

# REPORT ON DRINKING WATER, SANITATION, HYGIENE AND HOUSING CONDITION IN KERALA

Based on 76th Round NSS Socio Economic Survey (July 2018 – December 2018) (Central and State Sample Pooled Data)

> NSS Division Department of Economics and Statistics Government of Kerala

# **Preface**

National Statistical Office (NSO) has been conducting nationwide multi-subject, integrated, large-scale sample surveys in the form of successive rounds covering various aspects of social, economic, demographic, industrial and agricultural profiles. State Governments were invited to participate with matching samples to increase the number of samples to enable the preparation of estimates at the sub-state level (District level) which was not possible with the 'Central Sample' alone. Accordingly, Department of Economics and Statistics (DES), Kerala has also been participating in the National Sample Surveys with matching samples by adopting the same methodology of NSO with an aim to derive district level estimates by pooling of central and state sample data.

National Statistical Office (NSO) conducted survey on 'Drinking water, Sanitation, Hygiene and Housing in its 76<sup>th</sup> round (July 2018 - December 2018). Department of Economics and Statistics, Kerala also participated in the survey. This report on 'Drinking Water & Sanitation facilities and Housing Condition in Kerala' is prepared based on the pooled estimates of central and state sample data of NSS 76<sup>th</sup> round. This report provides district level estimates on facilities of drinking water, sanitation along with housing facilities available to the households and the micro-environment surrounding the houses which are important determinants of overall quality of living condition of the people.

I am grateful to National Statistical Office (NSO), Government of India, for their technical guidance provided to DES Kerala, regarding estimation and pooling of central and state samples for the National Sample Surveys. The supervisors, field staff, and NSS Division staff at DES who worked tirelessly to ensure the survey's success deserve special appreciation. I would like to take this opportunity to congratulate Sri.Francis Thomas, Assistant Director and Sreekumar G, Researh Officer with the assistance and support of the staff of the NSS division, under the guidance and supervision of Sri.Preeth V.S, Nosologist and Sri.Manoj M, Additional Director (State Income) for their meticulous effort for bringing out the report.

I hope the report would be of great use to the academia and administrators who are involved in the field of housing conditions of the people of Kerala comprehensively.



Thiruvananthapuram 31/05/2024

# **Contributers**

### **Guidance & Supervision**

Sri. Manoj M (Additional Director - State Income)

### **Report Editing**

Sri.Preeth V S (Deputy Director, NSS Division)

### **Report Writing**

Sri .Francis Thomas (Assistant Director) Sri.Sreekumar G, (Research Officer)

### **Report Layout & Design**

Sri.Vinod V.S. (Research Assistant) Sri. Bintu Joseph (Senior Grade Typist)

### **Data Validation & Tabulation**

NSS Division - Directorate of Economics and Statistics, Kerala

## **Data Collection & Data Entry**

District Offices, Department of Economics & Statistics

### **Technical Support**

National Statistical Office, Government of India

### **HIGHLIGHTS**

Department of Economics and Statistics, Kerala participated in NSS 76<sup>th</sup> round survey conducted during July – December 2018. This pooled report is based on the data collected from 6738 households both central and state samples of NSS 76<sup>th</sup> round survey on Drinking Water, Sanitation, Hygiene and Housing Condition in Kerala. Some important results of the survey are given below.

### **Drinking water Facility**

- At the state level, 82.6% of households in Kerala had exclusive access to their primary drinking water source, with rural areas at 82.7% and urban areas at 82.4%.
- Thiruvananthapuram (92.8%), Kannur (92.3%), Kollam (91.9%) and Kasargod (91.5%) districts stand out with a high percentage of households having exclusive use of their drinking water source, indicating a greater degree of control and ownership over the water source.
- Districts like Wayanad, Thrissur, Idukki and Alappuzha show a notable proportion of households relying on community use or other sources, indicating a more shared or communal approach to accessing drinking water.

### **Bathroom Facility**

- Most of households in Kerala, both rural (96.7%) and urban (93.9%) areas, have exclusive access to their own bathroom facilities, indicating a strong presence of private sanitation amenities across the state.
- Among districts in Kerala, Palakkad District (98.9%) had the highest proportion of households have exclusive use of their bathroom, closely followed by Kasaragod at 98.6% and Kannur 98.5%. While Ernakulam (92.3%), Kottayam (92.5%), Idukki (92.9%) exhibited lower percentages compared to other districts.

### **Latrine Facility**

- At the overall level, 96.1% of households in Kerala had access to a latrine with a flush/pour flush system connected to a piped sewer system, with rural and urban areas showing similar percentages of 96.2% and 96.1%, respectively.
- All districts in Kerala have high access rates to latrines with flush/pour-flush systems connected to piped sewer systems, exceeding 90% except for Kasaragod (58%) and Wayanad (77.7%).
- A notable proportion of households, accounting for 41.6% in Kasaragod and 22.3% in Wayanad, opt for pit latrines with slabs.
- Urban areas in Kasaragod and Wayanad exhibit a higher prevalence of pit latrine usage compared to rural regions. Specifically, in Wayanad, 33.8% of urban households utilize pit latrines, significantly higher than the 21.7% in rural areas. Similarly, in Kasaragod, urban households using pit latrines surpass rural ones by 12.2 percentage points, reaching 48.8% usage.

### **Housing Condition**

- Kerala had a high prevalence of homeownership, with 89.6% of households residing in owned dwelling units, signalling stability and permanence in living conditions statewide.
- Rural areas in Kerala exhibit a strong preference for homeownership, with 93.9% of households owning their dwellings, highlighting a robust tenurial security in rural communities.
- The urban sector has an ownership rate of 85.1%, with 13.8% of households opting for rented accommodations, reflecting a higher reliance on renting in urban settings.
- District-wise analysis shows that over 90% of households in districts like Kasargod, Kannur, Wayanad, Kozhikode, Palakkad, Alappuzha, and Kollam own their homes, while other districts range from 85% to 90% in homeownership rates.
- In rural areas across all districts exhibit a higher prevalence of owned dwellings, while in urban areas of Wayanad (47.2%), Idukki( 52.7%), Kottayam(75.8%), and Pathanamthitta (75.5%) show lower ownership rates and a greater reliance on rented accommodations.

## **Abbreviations**

### List of Abbreviations used in the Report

Abbreviation	Description
DES	Department of Economics and Statistics
NSO	National Statistical Office
NSS	National Sample Survey
FSU	First Stage Unit
UFS	Urban Frame Survey
TVM	Thiruvananthapuram
KLM	Kollam
РТА	Pathanamthitta
ALP	Alappuzha
ктм	Kottayam
IDK	Idukki
ЕКМ	Ernakulam
TSR	Thrissur
РКD	Palakkad
MLP	Malappuram
ККД	Kozhikkode
WND	Wayanad
KNR	Kannur
KSD	Kasaragod

## CONTENTS

	Contents		
Chapter 1	Introduction	1-6	
Chapter 2	Testing poolability of Central and State Sample Data	7-14	
Chapter 3	Summary of findings	15-34	
Appendix A	Detailed tables	35-216	
Appendix B	RSE tables	217-223	
Appendix C	Concepts and Definitions	225-238	
Appendix D	Sample Design and Estimation Procedure	239-246	
Appendix E	Survey Schedule 1.2	247	

# Chapter 1 Introduction

## Chapter 1 Introduction

#### 1.1 Back ground

The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MOSPI), Government of India, since its inception in 1950 has been conducting nation-wide large scale sample surveys, employing scientific sampling methods, to collect data on diverse economic aspects. In its 76th round survey, NSO carried out a survey on 'Drinking Water, Sanitation, Hygiene and Housing Condition' during July - December 2018 covering the entire country.

