least one Household Asset – Area-wise	27
Chart 3.11	Possession of Ration Card – Area-wise	28
Chart 3.12	Type of Ration Card at the Household Level – Area-wise	29
Chart 3.13	Lorenz Curve and Income Inequality	31
Chart 3.14	Ownership Status of the Households’ Dwelling/House – Area-wise	33
Chart 3.15	Types of House – Area-wise	34
Chart 3.16	Primary Source of Drinking Water of Households – Area-wise	35
Chart 3.17	Comparison of Households with Electricity between Census 2011 and PBS 2018	36
Chart 3.18	Comparison of Primary Cooking Fuel– District and State	36
Chart 3.19	Comparison of Primary Cooking Fuel– Rural and Urban	37
Chart 3.20	Presence of Latrine within the Premises of the Household – Area-wise	38
Chart 3.21	Presence of Latrine in the Premises of Different Types of Houses – Area-wise	39
Chart 3.22	Alternate Practices of Defecation by the Households without Latrine – Area-wise	39

## 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 Karur district who served during 2018-19—Mr. K. Rajakumar, Mr. N. Thiruvengadam and Mr. S. Pandey, the Deputy Directors (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 Karur 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 Treleven, 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 Late Dr. Hukum Chandra, National Fellow, ICAR–Indian Agricultural Statistics Research Institute and sampling consultant for the TNHPS, for his guidance on sampling and estimation. We thank Prof. Brinda Viswanathan, Professor, Madras School of Economics, for her insights and inputs on 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*

- Karur had a sample size of 6,429 households, of which 68.70 percent of households were from rural areas and 31.30 percent of households were from urban areas.
- The district had a huge demographic dividend with 67.79 percent of the population in the age group up to 45 years. Around 31.60 percent of the population was between 26-45 years of age. The percentage of people above 60 years of age was 12.85 percent.
- Hinduism was followed predominantly in the district.
- The BC and MBC category were the largest in number, together constituting almost 70 percent of the total population in the district. Around 25 percent of the households belonged to the SC category.

### *Education (Age 7 and above)*

- The district had a literacy rate of 82.58 percent, which was lower than the state estimate of 85.40 percent.
- The gender gap in the district's literacy rate was higher in rural areas at 18.62 percent than urban areas at 11.72 percent.
- Around 80.77 percent of the population in the district had formal schooling. Among the population with no formal schooling, around 90 percent did not have functional literacy.

### *Employment (Age 14 and above)*

- Around 54.68 percent of the specified population in the district were employed, which was higher than the state estimate of 50.10 percent. The unemployed population was 3.31 percent, and 42.00 percent were not in the labour force.
- Around 71.87 percent of the males were employed while female employment was at 38.59 percent, which shows the prevailing gender gap in employment.
- Most males—about 49.53 percent—who were currently not working were students, whereas most females—about 73.26 percent—in this category were homemakers.
- The largest proportion of the specified population in the district were casual labourers in the agriculture sector (28.14 percent).

- Salaried work in the private sector was predominant in urban areas while casual labour in agriculture was most prevalent in rural areas of the district.

### *Land Ownership and Assets*

- Around 25.98 percent of the households owned agricultural land in the district. This was higher among rural households than urban households. A larger proportion of BC and DNC households were agricultural land owners in the district, compared to other social groups.
- The percentage of land-owning households that depended on rain-fed irrigation in the district was 31.12 percent. A higher percentage of rural households—32.44 percent—owned unirrigated land than urban households—27.19 percent.
- Around 82 percent of the agricultural land owners had marginal or small (less than 2 hectares) landholdings.
- Around 30 percent of the households owned agricultural, allied agricultural or fishing assets in the district. This was higher among rural households than urban households.
- Around 90 percent of the households in the district owned at least one household asset.

### *Household Income*

- The annual mean income of the households in the district in the financial year 2017-18 was ₹1,11,131; in the urban areas it was ₹1,61,533 and in the rural areas it was ₹81,399. The district's mean annual household income was 22.15 percent lesser than the state estimate, and was ranked nineteenth (among the then 32 districts) in the state.
- The mean income from salaried work was the highest at ₹1,76,600.
- Income inequality in the district (0.555) was lower than the state estimate (0.563).

### *Housing*

- In the district, 80.45 percent of households resided in their own houses. Higher percentage of rural households resided in their own houses compared to urban households of the district.
- Out of the 80.45 percent that owned houses in the district, 19.96 percent of houses were built under a government scheme. SC households were the main beneficiaries of government housing schemes.

- Around 66.53 percent of the households in the district lived in pucca houses, around 20.46 percent lived in semi-pucca and less than 13 percent lived in kutccha houses.

#### *Access to Drinking Water, Electricity and Cooking Fuel*

- Most commonly used primary source of drinking water in the district was using piped water into dwelling at around 43.92 percent.
- Around 97.13 percent of households in the district had domestic electricity connection compared to the state estimate of 97.60 percent.
- About 75.68 percent of the households in the district used LPG as the primary cooking fuel. About 22.80 percent of the households used firewood as the primary cooking fuel.

#### *Sanitation*

- Around 70 percent of the households had latrine within the premises of the household. Latrine presence was higher among urban households than rural households of the district.
- The percentage of total households in the district following open defecation had declined from 53.23 percent in 2011 (Census, 2011) to 26.63 percent in 2018, as per the PBS estimates.
- Out of the 30.50 percent households which did not have latrine within the premises of the house, around 87.15 percent of the households practiced open defecation.

## 1. Introduction

### 1.1 Profile of Karur District

Karur district in Tamil Nadu was formed in the year 1995 from the trifurcation of Tiruchirappalli district into Tiruchirappalli, Karur and Perambalur districts. It is in the central region of the state, with Erode and Namakkal in the north, Tiruchirappalli in the east, Tiruchirappalli and Dindigul in the south, and Tiruppur in the west.

According to Census (2011), Karur had a total population of 10.64 lakhs, accounting for approximately 1.48 percent of Tamil Nadu's total population. The district comprised 2.86 lakh households, with 59.18 percent residing in rural areas. The male population was 49.62 percent, and the female population was 50.38 percent. Karur demonstrated a child-sex ratio of 939.46 compared to the state average of 943.27. Within the social groups, 23.3 percent of the population belonged to the Scheduled Castes, while 0.05 percent belonged to the Scheduled Tribes. The literacy rate in Karur district stood at 75.6 percent, compared to the state's average of 80.09 percent. The male literacy rate was 84.54 percent, while the female literacy rate was 66.86 percent, highlighting the need for investment in women's education.

In the fiscal year 2018-19, Karur's Net District Domestic Product was ₹19,64,375 lakhs, ranking twenty-fourth among all districts. The district's per capita Net District Domestic Product was recorded at ₹1,68,606, ranking it fourteenth 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 24 percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 25 percent and 51 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017a), Karur ranked eighteenth in terms of the Human Development Index with a score of 0.668, a relatively mediocre score. It ranked thirteenth in the Gender Inequality Index with a score of 0.07, which is a moderate score. In terms of the Child Development Index, the district ranked twenty-fifth with a score of 0.571, calling for the need to invest more in the development of the younger generation. Additionally, Karur ranked twenty-seventh in terms of the Multidimensional Poverty Index with a score of 0.61. The district must invest heavily and address the below-average performance in poverty alleviation.

Karur district demonstrates a stable economy with modest Net District Domestic Product and per capita income rankings. While showing average performance in human development and gender equality, the district needs to focus on enhancing child development efforts and addressing its below-average performance in poverty alleviation through significant investments.

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

The Tamil Nadu Household Panel Survey (TNHPS) has been designed as a longitudinal survey, beginning with a Pre-Baseline Survey or the PBS—an extensive household listing activity—followed by a Baseline Survey (Wave 1) and subsequent periodic surveys (Wave 2, Wave 3 etc.). The TNHPS aims to analyze the patterns of change in various socio-economic indicators, including households' income, occupational structures and living conditions.

The PBS collected data on a comprehensive set of socio-economic indicators for the period 2018-19 with the results providing district-level estimates for these indicators, and informing the sampling design and the associated sampling frame for the first wave of the TNHPS. As the Census 2021 has not yet commenced, the PBS estimates act as a valid benchmark for the Government of Tamil Nadu in terms of socio-economic development since 2011. The PBS surveyed around 2,12,282 households in the erstwhile 32 districts of Tamil Nadu across 1476 Primary Sampling Units—684 rural PSUs and 792 urban PSUs.

This report analyzes data from the PBS for Karur district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent Census data of Karur (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Karur district. The sample size for the district was 6,429 households, among which 4,417 households were from rural areas and 2,012 households were from urban areas. The blocks covered during the survey were: Aravakurichi, K. Paramathi, Kadavur, Karur, Krishnarayapuram, Kulithalai, Thanthoni and Thogaimalai.

