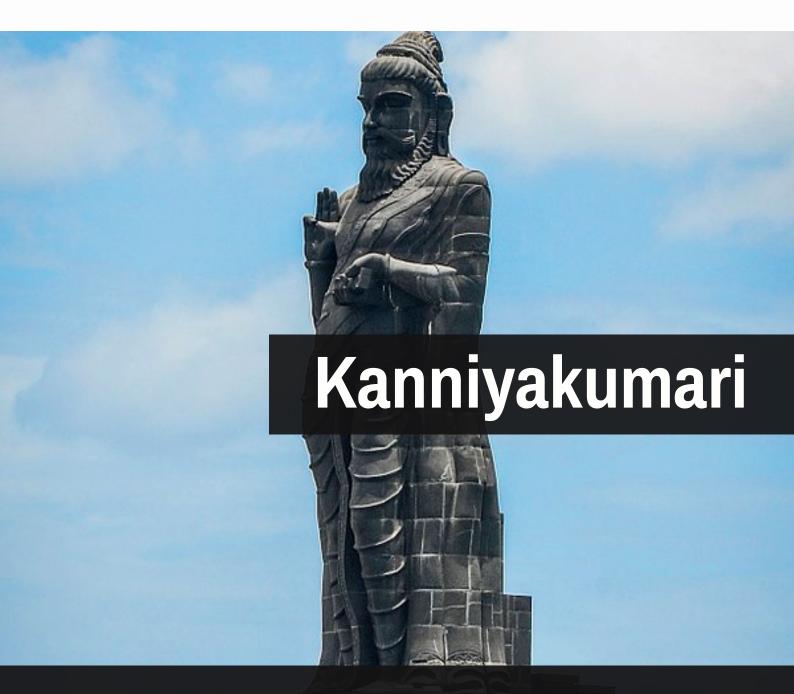
Department of Economics & Statistics









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

# Kanniyakumari District

February 2024

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

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# **Summary of PBS Findings**

# Demographic Indicators

- Kanniyakumari had a sample size of 6,804 households, of which 58.57 percent of households were from rural areas and 41.43 percent of households were from urban areas.
- The district had a huge demographic dividend with 66.06 percent of the population in the age group up to 45 years. Around 30 percent of the population was between 26-45 years of age. The percentage of people above 60 years of age was 14.68 percent.
- Around 52.84 percent of the households practiced Hinduism. Christianity was followed widely among 42.72 percent of the households in the district.
- The BC category was the largest in number, constituting 80.47 percent of the households in the district.

# Education (Age 7 and above)

- The district was ranked first in literacy rate with 94.54 percent of the total population being literate.
- The gender gap in literacy rate of the district was slightly higher in rural areas at 3.31 percent than urban areas at 2.98 percent.
- More than 90 percent of the specified population had formal schooling in the district. Among the population with no formal schooling, more than 80 percent did not have functional literacy.

## Employment (Age 14 and above)

- Kanniyakumari district was positioned last in terms of the percentage of population employed and ranked third in terms of unemployment status.
- Around 38.47 percent of the specified population in the district were employed;
   about 5.05 percent were unemployed and 56.43 percent were not in the labour force.
- Around 64.65 percent of the males in the specified population were employed and only around 15.90 percent of the females were employed, which shows the prevailing gender gap in employment.

- Most males who were currently not working were students—about 43.75
  percent—whereas most females—about 74.55 percent—in this category were
  homemakers.
- Salaried workers in the private sector constituted the largest share of the employed population (22.24 percent) in the district in 2018, followed by self-employment in non-agriculture (21.12 percent).

#### Land Ownership and Assets

- Around 10.35 percent of households in the district owned agricultural land. This was slightly higher among urban households than rural households. BC and General category households had a higher percentage of land-owning households as compared to other social groups in the district.
- Households that depended on rain-fed irrigation in the district was 41.61 percent. A higher percentage of urban households—about 45.30 percent—owned unirrigated land than rural households—around 28.04 percent.
- Around 98 percent of the agricultural land owners had marginal or small (less than 2 hectares) landholdings.
- About 22.25 percent of the households in the district owned agricultural, allied agricultural or fishing assets in the district, which was higher among urban households than rural households.
- Almost 96.05 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 ₹1,61,490 in the district; in the urban areas it was ₹1,73,355 and in the rural areas it was ₹1,27,924. The district's mean household income was 13.13 percent higher than the state estimate, and it was ranked fourth among all districts.
- The mean income from salaried work was the highest at ₹2,23,483.
- The income inequality in the district (0.540) was lower than the state estimate (0.563).

## Housing

- About 80.26 percent of households in the district resided in their own houses.
- Out of this 80.26 percent, 7.87 percent of houses were built under a government scheme. SC households were the main beneficiaries of the government housing schemes.
- Almost 80 percent of the households in the district lived in pucca houses.

# Access to Drinking Water, Electricity and Cooking Fuel

- The most commonly used primary source of drinking water in the district was piped water into the dwelling at 28.26 percent. This was the primary source in rural as well as urban areas.
- Kanniyakumari was ranked first among the then 32 districts in terms of electrification.
- In 2011, firewood was the primary cooking fuel used in the district. But, in 2018, though 58.41 percent households were using LPG as the primary cooking fuel, around 40 percent of the households in the district still used firewood. The district ranked fourth in terms of firewood usage.
- Around 41.69 percent of SC households used firewood as the primary cooking fuel in the district.

#### Sanitation

- Kanniyakumari district was ranked first in terms of the presence of latrine facilities within the premise of the household.
- The percentage of total households in the district following open defecation had declined from 7.13 percent in 2011 (Census, 2011) to 1.61 percent in 2018, as per the PBS estimates.
- Out of the 2.35 percent households which did not have latrine within the premises of the household, 68.33 percent of households practiced open defecation.

#### 1. Introduction

# 1.1 Profile of Kanniyakumari District

Kanniyakumari district in Tamil Nadu was formed in the year 1956. It is in the southern region of the state, with Tirunelveli in the north and east, Indian Ocean in the south, and borders of Kerala in the west.

According to Census (2011), Kanniyakumari had a total population of 18.70 lakhs, accounting for approximately 2.59 percent of Tamil Nadu's total population. The district comprised 4.84 lakh households, with 82.33 percent residing in urban areas. The male population was 49.53 percent, and the female population was 50.47 percent. Kanniyakumari demonstrated a child-sex ratio of 964 as compared to the state average of 943. Within the social groups, 3.97 percent of the population belonged to the Scheduled Castes, while 0.39 percent belonged to the Scheduled Tribes. The literacy rate in Kanniyakumari district stood at 91.75 percent, compared to the state's average of 80.09 percent. The male literacy rate was 93.65 percent, while the female literacy rate was 89.9 percent.