As usual in the regular NSS rounds, Department of Economics and Statistics, Kerala participated in the survey on matching sample basis. The sample surveyed by the Department of Economics and Statistics is referred to as the state sample, while another independent sample of equal size surveyed by NSO is called the 'Central sample'. All the results presented in this report have been analyzed after pooling these two samples using scientific techniques. The primary objective of this pooled report is to derive district-level estimates on various aspects of 'Housing Condition, Drinking water, Sanitation, and Hygiene' in Kerala. Additionally, more reliable state-level results are generated due to the increased sample size by pooling of central and state sample data.

The survey covered both rural and urban sectors of the state. Stratified multi-stage design had been adopted for the 76<sup>th</sup> round survey. The first stage units (FSUs) were the census villages in the rural sector and Urban Frame Survey (UFS) blocks in the urban sector. The ultimate stage units were households in both the sectors. In case of large FSUs, one intermediate stage of sampling was the selection of two hamlet-groups (hg)/ sub-blocks (sb) from each rural/urban FSU. The schedule of enquiry on 'Drinking Water, Sanitation, Hygiene and Housing Condition' (known as Schedule 1.2) was designed to collect information on housing condition with special emphasis on the aspects of drinking water, sanitation and hygiene. This report shows the state and district level estimates based on the data collected on the aspects of 'Drinking Water, Sanitation, Hygiene and Housing Condition''.

#### **1.2.** Past surveys on the subject

NSO has been collecting data on 'Housing Conditions and other Amenities' almost since its inception. Data on the structural aspects of dwelling units and basic housing amenities such as drinking water, bathrooms, sewerage, latrine, lighting, etc., available to the households were collected by NSO from NSS 7th round (October 1953 - March 1954) to NSS 23rd round (July 1968 - June 1969) through different survey schedules. These surveys were essentially exploratory in nature, designed to give only a broad idea of the dimensions of variables reflecting housing conditions at the national level. Prior to NSS 76th round, comprehensive surveys on housing condition with a separate Schedule 1.2 were carried out by NSO in 28thround (October 1973 - June 1974), 44th round (July 1988 - June 1989), 49th round (January - June, 1993), 58thround (July - December, 2002), 65th round (July 2008 - June 2009) and 69th round (July - December, 2012).

#### **1.3 Sample Size**

DES participated in the survey with equal matching sample size by adopting same methodology of NSO to derive district level estimates by pooling of central and state sample data. District wise Number of First Stage Units and Ultimate Stage Units (Households) surveyed in 76th Round NSS by NSO(central) and DES (State) is presented in table 1.3.2 and 1.3.3 respectively and its summary is shown in table 1.3.1. Overall, when central and state samples are combined, the survey covered 284 panchayath wards as First Stage Units in the rural sector and 284 UFS blocks as First Stage Units in the urban sector. By combining the households surveyed in the central and state samples, a total of 3343 households were covered in the rural sector and 3395 households in the urban sector. The variation in the total number of FSUs surveyed by NSO and DES across districts ranged from 16 in Wayanad to 68 in Malappuram, reflecting a corresponding variation in households surveyed, ranging from 192 in Wayanad to 792 in Malappuram.

	Number of FSU's Surveyed				Number of Households surveyed			
Sector	Central Sample	State Sample	Pooled Sample	Central Sample	State Sample	Pooled Sample		
Rural	142	142	284	1691	1652	3343		
Urban	142	142	284	1692	1703	3395		
ALL	284	284	568	3383	3355	6738		

 Table 1.3.1: Number of samples surveyed in the state for the survey.

		Rural			Urban		Rur	al + Ur	ban
District	Central sample	State Sample	Pooled (C+S)	Central sample	State Sample	Pooled (C+S)	Central sample	State Sample	Pooled (C+S)
Kasaragod	6	6	12	4	4	8	10	10	20
Kannur	8	8	16	14	14	28	22	22	44
Wayanad	6	6	12	2	2	4	8	8	16
Kozhikode	8	8	16	18	18	36	26	26	52
Malappuram	18	18	36	16	16	32	34	34	68
Palakkad	18	18	36	6	6	12	24	24	48
Thrissur	8	8	16	18	18	36	26	26	52
Ernakulam	8	8	16	20	20	40	28	28	56
Idukki	10	10	20	2	2	4	12	12	24
Kottayam	12	12	24	4	4	8	16	16	32
Alappuzha	8	8	16	10	10	20	18	18	36
Pathanamthitta	8	8	16	2	2	4	10	10	20
Kollam	12	12	24	10	10	20	22	22	44
Thiruvananthapuram	12	12	24	16	16	32	28	28	56
ALL	142	142	284	142	142	284	284	284	568

# Table 1.3.2: District-wise number of FSUs surveyed for schedule 1.2 (NSS 76<sup>th</sup> Round) in Kerala

Table 1.3.3: District-wise number of households Surveyed for schedule 1.2 (NSS 76 <sup>th</sup> )	
Round) in Kerala	

		Rural			Urban		Ru	ral + Ur	ban
District	Central sample	State Sample	Pooled (C+S)	Central sample	State Sample	Pooled (C+S)	Central sample	State Sample	Pooled (C+S)
Kasaragod	72	72	144	48	48	96	120	120	240
Kannur	96	96	192	168	168	336	264	264	528
Wayanad	72	72	144	24	24	48	96	96	192
Kozhikode	96	96	192	216	216	432	312	312	624
Malappuram	216	192	408	192	192	384	408	384	792
Palakkad	216	216	432	72	72	144	288	288	576
Thrissur	84	96	180	216	216	432	300	312	612
Ernakulam	96	84	180	233	240	473	329	324	653
Idukki	120	120	240	24	24	48	144	144	288
Kottayam	144	128	272	48	47	95	192	175	367
Alappuzha	96	96	192	120	120	240	216	216	432
Pathanamthitta	96	96	192	24	24	48	120	120	240
Kollam	144	144	288	120	120	240	264	264	528
Thiruvananthapuram	143	144	287	187	192	379	330	336	666
ALL	1691	1652	3343	1692	1703	3395	3383	3355	6738

#### **1.4: Contents of the report**

All the estimates presented in this report are based on the pooled data collected through Schedule 1.2 of NSS 76<sup>th</sup> round. The field work for the state sample was carried out by Department of Economics & Statistics and central sample was carried out by NSO. Important indicators of living conditions of the household members have been developed and presented in this report at the district level.

Since NSS 76<sup>th</sup> round survey was conducted during July - December 2018, the reference period for the survey results may be considered as the mid-point of the survey period July - December 2018 i.e., 01.10.2018.