## 2. Survey Response

For the Pre-Baseline Survey (PBS) 2018-19, a total of 7,260 households in Karur district were selected using a multi-stage stratified sampling design<sup>1</sup>. The final sample size was 6,429 households for PBS, among which 68.70 percent of households were from rural areas and 31.30 percent of households were from urban areas of the district. The area-wise distribution of 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		Karur	
	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage
Response	4,417	89.85	2,012	85.84	6,429	88.55
Non-Response	86	1.75	103	4.39	189	2.60
Non-sample	413	8.40	229	9.77	642	8.84
<b>Total</b>	<b>4,916</b>	<b>100</b>	<b>2,344</b>	<b>100</b>	<b>7,260</b>	<b>100</b>

Karur district had a lower response rate—willingness of households to participate in the TNHPS-PBS—of 88.55 percent compared to the state response rate of 96.5 percent. Rural areas had a higher response rate compared to the urban areas. Around 2.60 percent of households were not willing to participate in the survey. About 8.84 percent of the selected samples were removed as they were not considered as households as per the definition used in the PBS<sup>2</sup>.

<sup>1</sup> Detailed explanation of the Sampling Methodology is available in the TNHPS-PBS State Report (see TNHPS-PBS, 2021)

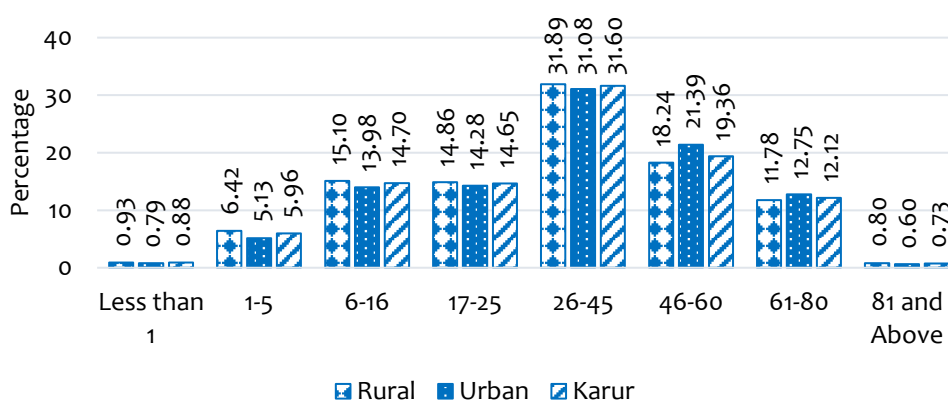
<sup>2</sup> A household is defined as a group of persons normally living together and taking food from a common kitchen. The category called non-sample consisted of institutions, houses of NRIs and other buildings where there was no kitchen.

### 3. Key Findings

#### 3.1 Demographic Indicators

As per the PBS estimates (2018-19), the average household size<sup>3</sup> in the district had reduced from 3.70 in 2011 (Census, 2011) to 3.51 in 2018. As per the PBS estimates, 48.89 percent of the population in the district were male, and 51.10 percent of the population were female. Around 17.85 percent of the households in Karur district were headed by females, which was slightly 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, around 31.60% of the population in the district were in the age group of 26 to 45 years. The population—between 17 to 60 years—in the district was 65.61 percent, which was similar to the state estimate of 66.00 percent (TNHPS-PBS, 2021).

The percentage of currently married population was similar in both urban and rural areas of the district. 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 96.04 percent of the households practiced Hinduism, 3.25 percent practiced Islam and 0.67 percent followed Christianity.

<sup>3</sup> 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	25.44
ST	0.01
BC	43.39
MBC	26.02
Denotified Communities (DNC)	3.52
General	1.53
DK/RF	0.08
<b>Total</b>	<b>100</b>

As per the PBS estimates, the highest percentage of households in Karur district belonged to the BC category. The percentages of SC and ST households in the district were 25.44 percent and 0.01 percent respectively in 2018-19.

The percentage of ST category households of Karur district was only 0.01 percent and only two ST category households were sampled in the district. Hence, the results pertaining to this social group discussed in the report must be interpreted in this context.

### *3.2 Development Indicators*

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

#### *3.2.1 Education*

The change in literacy rate of Karur 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	District - Rural		District - Urban		Karur		Tamil Nadu	
	2011	2018	2011	2018	2011	2018	2011	2018
Male	79.82	88.87	91.38	94.40	84.54	90.86	86.77	90.97
Female	59.02	70.25	78.19	82.68	66.86	74.72	73.40	80.15
<b>Total</b>	<b>69.30</b>	<b>79.32</b>	<b>84.70</b>	<b>88.40</b>	<b>75.60</b>	<b>82.58</b>	<b>80.09</b>	<b>85.40</b>

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



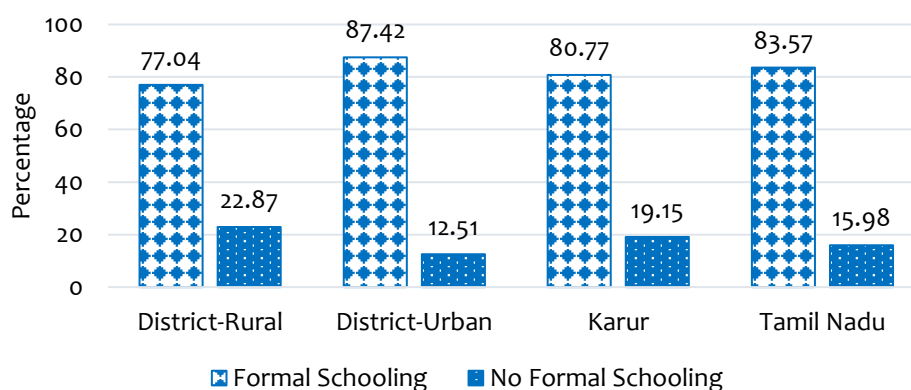
As per Census 2011, the literacy rate in Karur district was 75.60 percent, which was lesser than the state average of 80.09 percent. The PBS estimates showed that in the year 2018, the literacy rate in Karur district had increased to 82.58 percent, which continued to be lesser than the state estimate of 85.40 percent. Nevertheless, Karur district registered 6.98 percent growth in literacy rate between 2011 and 2018 while the state had registered 5.31 percent growth. The difference in literacy rate between state average and Karur was 4.49 percent in 2011, which had reduced to 2.82 percent in 2018. Both male literacy as well as female literacy in the district had recorded an increase during the period under consideration. The gender gap in literacy rate had declined from 17.68 percent in 2011 to 16.14 percent in 2018. As per the state PBS estimates, Karur was ranked twenty-second among the then 32 districts in terms of literacy rate (TNHPS-PBS, 2021).

The literacy rate in rural areas of the district was only 69.30 percent in the year 2011 (Census, 2011) which was lesser than the overall literacy rate of the district. The literacy rate in rural areas of Karur district had increased to 79.32 percent in the year 2018. The rural male and female literacy rates had also recorded an increase during the period 2011-18. The literacy rate in urban areas of Karur district had also increased from 84.70 percent (Census, 2011) to 88.4 percent in the year 2018. There had been an increase in both male literacy as well as female literacy in the urban areas of Karur district between 2011 and 2018. The urban literacy rate continued to be higher than 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 Karur district. The area-wise education status of population in Karur 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 Values are substantially high. Therefore, the total might not add up to 100 percent.

Chart 3.2 shows that 80.77 percent of the population in Karur district had attended formal schooling compared to the state estimate of 83.57 percent. The share of 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

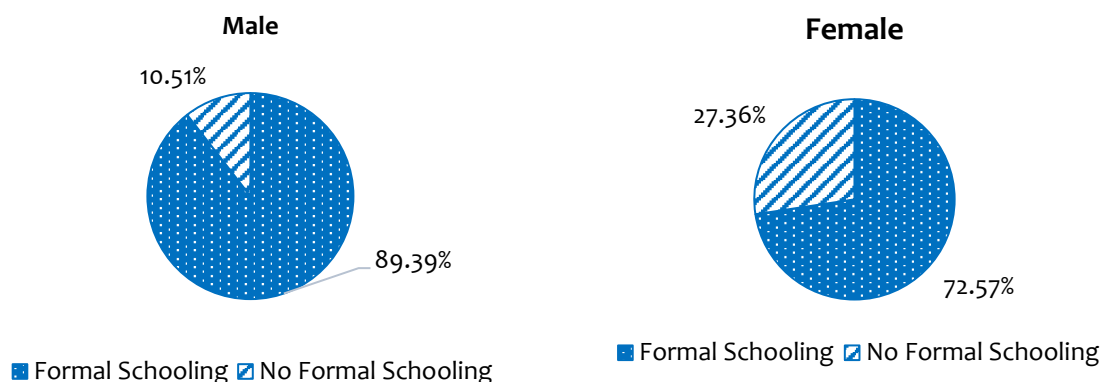


Chart 3.3 shows that the percentage of population that had acquired formal education was higher among the male population as compared to the female population. More than one tenth of the male population did not have formal education compared to more than a quarter of the female population.

A district level analysis on educational attainment status showed greater divergence across various social groups.