In the fiscal year 2018-19, Kanniyakumari's Net District Domestic Product was ₹40,12,959 lakhs, ranking sixteenth among all districts. The district's per capita Net District Domestic Product was recorded at ₹1,98,693, ranking it tenth among districts and surpassed Tamil Nadu's average of ₹1,83,884 (Department of Economics and Statistics, 2023). In terms of sectoral distribution, the primary sector (agriculture and allied) contributes approximately five percent to its domestic income, while the secondary (industry) and tertiary (service) sectors contribute approximately 50 percent and 45 percent, respectively (Department of Economics and Statistics, 2017).

According to the Tamil Nadu State Planning Commission (2017), Kanniyakumari ranked first in terms of the Human Development Index with a score of 0.944, pointing to an above-average performance in overall development. It ranked twelfth in the Gender Inequality Index with a score of 0.066, which is a moderate score. In terms of the Child Development Index, the district ranked first with a score of 0.872, which reflects well upon the district's investment in the development of the younger generation. Additionally, Kanniyakumari ranked thirteenth in terms of the Multidimensional Poverty Index with a score of 0.5, considered to be a modest ranking.

Kanniyakumari district stands out with a robust economy, high per capita income, and a balanced sectoral distribution. Its exceptional performance in human development and child welfare, alongside its moderate ranking in the multidimensional poverty index, underscores its commitment to inclusive growth and well-being.

# 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 socioeconomic 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 the Kanniyakumari district and presents the findings. Wherever possible, the report compares the district PBS estimates with the most recent Census data of Kanniyakumari (Census, 2011) and the state PBS estimates (TNHPS-PBS, 2021) to assess the socio-economic development of Kanniyakumari district. The sample size for the district was 6,804 households, among which 3,985 households were from rural areas and 2,819 households were from urban areas. The blocks covered during the survey were: Agasteeswaram, Melpuram, Munchirai, Rajakamangalam, Thuckalay, Thiruvattar and Thovalai.

# 2. Survey Response

For the Pre-Baseline Survey 2018-19, a total of 8,111 households in Kanniyakumari district were selected using a multi-stage stratified sampling design<sup>1</sup>. The final sample size was 6,804 households for PBS, among which 58.57 percent of households were from rural areas and 41.43 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

	Area Type								
Response of	Ru	ural	Uı	rban	Kanniyakumari				
Households	Number of HHs	Percentage	Number of HHs	Percentage	Number of HHs	Percentage			
Response	3,985	83.53	2,819	84.40	6,804	83.89			
Non-Response	186	3.90	115	3.44	301	3.71			
Non-sample	600	12.58	406	12.16	1,006	12.40			
Total	4,771	100	3,340	100	8,111	100			

Kanniyakumari district had a lower response rate—willingness of households to participate in the TNHPS-PBS—of 83.89 percent compared to the state response rate of 96.5 percent (TNHPS-PBS, 2021). Around 3.71 percent of households were not willing to participate in the survey. About 12.40 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>&</sup>lt;sup>1</sup> Detailed explanation of the Sampling Methodology is available in the TNHPS-PBS State Report (see TNHPS-PBS, 2021).

<sup>&</sup>lt;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, the average household size<sup>3</sup> in the district had reduced from 3.86 in 2011 (Census, 2011) to 3.52 in 2018. As per the PBS estimates, 47.26 percent of the population in the district were male, and 52.70 percent of the population were female. Around 23.63 percent of the households in Kanniyakumari district were headed by females, which was higher than the state estimate of 18.93 percent (TNHPS-PBS, 2021).

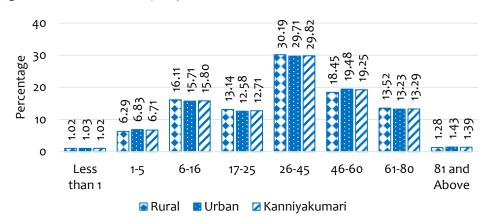


Chart 3.1 Age-wise Distribution of Population

As per the PBS estimates in 2018-19, around 29.82 percent 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 61.78 percent, which was lower than 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 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 52.84 percent of the households practiced Hinduism, while 4.34 percent practiced Islam and 42.72 percent followed Christianity.

<sup>&</sup>lt;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	4.39
ST	0.14
BC	80.47
MBC	6.63
Denotified Communities (DNC)	0.16
General	8.01
DK/RF	0.20
Total	100

As per the PBS estimates, the highest percentage of households in Kanniyakumari district belonged to the BC category. The percentages of SC and ST households in the district were 4.39 percent and 0.14 percent respectively in 2018-19.

The percentage of ST and DNC category households of Kanniyakumari district were only 0.14 percent and 0.16 percent respectively and, only eight ST category households and nineteen DNC category households were sampled in the district. Hence, the results pertaining to 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 Kanniyakumari district.

## 3.2.1 Education

The change in literacy rate of Kanniyakumari 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 - Rural District - Urban		Kanniya	kumari	Tamil Nadu	
Gender	2011	2018	2011	2018	2011	2018	2011	2018
Male	92.39	95.01	93.92	96.53	93.65	96.17	86.77	90.97
Female	89.16	91.70	90.06	93.55	89.90	93.13	73.40	80.15
Total	90.76	93.24	91.96	94.93	91.75	94.54	80.09	85.40

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

The literacy rate in the district was 91.75 percent in the year 2011, whereas the state average was only 80.09 percent in 2011. The PBS estimates show that in the year 2018-19, the literacy rate in Kanniyakumari district had increased to 94.54 percent, which was greater than the state estimate of 85.40 percent. Table 3.2 also shows that 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 3.75 percent in 2011 to 3.04 percent in 2018. The district was ranked first among the then 32 districts in 2018 in terms of literacy rate, followed by Chennai at 93.89 percent and Thoothukudi at 91.35 percent (TNHPS-PBS, 2021).

The literacy rate in the rural areas of Kanniyakumari district was 90.76 percent in the year 2011 (Census, 2011). According to the PBS estimates, the literacy rate in rural areas of Kanniyakumari district had increased to 93.24 percent in 2018. The rural male and female literacy rate had also recorded an increase during the period 2011-18. The literacy rate in urban areas had also increased from 91.96 percent in the year 2011 (Census, 2011) to 94.93 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 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 Kanniyakumari district. The area-wise education status of the population in Kanniyakumari district is given in Chart 3.2.