This report contains three chapters and five appendices. Following the present introductory chapter (chapter one), chapter two gives the methodology and results of poolability test. Chapter three presents summary of findings of the survey at the district level based on the pooled estimates. The detailed tables at district level forming the basis of this report are given in appendix A. Relative standard errors for some of the key results are given in appendix B. Appendix C gives the concepts and definitions of different terms used for the survey on 'Drinking Water, Sanitation, Hygiene and Housing Condition' of NSS 76<sup>th</sup> round. An outline of the sample design and estimation procedure adopted in NSS 76<sup>th</sup> round survey is presented in appendix D and appendix E gives a facsimile of the Schedule 1.2 canvassed in NSS 76<sup>th</sup> round survey.

# Chapter 2 Testing Poolability of Central and State Sample Data

Department of Economics & Statistics

# Chapter 2 Testing Poolability of Central and State Sample Data

#### 2.1: Introduction

Theoretically, combining central and state sample data through pooling should indeed increase the sample size and lead to more reliable estimates at the district level. However, from a practical standpoint, there are several challenges and obstacles that need to be addressed before generating these district-level estimates. Though the central sample and state sample are drawn independently following identical sampling design with same concepts, definitions, and instructions to collect the data, different non-sampling errors may be occurred due to different reasons like lack of adequate training to field staff and data processing staff, agency bias etc. If so, the effort of pooling of central and state data to generate district level estimates will not be fruitful. Therefore, before pooling one need to test that the samples are coming from identical distribution. Since the parametric distribution of the sample mean is unknown one may adopt non-parametric tests, such Run test, Median test, chi-square test etc to test that the samples are coming from identical distribution function. Considering the selected parameters for pooling, Chi-square tests were conducted, and the results are presented in this chapter.

#### 2.2: Parameters considered for pooling:

Considering the smaller sample size at district level following broad parameters were considered for pooling.

- a) Distribution of dwelling units by tenurial status
- b) Distribution of households by nature of access to the principal source of drinking water
- c) Distribution of households by access to latrine
- d) Distribution of households having access to latrine by type of latrine

#### 2.3: Testing poolability of the parameters

Chi-Square test is suitable for testing the poolability of two sets of data for parameters such as the distribution of dwelling units by tenurial status, households by nature of access to the principal source of drinking water, households by access to latrine, and households having access to latrine by type of latrine because all these parameters involve categorical variables and distributions across categories. A brief note on chi-square test is given below. Chi-Square test for two independent samples based on multinomial distributions is utilized to assess whether there is a significant difference in the proportions of categorical variables between two sets of data, typically grouped into classes. The null hypothesis (H0) states that there is no difference in proportions between the two samples, while the alternative hypothesis (H1) asserts that there is a difference. Construct 2 X k contingency table for k classes at the domain where two sets of data are to be pooled as below and use chi-square test if State sample and Central sample have identical distribution.

Sample-type		on	- Total		
	Class-1	Class-2	 Class-k-1	Class-k	Total
State Sample	N <sub>11</sub>	N <sub>12</sub>	 N <sub>1k-1</sub>	N <sub>1k</sub>	N <sub>1.</sub>
<b>Central Sample</b>	N <sub>21</sub>	N <sub>22</sub>	 N <sub>2k-1</sub>	N <sub>2k</sub>	N <sub>2.</sub>
Total	N.1	N.2	 N.k-1	N <sub>.k</sub>	N

Observed frequency of each cell  $O_{ij} = N_{ij}$  where i = 1 to 2, j = 1 to k.

Expected frequency of each cell  $E_{ij} = (N_i * N_j)/N_i$ , where i = 1 to 2, j = 1 to k.

$$\chi^2$$
 Value =  $\sum_{i=1}^{2} \sum_{j=1}^{2} (O_{ij} - E_{ij})^2 / O_{ij}$  with degrees of freedom = (2-1)\*(k-1) = k-1

The Chi-Square statistic is then compared to the critical Chi-Square value from the Chi-Square distribution table at a specified significance level with degrees of freedom equal to  $(2-1)^*(k-1) = k-1$ . If the calculated Chi-Square value is greater than the critical value, the null hypothesis is rejected, indicating a significant difference in proportions between the two samples. If the calculated Chi-Square value is not greater than the critical value, the null hypothesis is accepted, indicating no significant difference in proportions.

As such Chi-square test at 1% level of significance has been conducted for the parameters considered for pooling, separately for rural and urban sectors, and the results are presented in the tables 2.3.1 to 2.3.8. The poolability test has been accepted for almost all districts with rejections only observed in few cases. Therefore it is suggested to take caution when utilizing estimates of districts where the poolability test was rejected.

Table: 2.3.1- District wise Chi-square test value of tenurial status of dwelling units in Kerala for Rural samples. (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if chisqval > 9.210)

Sl.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	8.1	Accept
2	Kannur	2	1.02	Accept
3	Wayanad	2	11.27	Reject
4	Kozhikkode	2	1.02	Accept
5	Malappuram	2	6.65	Accept
6	Palakkad	2	12.79	Reject
7	Thrissur	2	3.37	Accept
8	Ernakulam	2	3.23	Accept
9	Idukki	2	11.26	Reject
10	Kottayam	2	1.46	Accept
11	Alappuzha	2	1.66	Accept
12	Pathanamthitta	2	5.23	Accept
13	Kollam	2	4.63	Accept
14	Thiruvananthapuram	2	1.66	Accept

Table 2.3.2.- Districtwise Chi-square test value of tenurial status of dwelling units in Kerala for Urban samples (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if chisqval >

9.210)

SI.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	9.75	Reject
2	Kannur	2	0.41	Accept
3	Wayanad	2	3.18	Accept
4	Kozhikkode	2	1.05	Accept
5	Malappuram	2	2.74	Accept
6	Palakkad	2	2.19	Accept
7	Thrissur	2	1.94	Accept
8	Ernakulam	2	1.74	Accept
9	Idukki	2	17.94	Reject
10	Kottayam	2	0.22	Accept
11	Alappuzha	2	0.93	Accept
12	Pathanamthitta	2	0.11	Accept
13	Kollam	2	3.92	Accept
14	Thiruvananthapuram	2	1.16	Accept

Table 2.3.3 Districtwise Chi-square test value of nature of access to the principal source of

drinking water of dwelling units in Kerala Rural samples. (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if p 0.01> 9.210

SI.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	4.14	Accept
2	Kannur	2	5.71	Accept
3	Wayanad	2	8.12	Accept
4	Kozhikkode	2	1.81	Accept
5	Malappuram	2	1.13	Accept
6	Palakkad	2	7.76	Accept
7	Thrissur	2	10.57	Reject
8	Ernakulam	2	17.87	Reject
9	Idukki	2	18.96	Reject
10	Kottayam	2	0.87	Accept
11	Alappuzha	2	3.03	Accept
12	Pathanamthitta	2	3.84	Accept
13	Kollam	2	15.86	Reject
14	Thiruvananthapuram	2	5.62	Accept

Table 2.3.4 District wise Chi-square test value of nature of access to the principal source of drinking water of dwelling units in Kerala Urban samples. (df=2, Critical value of  $\chi^2$ 