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

Education Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Formal Schooling	75.68	100	82.90	81.53	81.18	97.53	80.77
No Formal Schooling	24.15	0.00	17.06	18.40	18.72	2.47	19.15
Others and DK/RF	0.17	0.00	0.04	0.07	0.10	0.00	0.08
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.3 shows the percentage of the population who had attended formal schooling across various social group categories in Karur district. A majority of the General category population, followed by BC and MBC population in the district had formal education. 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	Karur
Primary (I to V)	25.83	18.31	22.91
Middle School (VI to VIII)	21.64	19.70	20.89
High School (IX to X)	22.80	22.78	22.79
Higher Secondary (XI to XII)	15.31	15.23	15.28
Bachelor's degree	8.00	12.71	9.83
Diploma Degree	3.42	4.01	3.65
Post Graduate Degree	2.87	7.17	4.55
Others/DK/RF	0.12	0.08	0.10
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The PBS estimates show that around 81.87 percent of the specified population were either pursuing or had completed schooling up to higher secondary level. Around 18.03 percent of the specified population were either pursuing or had completed tertiary education—such as bachelor’s degree, diploma, post graduate degree and other higher education—which was lower compared to the state estimate of 20.02 percent. Pursuance or completion of tertiary education was higher in urban areas at 23.89 percent compared to the rural areas with 14.29 percent.

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

Educational Attainment	Gender		
	Male	Female	Karur
Primary (I to V)	21.55	24.48	22.91
Middle School (VI to VIII)	21.37	20.32	20.89
High School (IX to X)	24.69	20.57	22.79
Higher Secondary (XI to XII)	13.62	17.23	15.28
Bachelor's degree	9.85	9.81	9.83
Diploma Degree	5.13	1.93	3.65
Post Graduate Degree	3.68	5.56	4.55
Others/DK/RF	0.11	0.09	0.10
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.5 shows the percentage of males and females who were either pursuing or had completed formal education. About 18.66 percent males from the stated population were either pursuing or had completed tertiary education compared to the females at 17.30 percent. Higher percentage of females had completed post-graduation compared to males.

In order to see the social group-wise disparity in educational attainment in Karur district, the PBS had estimated the percentage of population under each category across various education levels.

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

Educational Attainment	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Primary (I to V)	24.78	64.07	21.31	24.63	22.34	10.08	22.91
Middle (VI to VIII)	20.61	0.00	20.14	22.59	23.75	12.50	20.89
High School (IX to X)	23.90	35.93	21.88	23.06	22.71	24.47	22.79
Higher Secondary (XI to XII)	15.02	0.00	16.37	14.18	13.92	12.18	15.28
Bachelor's degree	7.79	0.00	11.28	8.39	10.31	24.11	9.83
Diploma Degree	4.50	0.00	3.61	3.04	2.17	4.70	3.65
Post Graduate Degree	3.17	0.00	5.35	4.02	4.69	11.96	4.55
Others/DK/RF	0.22	0.00	0.05	0.08	0.12	0.00	0.10
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.6 shows that the percentage of population that was either pursuing or had completed tertiary education was higher among General category at 40.77 percent, followed by BC at 20.24 percent. The MBC and SC population had lower percentage at 15.45 percent and 15.46 percent respectively. The proportion of population that was either pursuing or had completed tertiary education within all social categories with exception of DNC in the district was lower than the corresponding state level estimates. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

Around 19.15 percent of the population had not received formal education in Karur district (refer Chart 3.2). Among them, the PBS had 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	Karur
Yes	9.98	7.83	9.48
No	89.96	92.17	90.48
DK/RF	0.06	0.00	0.05
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.7 shows the functional literacy status of the population with no formal schooling. Only 9.48 percent of the population without formal schooling had functional literacy. The functional literacy rate of the specified population group in rural areas was higher than 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	BC	MBC	DNC	General	Karur
Yes	8.76	8.34	12.86	2.39	28.68	9.48
No	91.24	91.62	87.02	97.61	71.32	90.48
DK/RF	0.00	0.05	0.12	0.00	0.00	0.05
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\*Among the two ST category households surveyed, population from both the households had formal education.

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 General population and lower among the DNC 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 unemployed and not-in-labour-force population at the district level and comparison of the findings with the state PBS estimates. In the PBS, the population of 14 years and above has been classified as employed, unemployed and not in the labour force<sup>4</sup>.

<sup>4</sup> Percentage of population employed = (Number of employed persons 14 years and above/Total population of the district 14 years and above) \*100

The employed category includes the following:

- (i) People who are self-employed in agriculture,
- (ii) People who are self-employed in allied agricultural activities,
- (iii) People who are self-employed in non-agricultural activities,
- (iv) People who work as casual labourers in agriculture,
- (v) People who work as casual labourers in industry,
- (vi) People who work as casual labourers in the service sector,
- (vii) People who work as casual labourers in other domains,
- (viii) People who work as salaried employees in the government sector,
- (ix) People who work as salaried employees in the private sector,
- (x) People who are involved in multiple occupations, and
- (xi) People who are involved in other types of work.

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

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

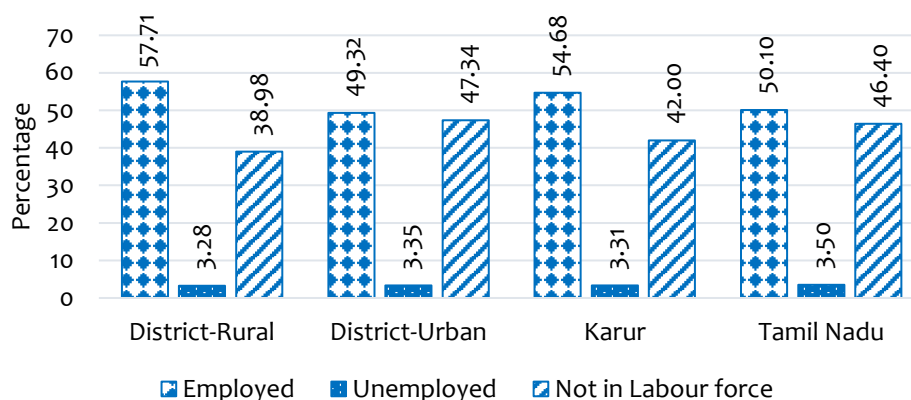
- (i) People who attended educational institutions,
- (ii) People who attended to domestic duties only,
- (iii) Rentiers, pensioners, remittance recipients, etc.,
- (iv) People who are not able to work due to disability and
- (v) Others (including begging, etc.).

---

Percentage of population unemployed = (Number of unemployed persons 14 years and above/Total population of the district 14 years and above) \*100

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

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



The overall percentage of employed population—14 years and above—in the district was higher than the state estimates. The percentage of population employed in rural areas was higher than in the urban areas of the district. The percentage of unemployed population in the district was lower than the state estimate. The unemployment status in rural areas of the district at 3.28 percent was lower than the state rural estimate of 3.60 percent, whereas the district urban unemployment status at 3.35 percent was marginally higher than the state urban estimate of 3.30 percent. Karur district was positioned fourth among all districts in Tamil Nadu in terms of employed population and positioned twentieth in terms of the unemployment status).

Chart 3.5 Employment Status of the Population – Gender-wise

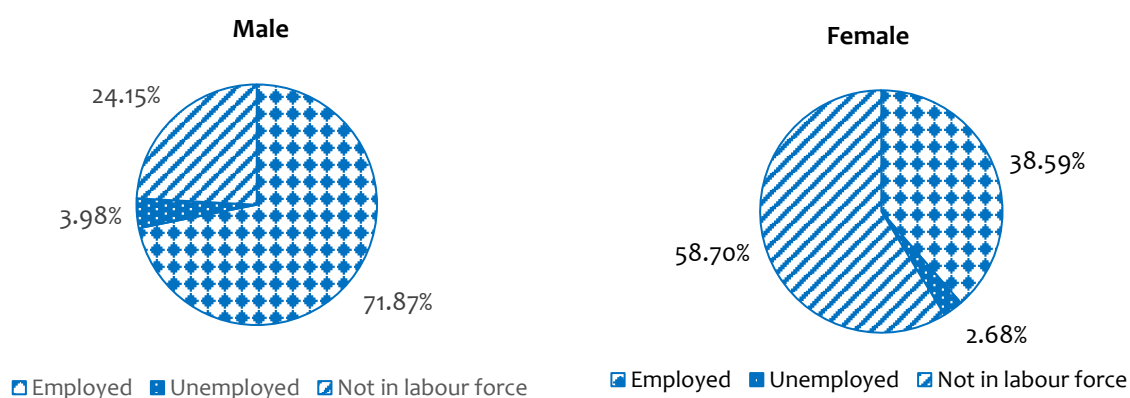


Chart 3.5 shows the gender-wise employment status of the population of the age 14 years and above. While 71.87 percent of the male population were employed, only 38.59 percent of the female population were employed. Decreased female labour force participation has been well documented at the national level (Das et al., 2015; Desai, 2017; Desai & Joshi, 2019). The female work participation of the district was higher than the national average of 23.3 percent in 2017-18 (National Statistical Office, 2019), and the state estimate of 29.96

percent (TNHPS-PBS, 2021). Around 58.70 percent of the female population were not in the labour force, and among these, majority of them—about 73.26 percent—were associated with attending domestic duties as homemakers (see Chart 3.7). Unemployment status was higher among males as compared to that of females. Karur district was positioned fifth in terms of female work participation and eighth in terms of female unemployment status.