94.01 92.01 100 83.57 80 Percentage 60 40 15.98 20 5.74 5.23 O District-Rural District-Urban Kanniyakumari Tamil Nadu

Chart 3.2 Formal Schooling of the Population – Area-wise

No Formal Schooling

Chart 3.2 shows that 93.55 percent of the population in Kanniyakumari district had attended formal schooling compared to the state estimate of 83.57 percent. The percentage of population with formal education in urban areas was higher than rural areas of the district.

Chart 3.3 Formal Schooling of the Population – Gender-wise

□ Formal Schooling

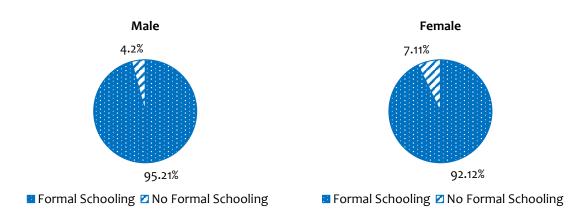


Chart 3.3 shows that the percentage of population—age 7 and above—that acquired formal education was higher among the male population compared to the female population.

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

<sup>\*</sup>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.

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

Education Status	Social Group							
Education Status	SC	ST	ВС	МВС	DNC	General	Kanniyakumari	
Formal Schooling	90.09	96.83	93.41	95.35	87.27	96.07	93.55	
No Formal Schooling	9.48	3.17	5.93	3.67	10.32	2.97	5.74	
Others and DK/RF	0.43	0.00	0.67	0.98	2.41	0.96	0.70	
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 groups in Kanniyakumari district. A majority of the General category population, followed by MBC and BC population in the district had formal education. The results for the ST and DNC 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						
Educational Attainment	Rural	Urban	Kanniyakumari				
Primary (I to V)	26.52	20.22	21.64				
Middle School (VI to VIII)	18.42	15.94	16.50				
High School (IX to X)	22.77	21.00	21.40				
Higher Secondary (XI to XII)	16.42	16.69	16.63				
Bachelor's degree	7.78 11.62		10.75				
Diploma Degree	5.17	6.83	6.45				
Post Graduate Degree	2.36	6.84	5.83				
Other Higher Education	0.00	0.07	0.05				
Others/DK/RF	0.56	0.80	0.74				
Total	100	100	100				

The PBS estimates show that around 76.17 percent of the district's population were either pursuing or had completed schooling up to higher secondary level. Around 23.08 percent of the population were either pursuing or had completed tertiary education—such as bachelor's degree, diploma, post graduate degree and other higher education—compared to the state estimate of 20.02 percent. Pursuance or completion of tertiary education was higher in urban areas at 25.36 percent compared to the rural areas at 15.31 percent.

Table 3.5 Highest Formal Educational Attainment of Population (Age 7 and above): Genderwise Percentages

Educational Attainment	Gender						
Educational Attainment	Male	Female	Kanniyakumari				
Primary (I to V)	20.92	22.31	21.64				
Middle School (VI to VIII)	17.28	15.80	16.50				
High School (IX to X)	22.16	20.69	21.40				
Higher Secondary (XI to XII)	15.69	17.48	16.63				
Bachelor's degree	9.50	11.89	10.75				
Diploma Degree	9.36	3.82	6.45				
Post Graduate Degree	4.41	7.11	5.83				
Other Higher Education	0.05	0.06	0.05				
Others/DK/RF	0.62	0.83	0.74				
Total	100	100	100				

Table 3.5 shows that about 23.32 percent males from the stated population were either pursuing or had completed tertiary education compared to females at 22.88 percent. However, a higher percentage of females had completed bachelor's degree and post-graduation compared to males.

In order to see the social group-wise disparity in educational attainment in Kanniyakumari 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

	Social Group						
Educational Attainment	SC	ST	ВС	MBC	DNC	General	Kanniyakumari
Primary (I to V)	23.87	26.71	22.16	20.82	29.56	15.21	21.64
Middle School (VI to VIII)	17.68	12.00	16.47	17.36	15.94	15.26	16.50
High School (IX to X)	24.77	41.04	20.98	18.49	33.58	25.96	21.40
Higher Secondary (XI to XII)	15.27	4.02	16.83	16.02	6.14	16.50	16.63
Bachelor's degree	7.82	0.00	10.37	14.37	9.99	13.42	10.75
Diploma Degree	7.29	8.12	6.47	5.46	1.35	6.86	6.45
Post Graduate Degree	2.81	8.12	5.99	5.94	0.76	5.80	5.83
Other Higher Education	0.00	0.00	0.03	0.51	0.00	0.00	0.05
Others/DK/RF	0.48	0.00	0.71	1.02	2.69	0.99	0.74
Total	100	100	100	100	100	100	100

Table 3.6 shows that within each social group, a higher percentage of SC population was either pursuing or had completed schooling up to higher secondary level. The percentage

of the specified population who were either pursuing or had completed tertiary education was higher among MBC (26.28 percent) and General (26.08 percent), and least among the SC population (17.92 percent). This estimate was substantially lower for the General category in the district than the corresponding state level estimate (45.20 percent), but higher for MBC (17.31 percent) and SC population (15.52 percent). The results for the ST and DNC category must be interpreted in the context of their sample size, as discussed in Section 3.1.

Around 5.74 percent of the population had not received formal education in Kanniyakumari 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

Franctional Literacy	Areas Type					
Functional Literacy	Rural	Urban	Kanniyakumari			
Yes	16.42	17.59	17.24			
No	82.58	81.11	81.55			
DK/RF	0.99	1.30	1.21			
Total	100	100	100			

Table 3.7 shows the functional literacy status of the population with no formal schooling. Only 17.24 percent of the population without formal schooling had functional literacy. The functional literacy rate of specified population group in urban areas was marginally higher than rural areas of the district.

Table 3.8 Functional Literacy of Population with No Formal Schooling - Social Group-wise Percentages

Functional	Social Group							
Literacy	SC	ST	ВС	МВС	DNC	General	Kanniyakumari	
Yes	9.29	80.64	17.78	20.60	0.00	18.76	17.24	
No	89.10	19.36	81.09	79.40	100	77.41	81.55	
DK/RF	1.61	0.00	1.13	0.00	0.00	3.83	1.21	
Total	100	100	100	100	100	100	100	

Table 3.8 shows that functional literacy was relatively higher among General category and lower among SC category. None of the five DNC respondents without formal schooling surveyed in the district possessed functional literacy. The results for the ST and DNC 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, 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 aged 14 years and above is classified as employed, unemployed and not in the labour force<sup>4</sup>.