0.01=9.210, reject if p 0.01> 9.210

Sl.No	District	df	chisqval	Accept/ Reject
1	Kasargod	2	4.91	Accept
2	Kannur	2	0.47	Accept
3	Wayanad	2	5.99	Accept
4	Kozhikkode	2	0.24	Accept
5	Malappuram	2	1.00	Accept
6	Palakkad	2	0.00	Accept
7	Thrissur	2	2.85	Accept
8	Ernakulam	2	8.75	Accept
9	Idukki	2	16.80	Reject
10	Kottayam	2	0.52	Accept
11	Alappuzha	2	15.92	Reject
12	Pathanamthitta	2	4.69	Accept
13	Kollam	2	0.00	Accept
14	Thiruvananthapuram	2	8.72	Accept

Table 2.3.5 Districtwise Chi-square test value by acc	cess to bathroom of dwelling units in
Kerala Rural samples. (df=2, Critical value of $\chi^2$	
Kerala Rural samples. (df=2, Critical value of $\lambda$	0.01=9.210, reject if p 0.01> 9.210

Sl.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	2.84	Accept
2	Kannur	2	5.71	Accept
3	Wayanad	2	2.39	Accept
4	Kozhikkode	2	1.60	Accept
5	Malappuram	2	4.63	Accept
6	Palakkad	2	1.02	Accept
7	Thrissur	2	3.65	Accept
8	Ernakulam	2	3.13	Accept
9	Idukki	2	28.63	Reject
10	Kottayam	2	0.61	Accept
11	Alappuzha	2	0.03	Accept
12	Pathanamthitta	2	0.05	Accept
13	Kollam	2	5.06	Accept
14	Thiruvananthapuram	2	4.67	Accept

Table 2.3.6 Districtwise Chi-square test value of access to bathroom of dwelling units in Kerala Urban samples. (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if p 0.01> 9.210

Sl.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	1.96	Accept
2	Kannur	2	0.00	Accept
3	Wayanad	2	0.00	Accept
4	Kozhikkode	2	0.03	Accept
5	Malappuram	2	4.02	Accept
6	Palakkad	2	0.70	Accept
7	Thrissur	2	1.31	Accept
8	Ernakulam	2	1.43	Accept
9	Idukki	2	0.00	Accept
10	Kottayam	2	0.13	Accept
11	Alappuzha	2	7.77	Accept
12	Pathanamthitta	2	1.18	Accept
13	Kollam	2	0.08	Accept
14	Thiruvananthapuram	2	10.93	Reject

Table 2.3.7 Districtwise Chi-square test value of access to latrine of dwelling units inKerala Rural samples. (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if p 0.01> 9.210

Sl.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	0.00	Accept
2	Kannur	2	0.00	Accept
3	Wayanad	2	4.04	Accept
4	Kozhikkode	2	0.00	Accept
5	Malappuram	2	1.51	Accept
6	Palakkad	2	5.63	Accept
7	Thrissur	2	7.18	Accept
8	Ernakulam	2	5.89	Accept
9	Idukki	2	15.38	Reject
10	Kottayam	2	0.02	Accept
11	Alappuzha	2	2.80	Accept
12	Pathanamthitta	2	1.02	Accept
13	Kollam	2	1.03	Accept
14	Thiruvananthapuram	2	0.00	Accept

Table 2.3.8 Districtwise Chi-square test value of access to latrine. of dwelling units in Kerala Urban samples. (df=2, Critical value of  $\chi^2$  0.01=9.210, reject if p 0.01> 9.210

Sl.No	District	df	chisqval	Acceptance/ Rejection
1	Kasargod	2	0.37	Accept
2	Kannur	2	1.85	Accept
3	Wayanad	2	0.40	Accept
4	Kozhikkode	2	12.72	Reject
5	Malappuram	2	1.04	Accept
6	Palakkad	2	0.00	Accept
7	Thrissur	2	1.25	Accept
8	Ernakulam	2	10.72	Reject
9	Idukki	2	7.03	Accept
10	Kottayam	2	3.85	Accept
11	Alappuzha	2	3.71	Accept
12	Pathanamthitta	2	2.01	Accept
13	Kollam	2	0.00	Accept
14	Thiruvananthapuram	2	1.05	Accept

# Chapter 3 Summary of Findings Based on Pooled Estimates

15

## Chapter 3

### Summary of findings based on Pooled Estimates

#### 3.1: Introduction

Though Survey on 'Drinking Water, Sanitation, Hygiene, and Housing Condition' in the 76th round NSS gathered extensive information regarding the facilities available to households in terms of drinking water, sanitation, and housing, only broad parameters were considered for pooling owing to lack of sufficient sample size. District level estimates of such broad parameters based on the pooled sample of the survey are presented in this chapter.

#### 3.2 Methodology of Pooling

When the State's participation is of unequal matching of central samples, the weighted average of two estimates with weights being matching ratio of central and state sample may be a better way of combining the estimates considering central and state samples as independent samples. For any characteristic, consider the state sample [s] in the form of two independent sub-sample s1 and s2 and the central sample[c] in the form of two independent sub-sample c1 and c2. Let matching ratio of state and central sample be m : n. Based on this, the respective estimates for state and central can be computed as:

$$t_s = \sum_{i}^{r} (t_{s1} + t_{s2})/2 \text{ and } t_{c} = \sum_{i}^{r} (t_{c1} + t_{c2})/2$$

Pooled estimate of these two estimates is given by weighing with matching participation rate m:n. Thus the pooled estimate is given by:

$$t_{p} = \frac{mt_{s} + nt_{c}}{m + n} \text{ with } V(t_{p}) = \frac{m^{2}V(t_{s}) + n^{2}V(t_{c})}{(m + n)^{2}}$$
In general  $V(t_{c})_{and} V(t_{s})_{can be estimated as} \hat{V}(t_{c}) = \sum_{l} (t_{cl} - t_{c2})^{2}/4$ 

$$\hat{V}(t_{s}) = \sum_{l} (t_{sl} - t_{s2})^{2}/4 \hat{V}(t_{p}) = \frac{m^{2}\hat{V}(t_{s}) + n^{2}\hat{V}(t_{c})}{(m + n)^{2}},$$

where  $\sum_{l}^{l}$  stands for summing over stratum x sub-stratum level covariance at the domain of pooling.

The pooled estimate will always lie between the estimates based on central and state sample separately.

In the 76th round, DES Kerala participated in the survey with a sample size equal to that of the central sample.

### 3.3: Drinking water

In this survey, the source of water from which the household obtained most of its drinking water during the last 365 days was considered as the principal source of drinking water of the household. The information on principal source of drinking water of the household was collected in terms of the seventeen categories viz. (i) bottled water, (ii) piped water into dwelling, (iii) piped water to yard/plot, (iv) piped water from neighbour, (v) public tap/standpipe, (vi) tube well, (vii) hand pump, (viii) protected well, (ix) unprotected well, (x) public tanker truck, (xi) private tanker truck, (xii) protected spring, (xiii) unprotected spring, (xiv) rainwater collection, (xv) tank/pond, (xvi) other surface water (river, dam, stream, canal, lake, etc.) and (xvii) others (cart with small tank or drum, etc.).