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

Work type	Area Type		
	Rural	Urban	Karur
Self Employed Agriculture	12.33	8.90	11.22
Self Employed Non-Agriculture	8.38	18.00	11.52
Self Employed Allied Agriculture	2.08	0.69	1.63
Casual Labourer Agriculture	35.53	12.86	28.14
Casual Labourer Industry	10.13	19.92	13.32
Casual Labourer Service	10.71	9.08	10.18
Casual Labourer (Others)	1.16	0.73	1.02
Salaried Worker Government	3.37	6.01	4.23
Salaried Worker Private	13.60	21.74	16.25
Multiple Occupation	2.51	1.67	2.23
Others	0.20	0.40	0.27
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Since Karur is primarily a rural district, almost 41 percent of the employed population depended on the agricultural sector for employment— as self-employed or casual labour. While the greatest proportion of the working population in the state were salaried workers in the private sector—about 21.82 percent—as per the state estimates (TNHPS-PBS, 2021), majority of the employed population in Karur district were casual labourers in agriculture. While casual labour in agriculture was predominant in rural areas of the district—about 35.53 percent—salaried work in the private sector was predominant in urban areas (21.74 percent).



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

Work type	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Self Employed Agriculture	7.94	0.00	15.78	7.93	10.96	7.93	11.22
Self Employed Non-Agriculture	7.12	0.00	14.02	11.19	8.97	42.82	11.52
Self Employed Allied Agriculture	1.31	43.93	1.47	1.91	4.58	0.00	1.63
Casual Labourer Agriculture	38.75	0.00	17.50	34.81	23.78	2.97	28.14
Casual Labourer Industry	13.41	0.00	15.25	10.76	10.60	10.63	13.32
Casual Labourer Service	11.15	0.00	9.14	10.16	17.57	4.46	10.18
Casual Labourer (Others)	1.02	0.00	0.76	1.49	0.38	0.90	1.02
Salaried Worker Government	3.80	0.00	4.34	4.27	6.42	3.94	4.23
Salaried Worker Private	13.71	56.07	19.44	13.92	14.62	23.62	16.25
Multiple Occupation	1.68	0.00	2.08	3.07	2.13	1.84	2.23
Others	0.11	0.00	0.22	0.49	0.00	0.90	0.27
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The estimates show that majority of the population from MBC and DNC categories were casual labourers in agriculture. A higher percentage of BC population were salaried workers in the private sector. Around 42.82 percent of the General category population were self-employed in the non-agriculture sector. The state estimates show that majority of the population from SC, ST, MBC and DNC category were casual labourers in the agricultural sector and higher percentage of BC and General population were salaried workers in the private sector (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 3.6 Composition of Population Not in the Labour Force -Area-wise*

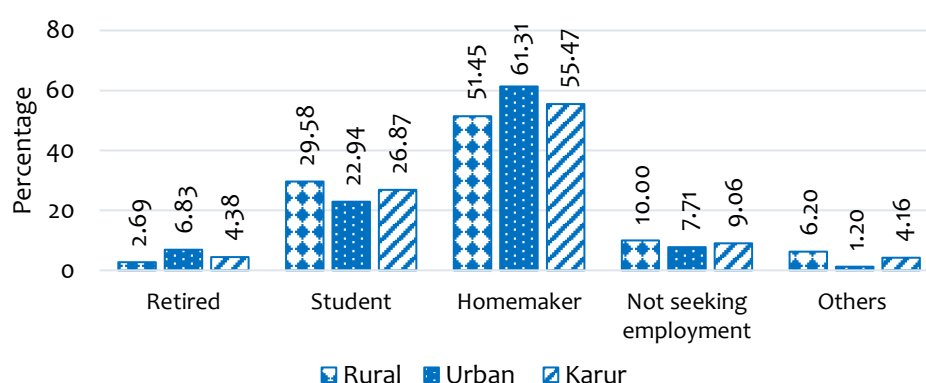
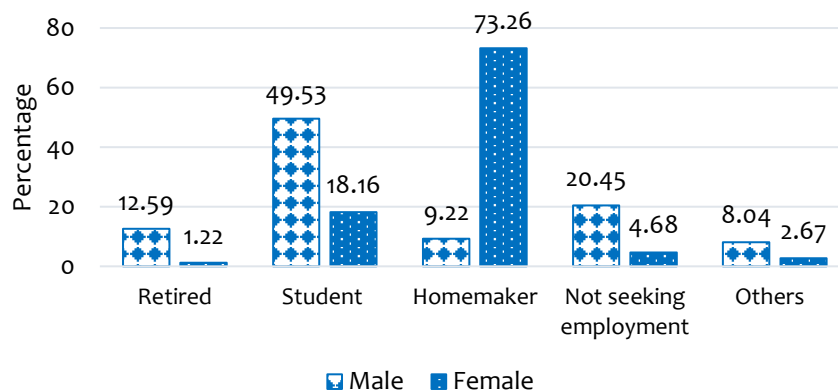


Chart 3.6 shows that, similar to the trend at the state level, more than half the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were not seeking employment and 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 as compared to men as only 18.16 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 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 the Labour Force - Social Group-wise Percentages*

Current Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Retired	3.83	0.00	4.49	3.85	5.40	13.07	4.38
Student	31.89	0.00	23.02	30.12	27.22	15.22	26.87
Homemaker	46.24	100	60.33	53.55	59.93	69.10	55.47
Not seeking employment	10.77	0.00	9.56	7.55	5.70	2.16	9.06
Others	7.09	0.00	2.59	4.92	1.76	0.44	4.16
DK/RF	0.19	0.00	0.01	0.01	0.00	0.00	0.05
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

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

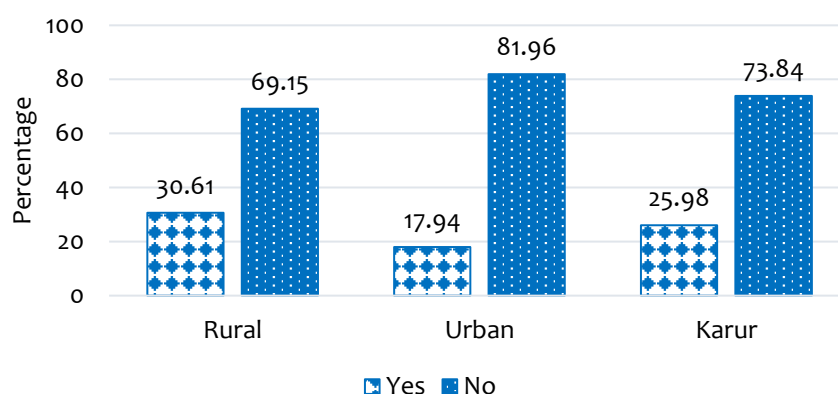
### 3.3 Socio-Economic Indicators

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

#### 3.3.1 Ownership of Agricultural Land

The PBS estimates of ownership of agricultural land at the household level in the rural and urban areas of Karur 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 only on the ownership of agricultural land. The fourth round of National Family Health Survey (NFHS, 2015-16) was a secondary source of data that followed the same definition for ownership of agricultural land.

Chart 3.8 Ownership of Agricultural Land – Area-wise



As per the state estimates, the percentage of total households owning agricultural land in Tamil Nadu was 19.41 percent. Karur is largely a rural and agricultural district. It was ranked eleventh on the percentage of households owning agricultural land (TNHPS-PBS, 2021). Chart 3.8 shows that while 25.98 percent of the households in Karur district owned agricultural land, 73.84 percent of the households in the district did not own agricultural land. The percentage of households owing agricultural land was higher in rural areas than urban areas of the district.

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

Type of Agricultural Land	Area Type		
	Rural	Urban	Karur
Only Irrigated Agricultural Land	50.68	57.82	52.48
Only Unirrigated Agricultural Land	32.44	27.19	31.12
Both Irrigated and Unirrigated Agricultural Land	16.43	14.77	16.02
DK/RF	0.45	0.22	0.39
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.12 shows that about 52.48 percent of the households who owned agricultural land in Karur district depended on various irrigation sources. Canals, tanks, tube wells and dug wells are the main sources of irrigation in the district. Dug wells alone accounted for around 60 percent of total irrigated area in the year 2008 (Tamil Nadu State Planning Commission, 2017b). Around 32.44 percent of agricultural land-owning households in rural areas and 27.19 percent of agricultural land-owning households in urban areas depended on rain-fed irrigation alone. Among the agricultural land-holding households, the households having irrigated agricultural land was higher in the district at 52.48 percent compared to the state estimate of 50.03 percent.

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

Agricultural Land Ownership	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Yes	12.47	0.00	35.05	24.14	29.82	17.47	25.98
No	87.27	100	64.69	75.84	70.18	82.53	73.84
DK/RF	0.26	0.00	0.26	0.02	0.00	0.00	0.19
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.13 shows that BC category households at 35.05 percent and DNC category households at 29.82 percent were predominant landholders in Karur district compared to other social groups. Only 12.47 percent of the SC category households owned agricultural land in the district. The results for the ST category must be interpreted in the context of their sample size, as discussed in Section 3.1.

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

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

Size of Agricultural Land (in Hectares)	Area Type		
	Rural	Urban	Karur
Marginal (0.01 - 0.99)	63.31	61.77	62.93
Small (1 - 1.99)	17.34	22.96	18.76
Semi Medium (2 - 3.99)	12.54	11.65	12.31
Medium (4 - 9.99)	4.99	3.61	4.65
Large (10 and above)	1.82	0.00	1.36
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.14 shows that 81.69 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands (less than 2 hectares). This estimate was 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 were 7.64 percent, 2.26 percent and 0.77 percent respectively.