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.

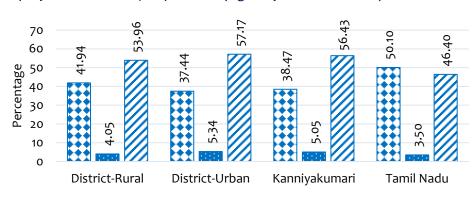
The not in the labour force category consists of the following:

- (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.).

<sup>&</sup>lt;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

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



Not in Labour force

Unemployed

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

Employed

The overall percentage of employed population—14 years and above—in the district was lower than the state estimates. The percentage of population employed in rural areas were higher than the urban areas of the district. The percentage of unemployed population in the district was higher than the state estimate. The unemployment status in rural areas of the district was at 4.05 percent, which was higher than the state rural estimate of 3.60 percent. Likewise, the district urban unemployment status stood at 5.34 percent, which was also higher than the state urban estimate of 3.30 percent. Kanniyakumari district was positioned last among all the districts in Tamil Nadu in terms of employed population and ranked third in terms of unemployment status, preceded by Thoothukudi at 5.21 percent and Cuddalore at 5.16 percent.

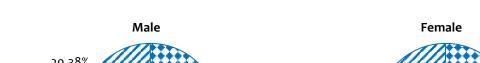


Chart 3.5 Employment Status of the Population – Gender-wise

15.90% 29.38% 4.27% 79.78% 64.65% 5.95% Employed Unemployed ■ Employed Unemployed Not in Labour force Not in Labour force

Chart 3.5 shows the gender-wise employment status of the population aged 14 years and above. While 64.65 percent of the male population were employed, only 15.90 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 lesser 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 79.78 percent of the female population were not in the labour force, and among these, majority of them—about 74.55 percent—were associated with attending to domestic duties as homemakers (see Chart 3.7). Unemployment was higher among male as compared to that of the female population. Kanniyakumari district was positioned last in terms of female work participation and ranked second in terms of female unemployment status.

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

Mayle Toma		Area Type	
Work Type	Rural	Urban	Kanniyakumari
Self Employed Agriculture	2.78	1.93	2.15
Self Employed Non-Agriculture	15.54	22.98	21.12
Self Employed Allied Agriculture	1.12	0.93	0.98
Casual Labourer Agriculture	9.45	3.42	4.93
Casual Labourer Industry	17.25	10.71	12.35
Casual Labourer Service	17.33	17.43	17.40
Casual Labourer (Others)	7.16	10.23	9.46
Salaried Worker Government	4.95	9.22	8.15
Salaried Worker Private	22.61	22.11	22.24
Multiple Occupation	1.43	0.63	0.83
Others	0.35	0.37	0.36
DK/RF	0.03	0.02	0.02
Total	100	100	100

Table 3.9 shows that the highest proportion of the working population in the district were private salaried workers at 22.24 percent, followed by self-employed in non-agriculture sector at 21.12 percent. The highest proportion of the working population in the state were also salaried private workers at 21.82 percent (TNHPS-PBS, 2021). While salaried private workers were predominant in rural areas—about 22.61 percent, self-employment in non-agricultural sector was most common in urban areas— about 22.98 percent—of the district.

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

Moule Temp				Soci	al Group	•	
Work Type	SC	ST	ВС	MBC	DNC	General	Kanniyakumari
Self Employed Agriculture	1.50	0.00	2.26	0.67	12.72	2.41	2.15
Self Employed Non- Agriculture	16.05	69.16	21.59	22.76	14.10	17.54	21.12
Self Employed Allied Agriculture	1.52	0.00	0.85	2.95	0.00	0.54	0.98
Casual Labourer Agriculture	7.92	0.00	5.16	0.88	9.98	3.64	4.93
Casual Labourer Industry	15.24	6.78	12.19	15.77	8.17	9.22	12.35
Casual Labourer Service	14.92	0.00	18.05	15.34	7.74	14.26	17.40
Casual Labourer (Others)	5.50	6.78	10.56	1.52	0.00	7.14	9.46
Salaried Worker Government	7.73	0.00	7.91	10.67	6.36	9.34	8.15
Salaried Worker Private	26.68	17.27	20.54	26.34	34.56	34.08	22.24
Multiple Occupation	2.86	0.00	0.54	2.10	6.36	1.39	0.83
Others	0.04	0.00	0.35	0.99	0.00	0.27	0.36
DK/RF	0.05	0.00	0.01	0.00	0.00	0.17	0.02
Total	100	100	100	100	100	100	100

The estimates show that majority of the population from SC, MBC and General category were engaged as salaried workers in the private sector. A higher percentage of BC 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 category population were salaried workers in the private sector (TNHPS-PBS, 2021). The percentage of population engaged in salaried work in the government sector in the district was higher among the MBC category compared to other social groups. The results for the ST and DNC 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

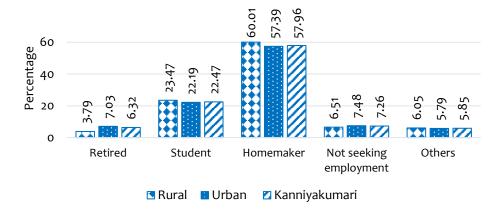


Chart 3.6 shows that, similar to the trend at the state level, more than half the population that was not in the labour force in the district comprised homemakers involved in unpaid domestic duties of the household, followed by students. The proportions of the population that were students and homemakers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

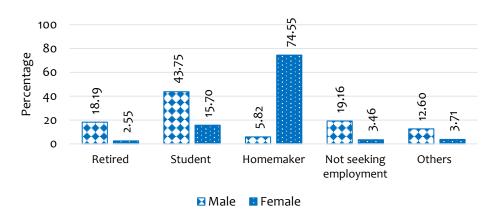


Chart 3.7 Composition of the Population Not in the Labour Force – Gender-wise

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 15.70 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										
Current Status	SC	ST	ВС	MBC	DNC	General	Kanniyakumari				
Retired	6.03	36.98	5.85	6.69	0.00	10.55	6.32				
Student	19.65	1.39	23.31	19.66	16.34	18.02	22.47				
Homemaker	61.93	58.86	57.42	62.12	68.11	58.50	57.96				
Not seeking employment	5.79	2.77	7.25	7.88	12.45	7.65	7.26				
Others	6.29	0.00	6.03	3.65	3.10	5.18	5.85				
DK/RF	0.31	0.00	0.14	0.00	0.00	0.11	0.14				
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. The BC, MBC and SC categories had a higher percentage of not-working population as students compared to the other social groups. The results for the ST and DNC 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 Kanniyakumari 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 Kanniyakumari district are given in Chart 3.8. The TNHPS PBS definition of land ownership does not include leased in land or other forms of holdings. Data were collected 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.