#### 3.3.1: Access of the household to the principal source of drinking water.

In this survey, access to the principal source of drinking water was defined in terms of the prevailing situation of use of the source of drinking water and **not the legal right to use**. The information on access to principal source of drinking water of the household was collected in terms of the eight categories viz. (i) exclusive use of household, (ii) common use of households in the building, (iii) neighbour's source, (iv) public source restricted to particular community, (v) public source unrestricted and (vii) others. The district wise percentage distribution of households in Kerala, by access to the principal source of drinking water of the household is given in Tables 3.3.1.1,3.3.1.2 and 3.3.1.3. Chart-3.3.1.1, 3.3.1.2 and 3.3.1.3 gives the pictorial representation of District-wise Percentage distribution of households by nature of access to the principal source of drinking water for rural, urban and all (rural + Urban) in Kerala.

In the rural sector, 82.7% of households have the advantage of exclusive use of their drinking water source, with limited percentages relying on common use within buildings, neighbour's sources, or community sources. In comparison, the urban sector shows similar trends but with slightly higher percentages of households (82.4%) having exclusive use, alongside a larger proportion (6%) with common use within buildings. The combined figures for Kerala indicate that 82.6% of households have exclusive access to their drinking water source, while around 6.9% have shared access within buildings or community sources. The data show variations across districts in terms of the predominant mode of access to drinking water. Thiruvananthapuram (92.8%), Kannur( 92.3%), Kollam(91.9%) and Kasargod (91.5%) districts

stand out with a high percentage of households having exclusive use of their drinking water source, indicating a greater degree of control and ownership over the water source. On the other hand, districts like Wayanad, Thrissur, Idukki and Alappuzha show a notable proportion of households relying on community use or other sources, indicating a more shared or communal approach to accessing drinking water.

Table 3.3.1.1: District-wise Percentage distribution of households by nature of access to the
principal source of drinking water for Kerala

STATE					F	RURAL	
		acce	ess to the	principal source	e of drinking wat	er	
		a		commu	unity use		
District	exclusive use of the household	common use of households in the building	neighbour's source	public source restricted to particular community	Private source restricted to particular community	others	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Kasargod	90.9	4.4	3.2	0.7	0.8	0	100
Kannur	97.9	0	2.1	0	0	0	100
Wayanad	69.2	5.6	11.3	6.9	0.8	6.1	100
Kozhikkode	86.8	1.4	11	0	0	0.8	100
Malappuram	75.6	4.9	17.3	1.5	0	0.7	100
Palakkad	79.5	2	9.7	8.7	0	0.1	100
Thrissur	65.1	1.3	14.3	7.9	7.1	4.3	100
Ernakulam	92.6	2.3	3.5	1.6	0	0	100
Idukki	64.6	5.5	7.8	9.7	2.3	10	100
Kottayam	80.6	0.9	11.2	5.5	0	1.8	100
Alappuzha	83.1	1.3	5.3	5.9	3	1.3	100
Pathanamthitta	86.1	1	6.2	1.2	0.6	4.9	100
Kollam	90.6	1.4	5.3	1.8	0	0.8	100
Thiruvananthapuram	95.1	0.4	2.9	1.6	0	0	100
ALL	82.7	2.3	8.4	3.8	0.8	1.9	100



Table 3.3.1.2: District-wise Percentage distribution of households by nature of access to the principal source of drinking water for Kerala

STATE	STATE URBAN							
	Access to the principal source of drinking water							
	he		e	commu	unity use			
District	exclusive use of the household	common use of households in the building	neighbour's source	public source restricted to particular community	private source restricted to particular community	others	All	
Kasargod	92.3	3.9	2.6	0.7	0.7	0	100	
Kannur	89.1	2.7	5.9	1.8	0.1	0.4	100	
Wayanad	54.8	43.2	0	0	0	2	100	
Kozhikkode	82.7	4.9	9.4	2.7	0	0.2	100	
Malappuram	77.6	9.2	11.6	1.1	0.3	0.2	100	
Palakkad	95.3	1	2.5	1.1	0	0	100	
Thrissur	71.9	9.2	6.7	8.9	1.3	1.9	100	
Ernakulam	85.2	7.7	1.1	3.5	0.2	2.2	100	
Idukki	62	38	0	0	0	0	100	
Kottayam	67.4	20.5	7.9	2.8	0	1.3	100	
Alappuzha	64.4	2.3	4	18.4	1	10	100	
Pathanamthitta	91.9	3.1	4	0	0	1	100	
Kollam	93.6	0.5	4.3	1.6	0	0	100	
Thiruvananthapuram	91.1	2.3	1.7	2.9	0	2	100	
ALL	82.4	6	5.3	4.3	0.3	1.7	100	



 Table 3.3.1.3: District-wise Percentage distribution of households by nature of access to the principal source of drinking water for Kerala

STATE ALL									
	Access to the principal source of drinking water								
	f	of		Commu	nity use				
District	Exclusive use of the household	Common use o households in the building	Neighbour's source	Public source restricted to particular community	Private source restricted to particular community	Others	All		
Kasargod	91.5	4.2	3	0.7	0.7	0	100		
Kannur	92.3	1.7	4.6	1.1	0.1	0.3	100		
Wayanad	68.5	7.6	10.7	6.5	0.8	5.9	100		
Kozhikkode	84	3.8	9.9	1.9	0	0.4	100		
Malappuram	76.5	6.8	14.8	1.3	0.1	0.4	100		
Palakkad	83.8	1.8	7.7	6.7	0	0.1	100		
Thrissur	70	7.1	8.8	8.6	2.9	2.6	100		
Ernakulam	87.5	6	1.9	2.9	0.2	1.5	100		
Idukki	64.4	8.7	7.1	8.7	2.1	9	100		
Kottayam	76.5	7.1	10.2	4.7	0	1.6	100		
Alappuzha	73.2	1.8	4.6	12.6	1.9	5.9	100		
Pathanamthitta	86.7	1.3	5.9	1.1	0.5	4.5	100		
Kollam	91.9	1	4.9	1.7	0	0.5	100		
Thiruvananthapuram	92.8	1.5	2.2	2.3	0	1.1	100		
ALL	82.6	4.1	6.9	4.1	0.6	1.8	100		



### 3.4; Bathroom facility

#### 3.4.1: Access of household to bathroom

For the purposes of the survey, a bathing place which satisfied the criteria of a room was considered as a bathroom. It was considered that the household had access to bathroom if majority of the household members could use bathroom facility irrespective of whether it was used by them or not. Information on access to bathroom was collected in terms of six categories viz. (i) exclusive use of household, (ii) common use of households in the building, (iii) public/community use without payment, (iv) public/community use with payment, (v) others and (vi) no bathroom.

District-wise percentage distributions of households by access to bathrooms for rural, urban, and combined rural-urban areas are provided in tables 3.4.1.1, 3.4.1.2, and 3.4.1.3, respectively. Corresponding graphical representations are depicted in Charts 3.4.1.1, 3.4.1.2, and 3.4.1.3 to offer a visual understanding of the data across different districts.

The state-level analysis of bathroom facilities in Kerala reveals that the majority of households, both in rural and urban areas, have exclusive access to their own bathroom facilities, showcasing a strong prevalence of private sanitation amenities across the state. In rural areas, 96.7% of households have exclusive use of their bathroom, indicating a high level of individualized sanitation infrastructure. Similarly, in urban areas, 93.9% of have exclusive use of their bathroom, slightly lower than the rural percentage but still substantial. The data also indicates that shared bathroom usage within buildings is more common in urban areas compared to rural regions, with 5.3% of urban households reporting common use. Moreover, the percentages of households relying on public or community-use bathroom facilities without payment are minimal, with both rural and urban areas reporting negligible figures in this category.