### 3.3.2 Ownership of Agricultural, Allied Agricultural and Fishing Assets

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

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

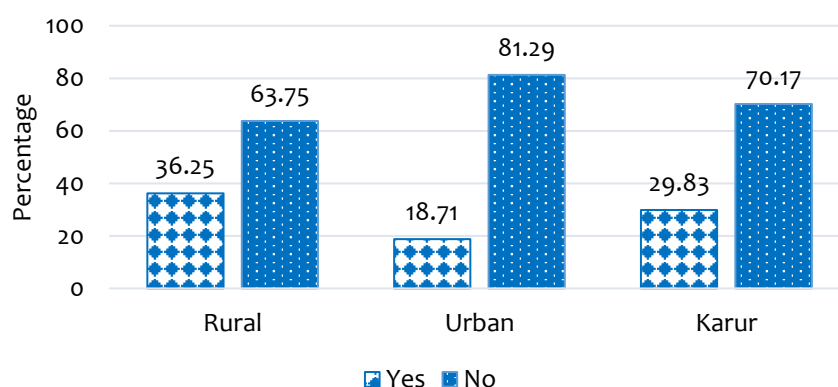
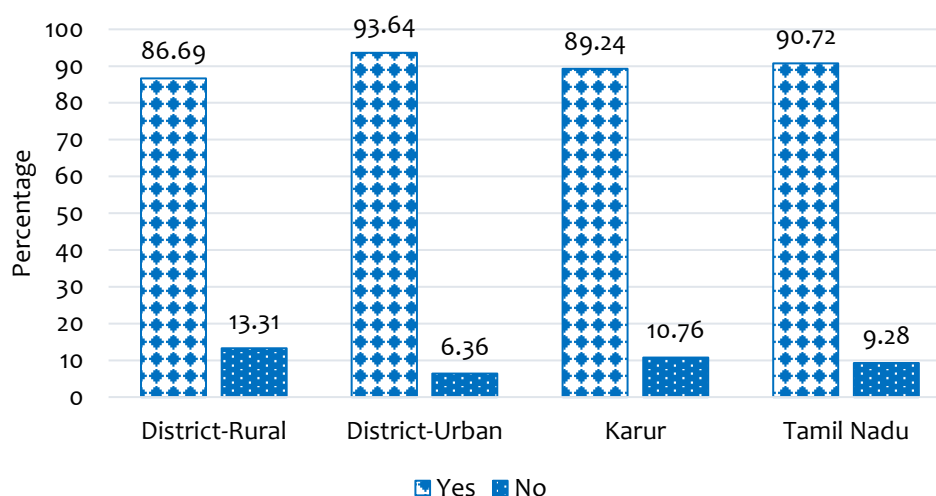


Chart 3.9 shows that 29.83 percent of the households in Karur district owned at least one agricultural, allied agricultural and fishing asset. The estimate was higher than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The proportion of households owning at least one agricultural, allied agricultural and fishing asset was higher in rural areas—about 36.25 percent—than in urban areas—18.71 percent—of the district.

### 3.3.3 Presence of Household Assets

This section discusses the percentage of households in Karur 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 phone and two-wheeler were the predominantly owned assets in rural areas whereas a combination of refrigerator, two-wheeler and mobile phone was largely owned in the urban areas.

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



The percentage of households owning at least one household asset in Karur district was 89.24 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						
	SC	ST	BC	MBC	DNC	General	Karur
Yes	86.95	100	91.47	88.30	81.59	98.46	89.24
No	13.05	0.00	8.53	11.70	18.41	1.54	10.76
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The PBS estimates show that 98.46 percent of the General category households owned at least one household asset. The DNC category had the lowest percentage of households owning at least one household asset— about 81.59 percent—compared to other social groups in the district. Around 18.41 percent the DNC 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 inclusion—or exclusion—of households from the government welfare schemes such as the availability of subsidized items from Public Distribution System and subsidized LPG connection. The percentage of households that possessed a ration card in rural and urban areas of Karur district are given in Chart 3.11.

Chart 3.11 Possession of Ration Card – Area-wise

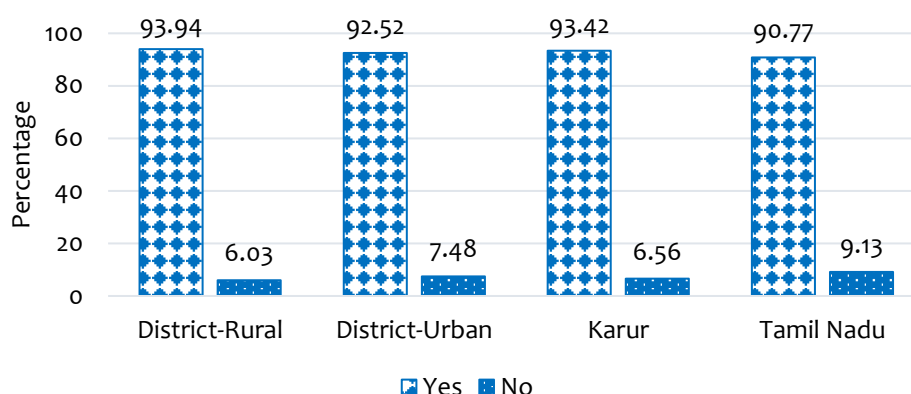


Chart 3.11 shows that the percentage of households in Karur district that possessed a ration card was higher than the state estimate. A higher percentage of rural households possessed ration cards as compared to the urban households.

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

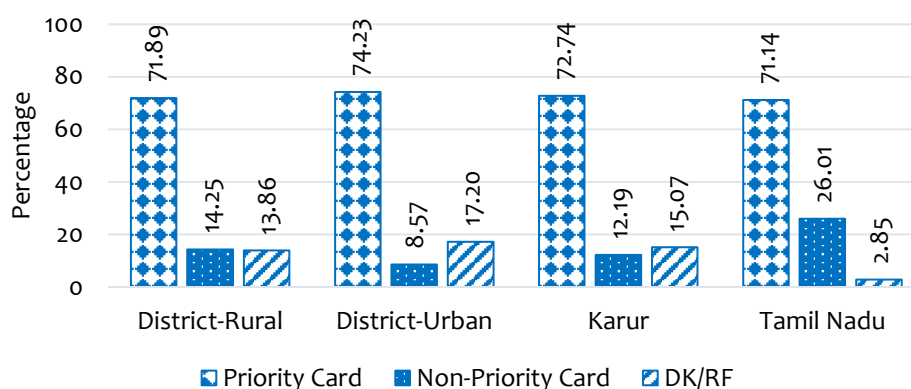
Possession of Ration Card	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Yes	91.48	100	94.85	93.00	91.89	96.73	93.42
No	8.52	0.00	5.11	6.98	8.11	3.27	6.56
DK/RF	0.00	0.00	0.04	0.02	0.00	0.00	0.02
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.16 shows that more than 90 percent of households belonging to almost all social groups possessed a ration card. Possession of ration cards was highest among the General category households at 96.73 percent and lowest among SC category households at 91.48 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 card are the target group of various social welfare schemes such as Antyodaya Anna Yojana (AAY) among others. The percentage of households possessing priority and non-priority ration cards in rural and urban areas of Karur district are given below.

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



The percentage of households possessing priority ration cards in the district was marginally higher than the state estimates. A higher percentage of urban households possessed priority ration cards than rural households of the district. A large fraction of households, especially in the urban areas, refused to answer this question.

### 3.4 Household Income

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

In this section we analyze the annual income of households in Karur 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 pension, remittances, investments and other mixed categories. Table 3.17 shows the mean income of households that depended on various sources of income in Karur district.

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

Source	District - Rural	District - Urban	Karur	Tamil Nadu
Agriculture	58,233	62,338	59,253	61,830
Allied Agriculture	23,233	29,805	25,035	38,576
Salaried	1,26,254	2,39,864	1,76,600	2,29,857
Self Employed	98,162	1,65,178	1,36,316	1,47,403
Wage Labour	35,667	50,883	40,320	47,734
Other Sources	51,288	1,28,585	85,133	97,646
<b>Income from all Sources</b>	<b>81,399</b>	<b>1,61,533</b>	<b>1,11,131</b>	<b>1,42,752</b>



The mean annual household income of Karur district was 22.15 percent lesser than the state estimate. Among the then 32 districts, Karur was ranked nineteenth 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 agriculture.

In the year 2017-18, the mean household income in the rural areas of Karur district was lower compared to the rural state estimate of ₹92,765 (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 allied agricultural activities.

In the year 2017-18 the mean household income in the urban areas of Karur district 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 allied agricultural activities.