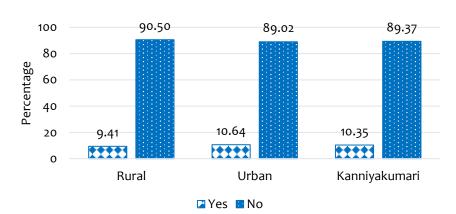


Chart 3.8 Ownership of Agricultural Land – Area-wise

As per the state estimates, the percentage of total households owning agricultural land in Tamil Nadu was 19.41 percent. Kanniyakumari district was ranked twenty-ninth on the percentage of total households owning agricultural land followed by Kancheepuram district at 9.01 percent, Coimbatore district at 8.14 percent and Chennai district at 4.87 percent (TNHPS-PBS, 2021). Chart 3.8 shows that 89.37 percent of the households in Kanniyakumari district did not own agricultural land and around one-tenth of the households in the district owned agricultural land. The percentage of households owing agricultural land was higher in urban areas than rural areas of the district.

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

Type of Advicultural Land	Area Type						
Type of Agricultural Land	Rural	Urban	Kanniyakumari				
Only Irrigated Agricultural Land	66.36	49.81	53-35				
Only Unirrigated Agricultural Land	28.04	45.30	41.61				
Both Irrigated and Unirrigated Agricultural Land	5.02	4.04	4.25				
DK/RF	0.58	0.86	0.80				
Total	100	100	100				

Table 3.12 shows that around 53.35 percent of the households who owned agricultural land in Kanniyakumari district depended on various irrigation sources. Canals, tanks, tube wells and open wells are the main sources of irrigation in Kanniyakumari district (Department of Economics and Statistics, 2023). Around 28.04 percent of agricultural land-owning households in rural areas and 45.30 percent of agricultural land-owning households in urban areas depended on rain-fed irrigation alone. Among the total agricultural land-holding households, the households having irrigated agricultural land was higher in the district at 53.35 percent compared to the state estimate of 50.03 percent.

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

Agricultural Land	Social Group										
Ownership	SC	ST	ВС	МВС	DNC	General	Kanniyakumari				
Yes	4.02	1.98	11.32	3.48	9.36	10.17	10.35				
No	95.98	98.02	88.36	96.52	90.64	89.60	89.37				
DK/RF	0.00	0.00	0.32	0.00	0.00	0.23	0.28				
Total	100	100	100	100	100	100	100				

Table 3.13 shows that BC category households at 11.32 percent and General category households at 10.17 percent were predominant landholders in Kanniyakumari district compared to other social groups. Only 4.02 percent of SC category households and 3.48 percent of MBC households owned agricultural land in the district. The results for the ST and DNC 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. The percentage of land-owning households 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	Area Type							
Hectares)	Rural	Urban	Kanniyakumari					
Marginal (0.01 - 0.99)	92.96	93.83	93.64					
Small (1 - 1.99)	4.66	3.79	3.98					
Semi Medium (2 - 3.99)	1.85	1.82	1.82					
Medium (4 - 9.99)	0.18	0.56	0.48					
Large (10 and above)	0.35	0.00	0.08					
Total	100	100	100					

Table 3.14 shows that 97.62 percent of the agricultural land-owning households in the district were holding marginal or small agricultural lands (less than 2 hectares). This estimate was higher than the state level estimate of 89.33 percent. The shares of semi-medium, medium and large landholdings were lower 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 Kanniyakumari district.

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

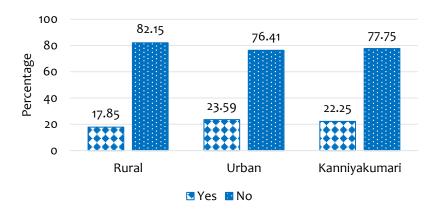


Chart 3.9 shows that 22.25 percent of the households in Kanniyakumari district owned at least one agricultural, allied agricultural and fishing assets. The estimate was higher than the state estimate of 20.92 percent (TNHPS-PBS, 2021). The proportion of households owning at least one agricultural, allied agricultural and fishing asset was higher in urban areas at 23.59 percent than rural areas at 17.85 percent of the district.

## 3.3.3 Presence of Household Assets

This section discusses the percentage of households in Kanniyakumari 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.

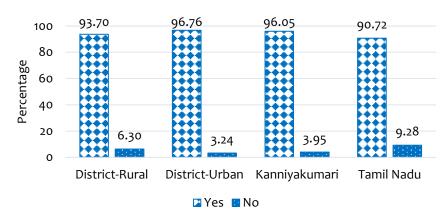


Chart 3.10 Ownership of at least one Household Asset – Area-wise

The percentage of households owning at least one household asset in Kanniyakumari district was at 96.05 percent, which was higher than the state estimate of 90.72 percent. Within the district, the urban areas had marginally higher percentage of households owning at least one household asset than the rural areas.

Table 3.15	5 Presence of	t at least one	Household Asser	t - Social Grou	p-wise Percentages

Presence of	Social Group										
Household Assets	SC	ST	ВС	МВС	DNC	General	Kanniyakumari				
Yes	94.05	100	95.97	98.98	100	95.81	96.05				
No	5.95	0.00	4.03	1.02	0.00	4.19	3.95				
Total	100	100	100	100	100	100	100				

The PBS estimates show that more than 90 percent of households belonging to each social group owned at least one household asset. The SC category had the lowest percentage of households owning at least one household asset at 94.05 percent compared to other social groups in the district. Around 5.95 percent the SC households did not even own a mobile phone. The results for the ST and DNC 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 Kanniyakumari district are given in Chart 3.11.

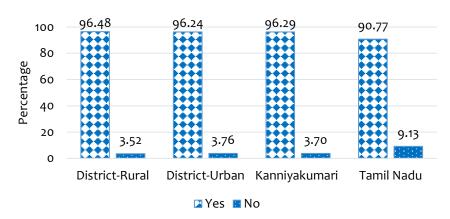


Chart 3.11 Possession of Ration Card – Area-wise

Chart 3.11 shows that the percentage of households in Kanniyakumari district that possessed a ration card was higher than the state estimate. A similar percentage of rural and urban households possessed ration cards.