Among districts in Kerala, Palakkad District (98.9%) had the highest proportion of households have exclusive use of their bathroom, closely followed by Kasaragod at 98.6% and Kannur 98.5%. While Ernakulam (92.3%), Kottayam (92.5%), Idukki (92.9%) exhibited lower percentages compared to other districts.

STATE										
		access to bathroom								
District	exclusive use of household	common use of households in the building	public/ community use without payment	no bathroom	others	all				
(1)	(2)	(3)	(4)	(5)	(6)	(7)				
Kasargod	99.9	0.0	0.0	0.1	0.0	100.0				
Kannur	100.0	0.0	0.0	0.0	0.0	100.0				
Wayanad	96.4	2.5	1.1	0.0	0.0	100.0				
Kozhikkode	100.0	0.0	0.0	0.0	0.0	100.0				
Malappuram	94.4	3.6	0.0	0.8	1.1	100.0				
Palakkad	98.8	0.5	0.0	0.1	0.6	100.0				
Thrissur	96.2	2.0	0.0	1.1	0.7	100.0				
Ernakulam	98.9	0.4	0.0	0.0	0.7	100.0				
Idukki	94.4	2.8	0.0	2.8	0.0	100.0				
Kottayam	97.5	0.7	0.0	1.5	0.3	100.0				
Alappuzha	97.5	0.0	0.0	1.0	1.5	100.0				
Pathanamthitta	96.0	1.1	0.0	0.6	2.3	100.0				
Kollam	95.9	1.4	0.0	2.2	0.4	100.0				
Thiruvananthapuram	92.7	0.0	0.0	6.8	0.5	100.0				
ALL	96.7	1.2	0.1	1.4	0.6	100.0				

 Table 3.4.1.1 : District wise Percentage distribution of Households by facility of bathroom

 and access to bathroom



Table 3.4.1.2 : District wise Percentage distribution of Households by facility of bathroom and access	
to bathroom	

STATE URBAN										
	access to bathroom									
District	exclusive use of household	common use of households in the building	public/ community use without payment	no bathroom	others	all				
(1)	(2)	(3)	(4)	(5)	(6)	(7)				
Kasargod	96.6	3.4	0.0	0.0	0.0	100.0				
Kannur	97.6	2.2	0.0	0.1	0.0	100.0				
Wayanad	65.0	35.0	0.0	0.0	0.0	100.0				
Kozhikkode	95.9	3.4	0.0	0.5	0.2	100.0				
Malappuram	92.5	6.7	0.0	0.5	0.4	100.0				
Palakkad	99.2	0.8	0.0	0.0	0.0	100.0				
Thrissur	92.9	6.2	0.0	0.3	0.6	100.0				
Ernakulam	89.3	10.7	0.0	0.0	0.0	100.0				
Idukki	79.9	20.1	0.0	0.0	0.0	100.0				
Kottayam	81.7	17.4	0.0	0.9	0.0	100.0				
Alappuzha	96.7	3.1	0.0	0.2	0.0	100.0				
Pathanamthitta	83.3	16.7	0.0	0.0	0.0	100.0				
Kollam	97.8	0.6	0.0	1.7	0.0	100.0				
Thiruvananthapuram	96.2	0.9	0.0	2.3	0.6	100.0				
ALL	93.9	5.3	0.0	0.7	0.2	100.0				


Table 3.4.1.3 : Districtwise Percentage distribution of Households by facility of bathroom and access	
to bathroom	

STATE						ALL				
	access to bathroom									
District	exclusive use of household	common use of households in the building	public/ community use without payment	no bathroom	others	all				
(1)	(2)	(3)	(4)	(5)	(6)	(7)				
Kasargod	98.6	1.4	0.0	0.1	0.0	100.0				
Kannur	98.5	1.4	0.0	0.1	0.0	100.0				
Wayanad	94.8	4.2	1.0	0.0	0.0	100.0				
Kozhikkode	97.2	2.4	0.0	0.4	0.1	100.0				
Malappuram	93.6	4.9	0	0.7	0.8	100.0				
Palakkad	98.9	0.6	0.0	0.1	0.4	100.0				
Thrissur	93.8	5.1	0.0	0.5	0.6	100.0				
Ernakulam	92.3	7.5	0.0	0.0	0.2	100.0				
Idukki	92.9	4.6	0.0	2.5	0.0	100.0				
Kottayam	92.5	5.9	0.0	1.3	0.2	100.0				
Alappuzha	97.1	1.6	0.0	0.6	0.7	100.0				
Pathanamthitta	94.6	2.9	0.0	0.5	2.0	100.0				
Kollam	96.7	1.0	0.0	2.0	0.3	100.0				
Thiruvananthapuram	94.7	0.5	0.0	4.2	0.5	100.0				
ALL	95.3	3.2	0.0	0.1	0.4	100.0				



## 3.5: Latrine Facility

#### 3.5.1: Access of household to latrine

In this survey, it was considered that the household had access to latrine if majority of the household members had the facility of using latrine irrespective of whether it was used by them or not. Information on access to latrine was collected in terms of six categories viz. (i) exclusive use of household, (ii) common use of households in the building, (iii) public/community use without payment, (iv) public/community use with payment, (v) others and (vi) no latrine. A household was categorised as 'having access to latrine' if majority of the household members had the facility of using the latrine irrespective of the situation whether they used it or not.

District-wise percentage distributions of households with access to latrine, categorized by the type of latrine used, are presented in Tables 3.5.1.1,3.5.1.2, and 3.5.1.3 for rural, urban, and combined (rural + urban) areas, respectively. The graphical representation of this data can be found in Charts 3.5.1.1,3.5.1.2, and 3.5.1.3, corresponding to the rural, urban, and combined sectors.

The predominant type of latrine used in both sectors of Kerala is flush/pour-flush to a piped sewer system, constituting 96.2% in rural areas and 96.1% in urban areas. Interestingly, there is no reported usage of other types of latrines or households not using any latrine in the data provided, indicating a comprehensive coverage of sanitation facilities across both rural and urban sectors.

All districts in Kerala have high access rates to latrines with flush/pour-flush systems connected to piped sewer systems, exceeding 90% except for Kasaragod (58%) and Wayanad (77.7%). These two districts notably deviate, with a substantial portion of households (41.6% in Kasaragod and 22.3% in Wayanad) utilizing pit latrines with slabs. Furthermore, the urban sectors of Kasaragod and Wayanad show a higher prevalence of pit latrine usage compared to their rural counterparts. In Wayanad, while 21.7% of rural households use pit latrines, the urban sector has a higher rate of 33.8%. Similarly, in Kasaragod, the percentage of urban households using pit latrines exceeds the rural sector by 12.2 percentage points, standing at 48.8%.