### 3.4.2 Income Inequality in Karur District

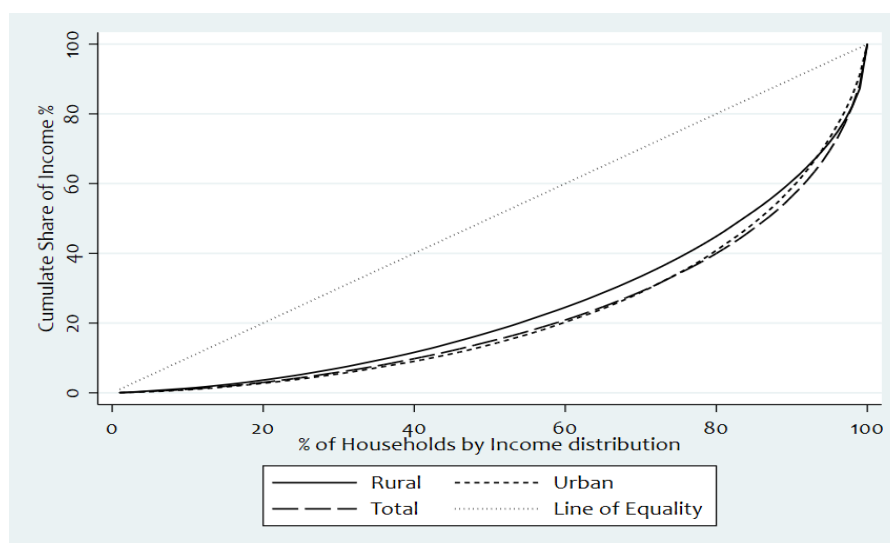
Table 3.18 represents the area-wise Gini coefficient values. The Gini coefficient measures the inequality levels where the Gini coefficient value of 0 represent perfect equality and 1—or 100 percent—represents perfect inequality across households. The income inequality in Karur district (0.555) was lower than the state estimate (0.563)<sup>5</sup>. The income inequality across households in urban areas of Karur district was found to be higher than the rural areas of the district.

*Table 3.18 Gini Coefficient of Income Inequality- Area-wise*

Area Type	Gini Coefficient
Rural	0.507
Urban	0.552
Karur	0.555
<b>Tamil Nadu</b>	<b>0.563</b>

<sup>5</sup> 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



Lorenz curve is a graphical representation of inequality in the distribution of income or wealth of the population. Chart 3.13 represents that the bottom 60 percent of the households have around 20 percent of total income; the bottom 80 percent of households have close to 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 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 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 their future economic status. Table 3.19 shows the area-wise percentage of households expecting an increase, decrease or no change in income in Karur district.

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

Households' Expectation of Change in Future Income	Area Type			
	District - Rural	District - Urban	Karur	Tamil Nadu
Higher	43.01	68.48	52.33	50.06
Lower	13.30	6.42	10.78	8.17
About the same	40.37	23.22	34.09	31.66
DK/RF	3.33	1.88	2.80	10.11
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

A larger proportion of households in the rural areas—about 40.37 percent—expected their income to be the same in the next five years compared to the households in the urban areas—about 23.22 percent—of Karur district. A larger proportion of households in the urban areas—about 68.48 percent—expected their income to be higher in future compared to the households in rural areas at 43.01 percent. On the whole, around 52.33 percent of the households in the Karur district expected an increase in their future income.

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

Households' Expectation of Change in Future Income	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Higher	43.82	56.07	59.78	46.19	60.09	69.30	52.33
Lower	9.95	0.00	7.85	18.29	2.20	0.20	10.78
About the same	43.24	43.93	28.79	34.08	35.24	29.01	34.09
DK/RF	2.99	0.00	3.57	1.44	2.46	1.48	2.80
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.20 shows that, the largest proportion of households expecting their income to be higher belonged to the General category—about 69.30 percent—followed by DNC category at 60.09 percent. Compared to other social groups, about 43.24 percent of SC households expected their income to remain the same in the near future. Furthermore, the largest proportion of households in the MBC category—about 18.29 percent—expected a fall in income compared to the 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.

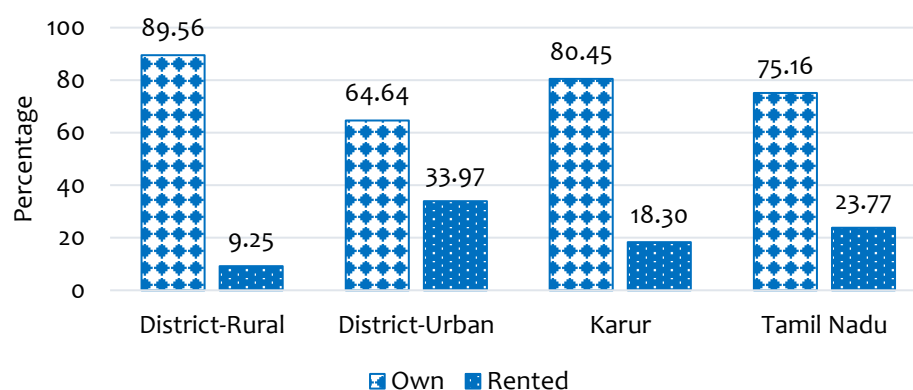
### 3.5 Basic Infrastructure

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

### 3.5.1 House Ownership Status

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

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



Around 80.45 percent of the households lived in their own houses and about 18.30 percent of the households lived in rented houses in Karur district. The percentage of households living in their own houses in the district was higher than the state estimate. The district was ranked thirteenth 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 of disparity between the ownership of houses in rural and urban areas. While most of the households lived in their own houses in rural areas, about one third of urban households were relying on rented houses for their stay. About 1.24 percent of households were living in other houses such as relative's house, encroachments etc. This data does not capture the ownership of a house in a different geographical location.

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

Ownership Status	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Own	90.13	100	73.80	82.50	83.99	67.13	80.45
Rented	8.56	0.00	24.99	16.23	16.01	28.26	18.30
Others	1.28	0.00	1.21	1.24	0.00	4.60	1.24
DK/RF	0.02	0.00	0.00	0.03	0.00	0.00	0.01
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3.21 shows that around 90.13 percent of SC households lived in their own houses in Karur district. On the other hand, only 67.13 percent of the General category households were living in their own houses and among the remaining, 28.26 percent were living in

rented houses. However, the district estimates on the percentage of General category households living in rented houses were lesser compared to the state estimates of 36.4 percent (TNHPS-PBS, 2021). Only two ST category households were surveyed and both of them were living in their own houses.

A detailed analysis of ownership of houses showed that out of 80.45 percent households that resided in an own house in Karur district, 19.96 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	Karur
Yes	47.82	0.00	6.09	12.91	11.77	1.67	19.96
No	52.11	100	93.89	86.98	87.95	98.33	79.98
DK/RF	0.07	0.00	0.02	0.11	0.28	0.00	0.06
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Among the owned houses, the percentage of houses constructed under a government scheme was higher in Karur district—about 19.96 percent—compared to the state estimate of 14.12 percent (TNHPS-PBS, 2021). In Karur, SC households at 47.82 percent had the highest percentage of houses built under a government scheme compared to other social groups. Though 34.7 percent of the ST households in the state had constructed a house under a government scheme (TNHPS-PBS, 2021), neither of the two house-owning ST households surveyed in the district had done so.

### 3.5.2 House Type

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

*Chart 3.15 Types of House – Area-wise*

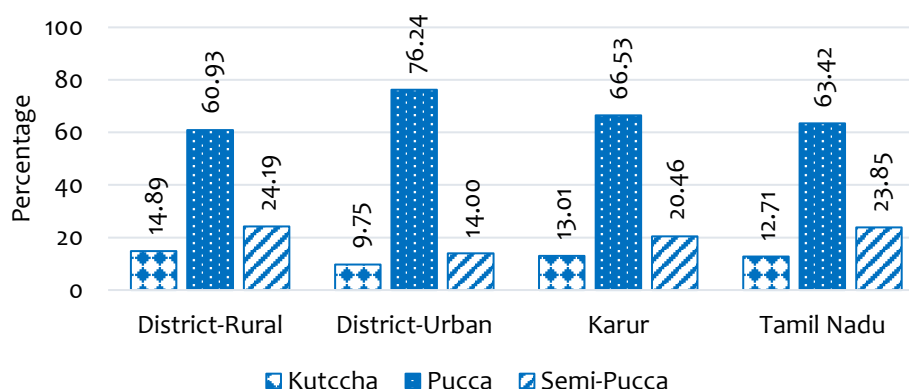


Chart 3.15 shows that majority of households—about 66.53 percent—in Karur district were living in pucca houses. The percentage of households living in pucca houses were higher than the state estimates of 63.42 percent. The percentage of people living in pucca houses was higher in urban areas compared to the rural areas of the district. While 52.93 percent of state rural households lived in pucca houses (TNHPS-PBS, 2021), around 60.93 percent of rural households in the district lived in pucca houses.

### 3.5.3 Primary Drinking Water Source

In this section, we discuss findings of the PBS on the primary source of drinking water of the households in Karur district. The primary sources<sup>6</sup> of water are: bottled water, piped water into dwelling, piped water to yard or plot, public tap or standpipe, tube well or borehole. Other water sources include protected well, unprotected well, rainwater collection, and surface water (tank/pond/river/dam).