Гable 3.	16	Pos	sess	ion	ot	Rat	ion (	Cara	at	th	e F	łouse	hold	Leve	l	Social	Grou	ıp-wis	e Pe	ercenta	iges

Possession of	Social Group										
Ration Card	SC	ST	ВС	МВС	DNC	General	Kanniyakumari				
Yes	91.92	60.59	97.01	90.96	98.42	96.78	96.29				
No	8.08	39.41	2.98	9.04	1.58	3.22	3.70				
DK/RF	0.00	0.00	0.01	0.00	0.00	0.00	0.01				
Total	100	100	100	100	100	100	100				

Table 3.16 shows that more than 90 percent of households belonging to almost all social groups except ST category possessed a ration card in the district. Possession of ration cards was highest among the BC category households at 97.01 percent and lowest among MBC category households at 90.96 percent. The results for the ST and DNC 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 Kanniyakumari district are given below.

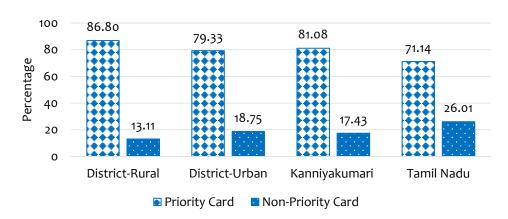


Chart 3.12 Type of Ration Card at the Household Level – Area-wise

The percentage of households possessing priority ration cards in the district was 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 analyze the annual income of households in Kanniyakumari 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 Kanniyakumari district.

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

Source	District - Rural	District - Urban	Kanniyakumari	Tamil Nadu
Agriculture	65,408	1,02,701	92,829	61,830
Allied Agriculture	1,69,638	70,747	1,03,380	38,576
Salaried	1,65,823	2,43,758	2,23,483	2,29,857
Self Employed	1,12,478	1,47,678	1,39,470	1,47,403
Wage Labour	61,176	71,143	67,923	47,734
Other Sources	1,08,284	1,65,532	1,51,037	97,646
Income from all Sources	1,27,924	1,73,355	1,61,490	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 Kanniyakumari district was 13.13 percent higher than the state estimates. Among the then 32 districts, Kanniyakumari was ranked fourth in terms of mean annual household income (TNHPS-PBS, 2021).

In the year 2017-18, the mean household income in the rural areas of Kanniyakumari district was higher than the rural state estimate of ₹92,765 (TNHPS-PBS, 2021). As agriculture was not a predominant employer in rural areas of the district, higher incomes from allied agricultural and non-agricultural sources could be the reason for higher mean rural income. The mean rural household income was higher among the households that depended on allied agriculture and salaried income. Lower mean income was reported among the households that engaged in wage labour.

In the year 2017-18, the mean household income in the urban areas of Kanniyakumari 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 that depended on salaried income. Lower mean income was reported among the households that engaged in allied agricultural actives as a source of income.

## 3.4.2 Income Inequality in Kanniyakumari District

Table 3.18 represents the area-wise Gini coefficient values. The Gini coefficient measures the inequality levels where the Gini coefficient value of o represent perfect equality and 1—or 100 percent—represents perfect inequality across households. The income inequality in Kanniyakumari district (0.540) was lower than the state estimate (0.563)<sup>5</sup>. The

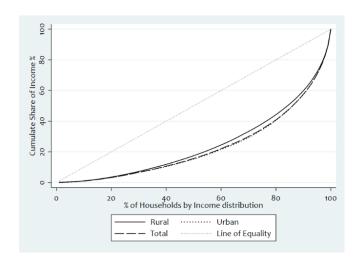
<sup>&</sup>lt;sup>5</sup> Other studies have estimated the Gini coefficient for Tamil Nadu, for instance - Chandrasekhar et al (2021) estimated the Gini coefficient of income inequality for Tamil Nadu as 0.378 in 2018-19 using data from the Periodic Labour Force Survey (PLFS) (2018-19).

income inequality across households in urban areas of the 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	0.509				
Urban	0.545				
Kanniyakumari	0.540				
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 households. 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 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 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 Kanniyakumari district.

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

Expectation of Change in	Area Type							
Future Income	District - Rural	District - Urban	Kanniyakumari	Tamil Nadu				
Higher	49.48	43.80	45.13	50.06				
Lower	11.83	11.76	11.77	8.17				
About the same	28.90	23.74	24.95	31.66				
DK/RF	9.78	20.70	18.15	10.11				
Total	100	100	100	100				

Majority of the households in rural areas—about 49.48 percent—and urban areas—about 43.80 percent—of the district expected their household income to increase in the coming five years. Around 45.13 percent of the households in the district anticipated an increase in their income in future and 24.95 percent of the households expected their income to remain the same.

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

Expectation of	Social Group								
Change in Future Income	SC	ST	ВС	МВС	DNC	General	Kanniyakumari		
Higher	43.87	69.75	44.81	48.63	67.69	45.07	45.13		
Lower	12.31	7.01	11.85	14.00	0.00	9.46	11.77		
About the same	24.38	23.24	24.47	18.85	17.73	35.82	24.95		
DK/RF	19.44	0.00	18.88	18.52	14.58	9.65	18.15		
Total	100	100	100	100	100	100	100		

Around 48.63 percent of the MBC households in Kanniyakumari district were expecting an increase in income in the next five years. The percentage of SC households that expected an increase in the income in future was only 43.87 percent. The percentage of households expecting a decline in future income was higher among MBC households at 14.00 percent. The results for the ST and DNC 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 are given below.