STATE					RURAL				
	flush/pour-flush to								
District	piped sewer system	pit latrine with slab	others	not used	all				
(1)	(2)	(3)	(4)	(5)	(6)				
Kasargod	63.4	36.6	0.0	0	100				
Kannur	97.5	2.5	0.0	0	100				
Wayanad	78.3	21.7	0.0	0	100				
Kozhikkode	99.8	0.2	0.0	0	100				
Malappuram	98.4	1.6	0.0	0	100				
Palakkad	100	0	0.0	0	100				
Thrissur	93.1	6.8	0.0	0.1	100				
Ernakulam	98.2	1.8	0.0	0	100				
Idukki	95	5	0.0	0	100				
Kottayam	97.5	2.5	0.0	0	100				
Alappuzha	100	0	0.0	0	100				
Pathanamthitta	100	0	0.0	0	100				
Kollam	100	0	0.0	0	100				
Thiruvananthapuram	100	0	0.0	0	100				
All	96.2	3.8	0.0	0	100				

Table 3.5.1.1 District wise percentage distribution of households having access to latrine by type oflatrine used



Table 3.5.1.2 : District wise percentage distribution of households having access to latrine by type of
latrine used

STATE	STATE URBAN									
		flush/p	our-flush to							
District	piped sewer system	pit latrine with slab	others	not used	all					
(1)	(2)	(3)	(4)	(5)	(6)					
Kasargod	50.2	48.8	0.0	1	100					
Kannur	96.6	3.4	0.0	0	100					
Wayanad	66.2	33.8	0.0	0	100					
Kozhikkode	96.6	3.4	0.0	0	100					
Malappuram	97.4	2.6	0.0	0	100					
Palakkad	99.5	0.5	0.0	0	100					
Thrissur	91	9	0.0	0	100					
Ernakulam	99.5	0.5	0.0	0	100					
Idukki	100	0	0.0	0	100					
Kottayam	100	0	0.0	0	100					
Alappuzha	99.7	0.3	0.0	0	100					
Pathanamthitta	100	0	0.0	0	100					
Kollam	99.5	0	0.5	0	100					
Thiruvananthapuram	100	0	0.0	0	100					
All	96.1	3.8	0.0	0	100					





STATE ALL									
		flush	/pour-flush to	-					
District	piped sewer system	pit latrine with slab	others	not used	all				
(1)	(2)	(3)	(4)	(5)	(6)				
Kasargod	58	41.6	0.0	0.4	100				
Kannur	96.9	3.1	0.0	0	100				
Wayanad	77.7	22.3	0.0	0	100				
Kozhikkode	97.6	2.4	0.0	0	100				
Malappuram	98	2	0.0	0	100				
Palakkad	99.9	0.1	0.0	0	100				
Thrissur	91.6	8.4	0.0	0	100				
Ernakulam	99.1	0.9	0.0	0	100				
Idukki	95.6	4.4	0.0	0	100				
Kottayam	98.3	1.7	0.0	0	100				
Alappuzha	99.9	0.1	0.0	0	100				
Pathanamthitta	100	0	0.0	0	100				
Kollam	99.8	0	0.2	0	100				
Thiruvananthapuram	100	0	0.0	0	100				
All	96.1	3.8	0.0	0	100				



### **3.6: Housing Condition**

#### 3.6.1: Tenurial status of dwelling unit

Housing stands as a fundamental necessity for human well-being, playing a pivotal role in determining the overall quality of life. One of the critical factors shaping this quality is the tenurial status of the dwelling unit, which refers to whether the household owns, rents, or lacks a dwelling altogether. This status directly impacts the security, stability, and permanence of a household's living conditions, making it a vital determinant of their overall well-being.

Table 3.6.1.1 illustrates the district-wise percentage distribution of households in rural Kerala based on the tenurial status of dwelling units, while Table 3.6.1.2 focuses on urban Kerala, and Table 3.6.1.3 presents the combined data for both rural and urban sectors in Kerala. These figures show a higher prevalence of owned dwelling units across both rural and urban sectors in Kerala, with the combined percentage being 89.6%. This indicates that a substantial proportion of households in Kerala have secured homeownership, reflecting a sense of stability and permanence in their living conditions. Specifically, in the rural sector, the percentage of households with owned dwelling units is notably higher at 93.9%, underscoring the strong preference for homeownership and tenurial security in rural communities. On the other hand,

the urban sector shows a lower ownership rate of 85.1%, with a relatively higher proportion of households relying on renting (13.8%) compared to rural areas.

It's noteworthy that over 90% of households in districts like Kasargod, Kannur, Wayanad, Kozhikode, Palakkad, Alappuzha, and Kollam own their dwelling units. However, in districts such as Malappuram, Thrissur, Ernakulam, Idukki, Kottayam, Pathanamthitta, and Thiruvananthapuram, the proportion of households owning dwelling units is relatively lower, ranging from 85% to 90%. Notably, in the rural sector, all districts exhibit a higher prevalence of owned dwelling units, whereas in the urban sector, Wayanad, Idukki, Kottayam, and Pathanamthitta show lower percentages of households owning dwelling units and a higher reliance on rented accommodations compared to other districts.

STATE	Rural							
	Tenurial status of dwelling units							
	Households	s with dwell	ing units	TT 1 11				
District	Owned	Hired	Others	Households with no dwelling units	All			
(1)	(2)	(3)	(4)	(5)	(6)			
Kasargod	91.8	8.2	0	0	100			
Kannur	97.6	2.3	0	0	100			
Wayanad	94.7	5.3	0	0	100			
Kozhikkode	98.5	1.5	0	0	100			
Malappuram	90.9	5.5	3.6	0	100			
Palakkad	97.4	1.9	0.6	0	100			
Thrissur	90.1	7.5	2.4	0	100			
Ernakulam	94.4	5.4	0.1	0	100			
Idukki	88.6	6.3	5.2	0	100			
Kottayam	92.2	7.8	0	0	100			
Alappuzha	96.5	2.8	0.7	0	100			
Pathanamthitta	91.6	8.4	0	0	100			
Kollam	96.2	3.8	0	0	100			
Thiruvananthapuram	94.1	3.6	2.3	0	100			
ALL	93.9	4.9	1.2	0	100			

 Table 3.6.1.1: District wise Percentage distribution of dwelling units by tenurial status of the household for Kerala (Rural)

# Table 3.6.1.2: District wise Percentage distribution of dwelling units by tenurials status of the household for Kerala (Urban)

STATE					Urban
				f dwelling units	
District	Households	with dwelli	ing units	Households with	
	Owned	Hired	Others	no dwelling units	All
(1)	(2)	(3)	(4)	(5)	(6)
Kasargod	88.7	11.3	0	0	100
Kannur	95.1	3.9	1	0	100
Wayanad	47.2	50.8	2	0	100
Kozhikkode	88.8	10.5	0.8	0	100
Malappuram	88.2	10.5	1.3	0	100
Palakkad	90.9	8.6	0.5	0	100
Thrissur	84.2	14.2	1.5	0	100
Ernakulam	80.7	19	0.3	0	100
Idukki	52.7	46.3	1	0	100
Kottayam	75.8	24.2	0	0	100
Alappuzha	85	14.8	0.3	0	100
Pathanamthitta	75.9	24.1	0	0	100
Kollam	88	10.1	1.9	0	100
Thiruvananthapuram	80	16.8	3.2	0	100
All	85.1	13.8	1.2	0	100