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

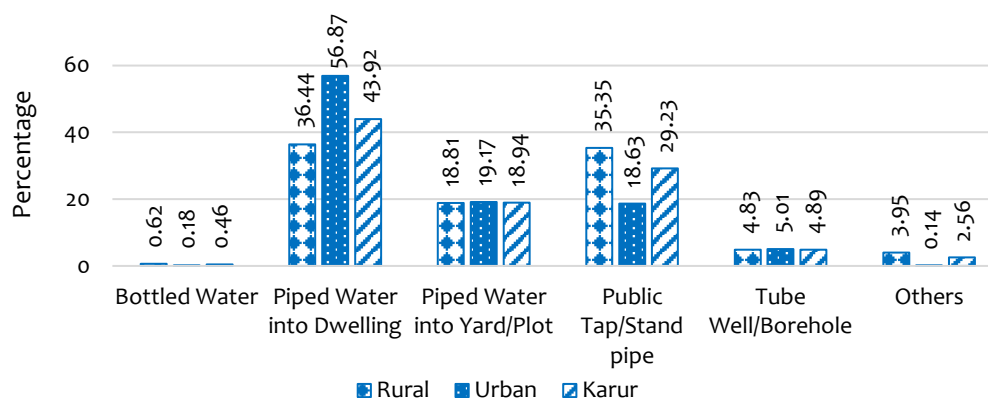


Chart 3.16 show that majority of households in Karur district—about 43.92 percent—were using piped water into dwelling as their primary source of drinking water, followed by public tap/stand pipe. The state estimates show that piped water into the dwelling in urban areas—about 37.02 percent—and public tap/standpipe in rural areas—about 44.51 percent—were the primary water sources of households (TNHPS-PBS, 2021). In Karur, piped water into the dwelling was used both in urban and rural households as the primary drinking water source, at 56.87 percent and 36.44 percent respectively.

### 3.5.4 Electricity

Tamil Nadu had witnessed a mass electrification during the last decade. A comparison of

<sup>6</sup> Primary source - Water that is availed for the greater part of the year

households with electricity connection between 2011 Census and 2018 PBS estimates shows that the state is close to the status of complete electrification in case of urban areas (TNHPS-PBS, 2021). The electrification status has improved in rural areas as well.

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

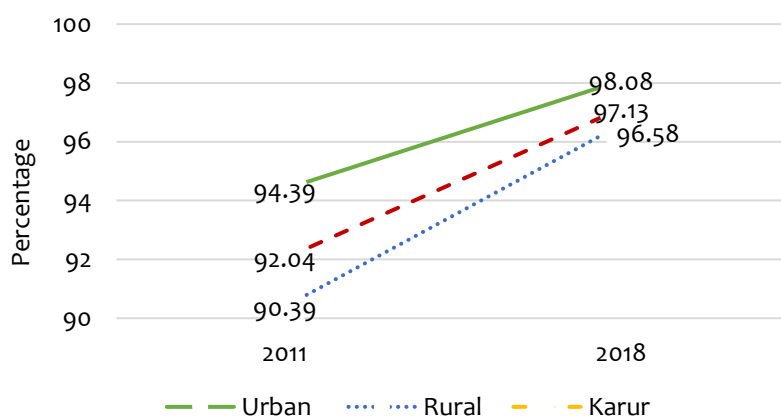


Chart 3.17 shows that an increase in electrification had happened in both rural and urban areas of Karur district during the period from 2011 to 2018, where the rate of growth of households with electricity was higher in rural areas. Although Karur district was ranked twenty-first among the then 32 districts in terms of electrification, around 97.13 percent of households in the district had domestic electricity connection compared to the state estimate of 97.60 percent (TNHPS-PBS, 2021).

### 3.5.5 Primary Cooking Fuel

A comparison of 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 Cooking Fuel– District and State*

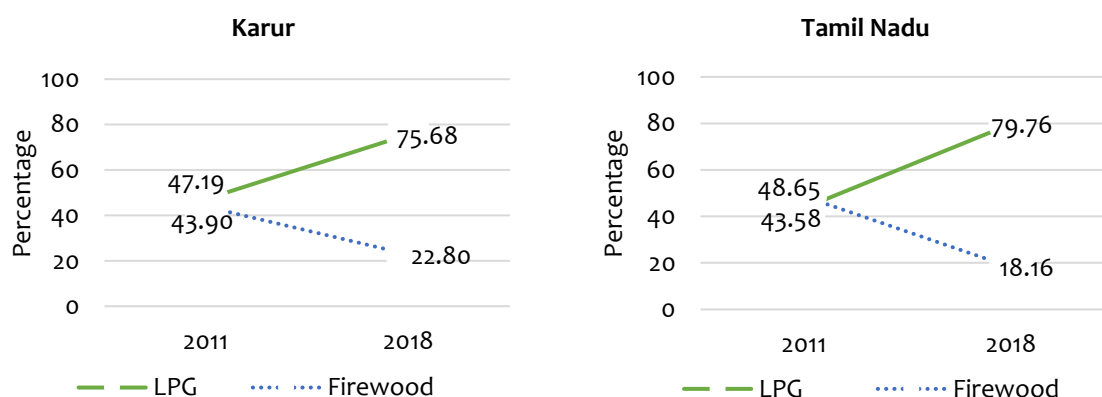


Chart 3.18 shows that, although the use of LPG as the primary fuel for cooking in Karur district had increased from 47.19 percent in 2011 (Census 2011) to 75.68 percent in 2018,

about 22.80 percent still used firewood to a significant level. Compared to other districts of Tamil Nadu, Karur district was ranked nineteenth in terms of LPG use and ranked fifteenth in terms of firewood use (TNHPS-PBS, 2021).

Chart 3.19 Comparison of Primary Cooking Fuel– Rural and Urban

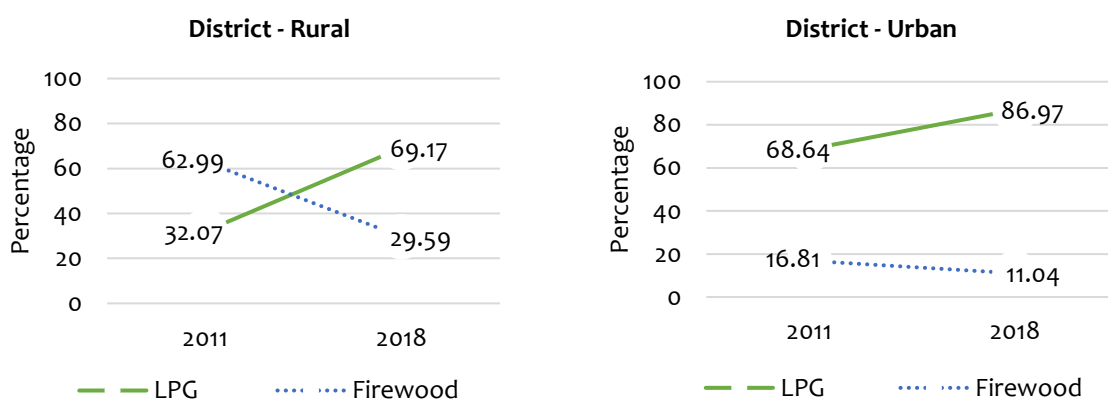


Chart 3.19 indicates that majority of the households in rural areas—about 69.17 percent—and urban areas—about 86.97 percent—used LPG as the primary fuel for cooking. The percentage of households using LPG as primary fuel was higher in urban areas of the district compared to rural areas. The usage of firewood had reduced and there was an increase in LPG as primary cooking fuel in both urban and rural areas. Nevertheless, around 30 percent of households in rural areas of Karur district were still using firewood as the primary cooking fuel.

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

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

Primary Cooking Fuel	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Firewood	36.87	0.00	8.67	33.83	22.93	1.72	22.80
LPG	62.16	100	89.79	64.47	73.85	95.57	75.68
Kerosene	0.89	0.00	1.13	1.08	3.07	0.41	1.11
Others	0.08	0.00	0.36	0.49	0.00	2.30	0.34
DK/RF	0.00	0.00	0.05	0.14	0.15	0.00	0.06
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

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

Table 3.23 shows that a higher percentage of the General and BC households used LPG as the primary fuel for cooking. More than one-third of the SC and MBC households used firewood as the primary fuel for cooking, it was also higher than the state estimates of

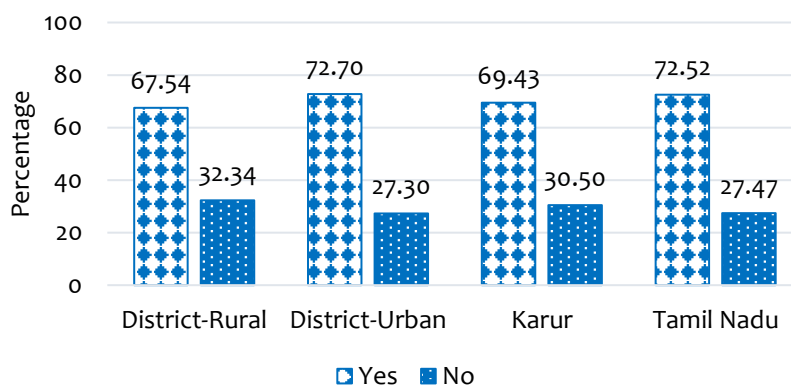


27.60 percent and 20.10 percent respectively (TNHPS-PBS, 2021). Both the ST households surveyed in the district used LPG as the primary fuel.

### 3.5.6 Sanitation

The PBS estimates on households with and without latrine is given in Chart 3.20.