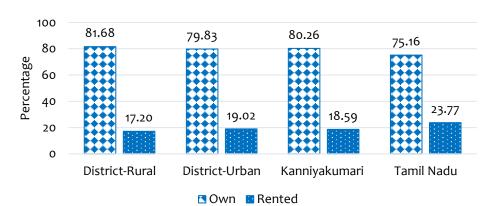


Chart 3.14 Ownership Status of the Households' Dwelling/House – Area-wise

Around 80.26 percent of the households lived in their own house and one-fifth of the households lived in rented houses in Kanniyakumari district. The percentage of households living in their own houses in the district was higher than the state estimates. The district was ranked fourteenth among all districts of Tamil Nadu in terms of percentage of households living in their own houses (TNHPS-PBS, 2021). No disparity was found between the ownership of houses in rural and urban areas. Less than two percent of households lived in other houses such as relative's houses, 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	Social Group							
Status	SC	ST	ВС	МВС	DNC	General	Kanniyakumari	
Own	72.73	24.69	85.34	42.14	51.54	66.87	80.26	
Rented	25.09	75.31	13.58	57.00	41.17	31.73	18.59	
Others	2.18	0.00	1.08	0.86	7.29	1.40	1.15	
Total	100	100	100	100	100	100	100	

Table 3.21 shows that around 85.34 percent of the BC category households in Kanniyakumari district were living in their own houses. The percentage of MBC households living in their own houses was 42.14 percent compared to the state estimates of 79.88 percent. Although 31.73 percent of General category households in the district lived in rented houses, the estimates were lesser compared to the state estimates of 36.4 percent. The percentage of SC and MBC households that lived in rented houses were higher than the state estimates of the respective social groups (TNHPS-PBS, 2021). The results for the ST and DNC category must be interpreted in the context of their sample size, as discussed in Section 3.1.

A detailed analysis of ownership of houses showed that out of the 80.26 percent households that owned houses in Kanniyakumari district, 7.87 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	Social Group									
under a Government Scheme	SC	SC ST BC MBC DNC General Kanniyakuma								
Yes	22.94	28.39	7.37	5.50	28.29	6.32	7.87			
No	76.99	71.61	92.62	94.50	71.71	93.64	92.11			
DK/RF	0.08	0.00	0.01	0.00	0.00	0.05	0.02			
Total	100	100	100	100	100	100	100			

Among the owned houses, the percentage of houses constructed under a government scheme were lower in Kanniyakumari district at 7.87 percent compared to the state estimate of 14.12 percent (TNHPS-PBS, 2021). In Kanniyakumari, SC households at 22.94 percent had a higher percentage of houses built under a government scheme compared to other social groups. The results for the ST and DNC category must be interpreted in the context of their sample size, as discussed in Section 3.1.

#### 3.5.2 House Type

Based on the material used for wall/roof or quality of houses, the PBS classifies the houses as kutcha, 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

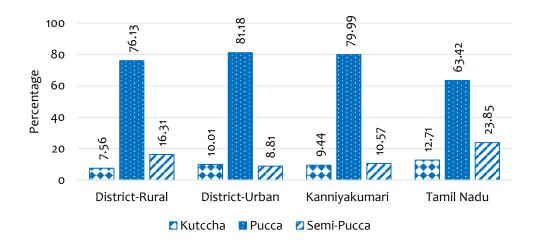


Chart 3.15 shows that majority of households—about 79.99 percent—in Kanniyakumari district were living in pucca houses. The percentage of households living in pucca houses were higher than the state estimate of 63.42 percent. The percentage of people living in pucca houses was higher in urban areas compared to the rural areas of the district. While 75.22 percent of state urban households and 52.93 percent of state rural households lived in pucca houses (TNHPS-PBS, 2021), 81.18 percent of district urban households and 76.13 percent of district rural households lived in pucca houses. The percentage of people living in semi-pucca and kutccha houses were similar in the district, and lower than the respective state estimates. A higher percentage of people lived in semi-pucca houses in rural areas and kutccha houses in urban areas of the district.

## 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 Kanniyakumari 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).

 $^{\rm 6}$  Primary source - Water that is availed for the greater part of the year

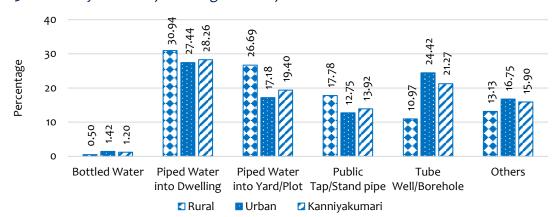


Chart 3.16 Primary Source of Drinking Water of Households – Area-wise

Chart 3.16 shows that 28.26 percent of households in Kanniyakumari district were using piped water into the dwelling as their primary source of drinking water, followed by piped water into yard/plot. 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 Kanniyakumari district, piped water into the dwelling were mostly used both in urban and rural households at 27.44 percent and 30.94 percent respectively.

# 3.5.4 Electricity

The state had witnessed a mass electrification during the last decade. A comparison of 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 shows the electrification status of households in Kanniyakumari district, along with a comparison to the electrification status during Census (2011).

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

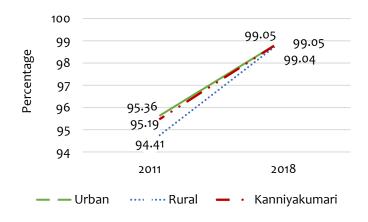


Chart 3.17 shows that an increase in electrification had happened in both rural and urban areas of Kanniyakumari district during the period from 2011 to 2018 where the rate of growth of households with electricity was higher in rural areas. Kanniyakumari was ranked first among the then 32 districts in terms of electrification, followed by Chennai at 98.82 percent and Tiruvallur at 98.77 percent. Around 99.05 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 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 – District and State

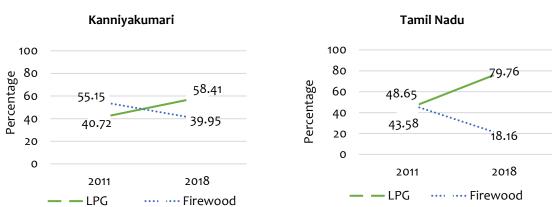


Chart 3.18 shows that the use of LPG as primary fuel for cooking in Kanniyakumari district had increased from 40.72 percent in 2011 (Census 2011) to 58.41 percent in 2018. However, firewood was still used by 39.95 percent of households in 2018. Compared to other districts of Tamil Nadu, Kanniyakumari was ranked thirtieth in terms of LPG use and fourth in terms of firewood use (TNHPS-PBS, 2021).

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

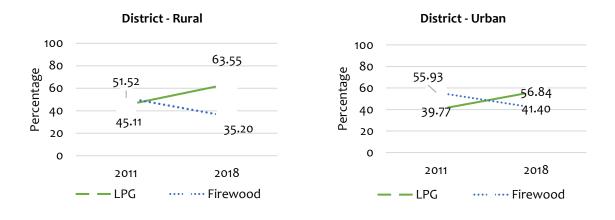


Chart 3.19 indicates that more than one-third of the households in rural areas and more than 40 percent of households in urban areas were still using firewood as the primary fuel for cooking. The usage of firewood was higher in urban areas than rural areas of the district.