Chart 3.20 Presence of Latrine within the Premises of the Household – Area-wise



The percentage of households with latrine within the house premises has increased from 40.34 percent in 2011 (Census, 2011) to 69.43 percent in 2018, as per the PBS estimates. Karur district was positioned twentieth among the 32 districts in terms of the presence of latrine facilities within the premise of the household (TNHPS-PBS, 2021). The households equipped with latrine within the house premises in the district was lower than the state estimate. The percentage of rural households equipped with latrine within house premises was lower compared to the percentage of urban households with latrine within house premises.

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

Percentages

Latrine within House Premises	Social Group						
	SC	ST	BC	MBC	DNC	General	Karur
Yes	46.88	56.07	82.24	69.27	62.93	98.85	69.43
No	53.12	43.93	17.67	30.60	37.07	1.15	30.50
DK/RF	0.00	0.00	0.09	0.14	0.00	0.00	0.08
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The estimates show that majority of General, BC and MBC households had latrine within the premises of the household in the district, and the percentages were similar to the state estimates for the respective categories. Significant percentage of the SC and DNC

households in the district did not have latrine within the premises, compared to 47.70 percent and 34.80 percent state 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.

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

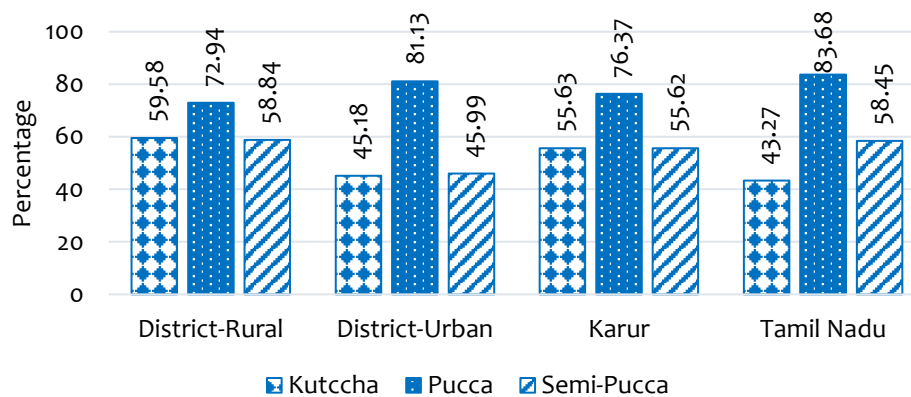
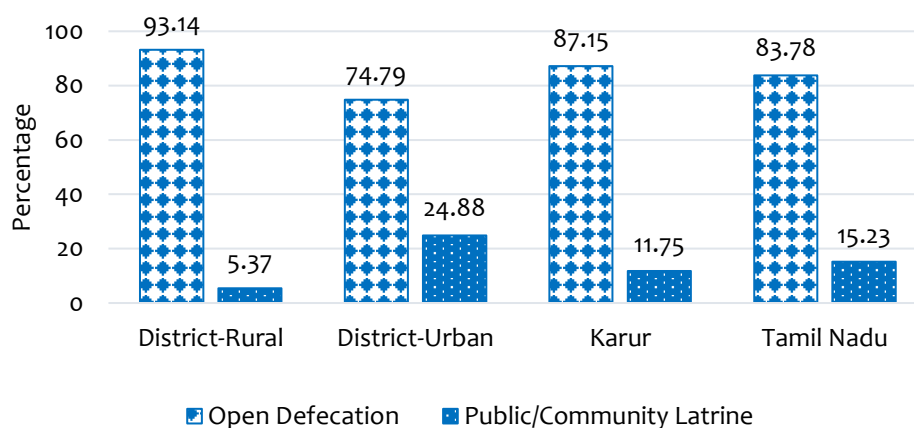


Chart 3.21 depicts presence of latrine in the premises of different types of houses. Majority of the pucca houses had latrine facilities within the premises of the house. The percentage of semi-pucca and kutccha houses with latrine facilities within the premises of the house were lower compared to the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

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



The percentage of total households in the district following open defecation had declined from 53.23 percent in 2011 (Census, 2011) to 26.63 percent in 2018 (TNHPS-PBS, 2021).

Compared to other districts of Tamil Nadu, Karur district was positioned twelfth in terms of percentage of total households following open defecation.

Chart 3.22 shows that 87.15 percent of households without an in-house latrine in Karur district were following open defecation. This estimate was higher than the corresponding state estimate. The district estimates were notably higher in rural areas as compared to urban areas of the district.

## 4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Karur district was conducted from the sample of 6,429 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.

Karur is an agrarian district with almost half of the rural employed population engaged in agricultural or allied activities (as self-employed or casual labour). Agricultural land ownership was also higher than the state estimate, and so was the ownership of agricultural assets. The proportions of marginal and small landholdings were lesser than the state estimates while that of semi-medium, medium and large holdings was higher. Around 31 percent of landholdings depended on rain-fed irrigation alone and income from agriculture was much lower than from other income sources.

Karur district was ranked fourth in the state in terms of employed population at 54.68 percent. Female work participation was also high (38.59 percent) and the district was ranked fifth with respect to this parameter. This is despite having lower literacy levels and formal educational attainment than the state estimates. The gender gap in literacy was also high, especially in rural areas. The mean annual household income was significantly lower than the state estimate and Karur ranked nineteenth amongst all the districts. Also, only 13.32 percent of the employed population was engaged in casual labour in the industrial sector. Hence, given the high labour force participation in agriculture, its low ability to generate adequate incomes, and low levels of industrial employment, policy attention directed towards development of MSMEs that can absorb the excess workforce in agriculture and improve incomes could be considered. This may also help the district withstand unexpected shocks to its economy.

With respect to developmental indicators, it is commendable that piped water into the dwelling of households was the primary source of drinking water in rural as well as urban areas of the district, ensuring easy access to safe drinking water. This is unlike the state estimates where use of public tap or standpipe was more common in rural areas. However, around 32.3 percent of rural households did not have access to in-house latrine facilities. The district's performance with respect to this parameter was lower than the state estimate and was ranked twentieth among all districts. The percentage of households following open defecation was higher than the state estimate. A significantly high percentage (22.80 percent) of households in the district used firewood as the main cooking fuel. Both - absence of latrine facilities and firewood use - were much higher among the SC and MBC groups. Hence, policy interventions to increase LPG use and latrine adoption targeted at these marginalized sections could help the district bridge the gap.

## References

- Census. (2011). *District Census Handbook - Series-34 - Part XII-B - Karur*. Directorate of Census Operations. Government of Tamil Nadu.  
<https://censusindia.gov.in/nada/index.php/catalog/1123>
- Chandrasekhar, S., Naraparaju, K., & Sharma, A. (2021). Spatial Disparities in Household Earnings in India: Role of Urbanization, Sectoral Inequalities, and Rural-Urban Differences. *Indira Gandhi Institute of Development Research*, WP-2021-009.  
<http://www.igidr.ac.in/pdf/publication/WP-2021-009.pdf>
- Das, S., Jain-Chandra, S., Kochhar, K., & Kumar, N. (2015). Women Workers in India: Why So Few Among So Many? *International Monetary Fund*, WP/15/55.  
<https://www.imf.org/external/pubs/ft/wp/2015/wp1555.pdf>
- Department of Economics and Statistics. (2017). *Statistical Hand Book of Tamil Nadu-2016-17*. Government of Tamil Nadu.
- Department of Economics and Statistics. (2023). *Statistical Hand Book of Tamil Nadu-2020-21*. Government of Tamil Nadu.
- Desai, S. (2017, March 7). *Declining female labour force participation in rural India: The demand side*. Ideas for India. <https://www.ideasforindia.in/topics/social-identity/declining-female-labour-force-participation-in-rural-india-the-demand-side.html>
- Desai, S., & Joshi, O. (2019). The Paradox of Declining Female Work Participation in an Era of Economic Growth. *The Indian Journal of Labour Economics*, 62, 55–71.  
<https://doi.org/10.1007/s41027-019-00162-z>
- National Statistical Office. (2019). *Annual Report, Periodic Labour Force Survey, July 2017-June 2018*. [https://mospi.gov.in/sites/default/files/publication\\_reports/Annual%20Report%2C%20PLFS%202017-18\\_31052019.pdf?download=1](https://mospi.gov.in/sites/default/files/publication_reports/Annual%20Report%2C%20PLFS%202017-18_31052019.pdf?download=1)
- Tamil Nadu State Planning Commission. (2017a). *Tamil Nadu Human Development Report - 2017*. Government of Tamil Nadu. <https://spc.tn.gov.in/tnhdr2017.html>
- Tamil Nadu State Planning Commission. (2017b). *District Human Development Report – 2017, Karur District*. <https://spc.tn.gov.in/DHDR/Karur.pdf>
- TNHPS-PBS. (2021). *Tamil Nadu Household Panel Survey- Pre-Baseline Survey: 2018-19*. Draft report submitted to the Government of Tamil Nadu.

**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.



For more information, please contact:  
TNHPS Research Manager  
Madras Institute of Development Studies  
79, Second Main Road, Gandhi Nagar, Adyar  
Chennai 600020 Ph: 24411574 / 24412589  
[www.mids.ac.in](http://www.mids.ac.in)  
Email : [researchmanager.tnhps@gmail.com](mailto:researchmanager.tnhps@gmail.com)