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

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

Primary Cooking	Social Group									
Fuel	SC	ST	ВС	MBC	DNC	General	Total			
Fire wood	41.69	39.41	45.31	11.78	2.08	9.64	39.95			
LPG	57.14	60.59	53.34	87.17	97.92	85.40	58.41			
Kerosene	1.05	0.00	0.69	1.02	0.00	3.06	0.92			
Others	0.11	0.00	0.53	0.04	0.00	1.44	0.55			
DK/RF	0.00	0.00	0.13	0.00	0.00	0.45	0.17			
Total	100	100	100	100	100	100	100			

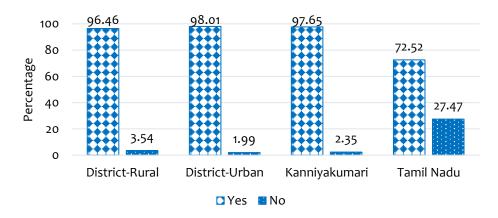
<sup>\*</sup>Others Include Electricity, Gobar Gas, Solar Energy, etc.

Table 3.23 shows that most of the General category households— 85.40 percent—and MBC category—87.17 percent—of households used LPG as the primary fuel for cooking. Firewood use was high among by BC households—45.31 percent—and SC category households—41.69 percent—compared to the state estimates of 12.00 percent and 27.6 percent respectively (TNHPS-PBS, 2021). The results for the ST and DNC 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 latrine is given below.

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



The percentage of households with latrine within house premises increased from 93.36 percent in 2011 (Census, 2011) to 97.65 percent in 2018 as per the PBS estimates. Kanniyakumari district was positioned first 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 facilities in the district was notably higher than the state estimate. A slightly higher percentage of the households in urban areas have latrine within the premises than rural areas of the district.

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

Latrine Within	Social Group								
House Premises	SC	ST	ST BC MBC DNC General Kanniyaku						
Yes	89.53	100	97.84	99.78	92.71	98.42	97.65		
No	10.47	0.00	2.16	0.22	7.29	1.58	2.35		
Total	100	100	100	100	100	100	100		

The estimates show that majority of MBC, General and BC households had latrine within the premises of the household in the district, and the percentages were higher than the state estimates for the respective categories. One-tenth of the SC households did not have latrine facility within the premises, compared to 47.70 percent of households in the state (TNHPS-PBS, 2021). All the eight ST households surveyed in the district possessed an inhouse latrine. The results for the DNC category must be interpreted in the context of its sample size, as discussed in Section 3.1.

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

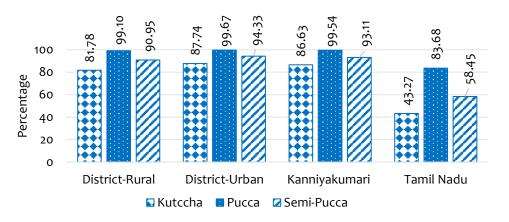


Chart 3.21 depicts presence of latrine in the premises of different types of houses. Majority of the pucca houses had latrine facilities within the premises of the house. The percentage of semi-pucca and kutcha houses with latrine facilities within the premises of the house

were lower compared to the pucca houses of the district. The percentage of households with latrine facilities in kutcha, pucca and semi-pucca houses were higher in urban areas compared to rural areas of the district. The estimates of the district for all types of houses were significantly higher than the state estimates.

The alternative practices followed by the households without latrine within the premises of the house is shown below.

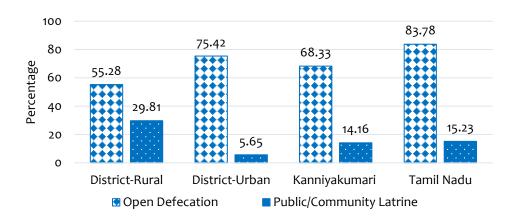


Chart 3.22 Alternate Practices of Defecation by the Households without Latrine – Area-wise

The percentage of total households in the district following open defecation had declined from 7.13 percent in 2011 (Census, 2011) to 1.61 percent in 2018 as per the PBS estimates. Compared to other districts of Tamil Nadu, Kanniyakumari district was positioned thirty-first in terms of percentage of total households following open defecation, followed by Chennai district at 1.01 percent (TNHPS-PBS, 2021).

Chart 3.22 shows that 68.33 percent of households without an in-house latrine in Kanniyakumari district were following open defecation. This was lower than the state estimate. The practice of open defecation was higher in urban areas compared to rural areas of the district.

# 4. Conclusion and Recommendations

The Pre-Baseline Survey (PBS) 2018-19 of Kanniyakumari district was conducted from the sample of 6,804 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.

Kanniyakumari was ranked first in the state in terms of literacy rate; and the gender gap in literacy rate was also much lower compared to other districts. The mean annual household income of Kanniyakumari district was 13.13 percent higher than the state estimates, and the district was ranked fourth in terms of this parameter. The Gini coefficient and Lorenz curve measured income inequality to be lower in the district compared to the state. Almost 80 percent of the households lived in pucca houses, which was much higher compared to the state estimate of 63.42 percent. Ownership of household assets was also higher in the district than the state estimate.

With respect to development indicators, Kanniyakumari was ranked first with respect to domestic electrification. It also topped the state in terms of latrine presence within the premises of the household. The practice of open defecation was also significantly lower than that at the state level. Piped water supply into dwellings was the principal drinking water source in rural areas too, unlike other districts where public tap or standpipe was common.

There are certain indicators in the district which merit policy attention. Despite being the district with the highest literacy rate, Kanniyakumari was positioned last among all districts in Tamil Nadu in terms of employed population and ranked third in terms of unemployment status. Female work participation was especially low at 15.90 percent, despite their high participation in tertiary education where a greater percentage of females had completed bachelor's degree and post-graduate degree than males. Almost 75 percent of females who were not in the labour force were homemakers. Hence, policy attention might be directed to providing job opportunities commensurate with the high educational attainment of the district's population, with more formal sector employment opportunities.

Despite the district's phenomenal performance with respect to multiple economic and development indicators, Kanniyakumari had a significantly high proportion of the households using firewood as the main cooking fuel. The district was ranked fourth highest with respect to firewood usage and third lowest in terms of LPG use in the state. More than 40 percent of the SC and BC households were using firewood. Targeting adoption of cleaner fuels like LPG among these sections would help the district improve its performance with respect to this indicator.

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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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