STATE					All			
District	tenurial status of dwelling units							
	households w	vith dwellin	g units	house holds with	all			
	owned         hired         others         no dwelling units							
(1)	(2)	(3)	(4)	(5)	(6)			
Kasargod	90.6	9.4	0	0	100			
Kannur	96	3.3	0.6	0	100			
Wayanad	92.2	7.7	0.1	0	100			
Kozhikkode	91.8	7.7	0.5	0	100			
Malappuram	89.8	7.7	2.6	0	100			
Palakkad	95.7	3.7	0.6	0	100			
Thrissur	85.8	12.4	1.8	0	100			
Ernakulam	85	14.7	0.3	0	100			
Idukki	85	10.3	4.7	0	100			
Kottayam	87	13	0	0	100			
Alappuzha	90.4	9.1	0.5	0	100			
Pathanamthitta	89.7	10.3	0	0	100			
Kollam	92.6	6.5	0.8	0	100			
Thiruvananthapuram	86	11.2	2.8	0	100			
All	89.6	9.2	1.2	0	100			

## Table 3.6.1.3: Districtwise Percentage distribution of dwelling units by tenurials status of the household for Kerala (All)



Department of Economics & Statistics



# Appendix - A Detailed Tables

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class	on MPCE	
Kerala		Kasar	god				RURAL			
		Tenurial st	tatus of dwe	lling units			Number of house holds			
			House		0		Estd.(0)		Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	87.1	12.9	0	0	100	300	300	33	33	
20-40	88.4	11.6	0	0	100	334	334	23	23	
40-60	94.5	5.5	0	0	100	349	349	27	27	
60-80	90	10	0	0	100	382	382	32	32	
80-100	97.8	2.2	0	0	100	377	377	29	29	
All	91.8	8.2	0	0	100	1742	1742	144	144	
Estd.(00) no. of dwelling units	1599	143	0	0	1742	Х	Х	Х	X	
Sample no. of dwelling units	134	10	0	0	144	X	X	Х	Х	

Kerala		Kasar	god				URBAN		
		Tenurial s	tatus of dwe	elling units			Number of <b>l</b>	nouse holds	
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	92.6	7.4	0	0	100	166	166	14	14
20-40	93.8	6.2	0	0	100	250	250	19	1
40-60	89.5	10.5	0	0	100	235	235	18	1
60-80	95	5	0	0	100	248	248	17	1
80-100	75.9	24.1	0	0	100	284	284	28	2
All	88.7	11.3	0	0	100	1182	1182	96	9
Estd.(00) no. of dwelling									
units	1049	133	0	0	1182	Х	Х	Х	2
Sample no. of dwelling units	85	11	0	0	96	Х	Х	Х	У

Kerala	Kasargod Tenurial status of dwelling units						ALL Number of house holds				
	Household	ls with dwel		House		Estd			sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	89	11	0	0	100	466	466	47	47		
20-40	90.7	9.3	0	0	100	584	584	42	42		
40-60	92.5	7.5	0	0	100	584	584	45	45		
60-80	92	8	0	0	100	630	630	49	49		
80-100	88.4	11.6	0	0	100	660	660	57	57		
All	90.6	9.4	0	0	100	2924	2924	240	240		
Estd.(00) no. of dwelling											
units	2648	276	0	0	2924	Х	Х	Х	Х		
Sample no. of dwelling units	219	21	0	0	240	Х	Х	Х	Х		

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	untile class o	on MPCE
Kerala		Kanı	nur				RURAL		
		Tenurial s	tatus of dwe	elling units			Number of I	house holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	San	nple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	99.7	0	0.3	0	100	261	261	24	24
20-40	100	0	0	0	100	396	396	36	36
40-60	95.2	4.8	0	0	100	436	436	48	48
60-80	100	0	0	0	100	423	423	38	38
80-100	94.6	5.4	0	0	100	479	479	46	46
All	97.6	2.3	0	0	100	1995	1995	192	192
Estd.(00) no. of dwelling									
units	1948	47	1	0	1995	Х	Х	Х	Х
Sample no. of dwelling units	188	3	1	0	192	Х	Х	Х	Х

-

Г

Kerala		Kanı	nur				URBAN		
		Tenurial s	tatus of dwe	elling units			Number of <b>l</b>	house holds	
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	93.5	0	6.5	0	100	544	544	53	53
20-40	97.4	2.6	0	0	100	596	596	66	66
40-60	96.1	3.9	0	0	100	647	647	78	78
60-80	98.5	1.5	0	0	100	841	841	89	89
80-100	90.8	9.2	0	0	100	907	907	50	50
All	95.1	3.9	1	0	100	3534	3534	336	336
Estd.(00) no. of dwelling									
units	3362	137	35	0	3534	Х	Х	Х	Х
Sample no. of dwelling units	321	13	2	0	336	Х	Х	Х	Х

c

Kerala		Kanr	lur				ALL		
		Tenurial st	tatus of dwe	lling units			Number of <b>l</b>	house holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	95.5	0	4.5	0	100	805	805	77	77
20-40	98.4	1.6	0	0	100	991	991	102	102
40-60	95.7	4.3	0	0	100	1083	1083	126	126
60-80	99	1	0	0	100	1264	1264	127	127
80-100	92.1	7.9	0	0	100	1387	1387	96	96
All	96	3.3	0.6	0	100	5529	5529	528	528
Estd.(00) no. of dwelling									
units	5310	184	36	0	5529	Х	Х	Х	Х
Sample no. of dwelling units	509	16	3	0	528	Х	Х	Х	Х

r

Kerala		Waya	nad				RURAL		
		Tenurial st	tatus of dwe	elling units			Number of l	nouse holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	100	0	0	0	100	312	312	21	21
20-40	98.1	1.9	0	0	100	333	333	23	23
40-60	93.9	6.1	0	0	100	448	448	34	34
60-80	99.2	0.8	0	0	100	496	496	34	34
80-100	85.3	14.7	0	0	100	507	507	32	32
All	94.7	5.3	0	0	100	2097	2097	144	144
Estd.(00) no. of dwelling									
units	1985	112	0	0	2097	Х	Х	Х	Х
Sample no. of dwelling units	127	17	0	0	144	Х	Х	Х	Х

Kerala		Wayaı Tenurial st	nad tatus of dwe	lling units			URBAN Number of I	house holds	
	Household	ls with dwel		House		Estd		Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	74.5	0	25.5	0	100	8	8	4	4
20-40	87.8	12.2	0	0	100	17	17	8	8
40-60	78.8	21.2	0	0	100	15	15	9	9
60-80	83.6	15.2	1.2	0	100	21	21	18	18
80-100	8.6	91.4	0	0	100	55	55	9	9
All	47.2	50.8	2	0	100	116	116	48	48
Estd.(00) no. of dwelling									
units	55	59	2	0	116	Х	Х	Х	Х
Sample no. of dwelling units	26	20	2	0	48	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of the	e household	for each qu	intile class o	on MPCE
Kerala		Waya	nad				ALL		
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	San	ıple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	99.3	0	0.7	0	100	321	321	25	25
20-40	97.6	2.4	0	0	100	350	350	31	31
40-60	93.4	6.6	0	0	100	463	463	43	43
60-80	98.6	1.3	0	0	100	517	517	52	52
80-100	77.7	22.3	0	0	100	563	563	41	41
All	92.2	7.7	0.1	0	100	2213	2213	192	192
Estd.(00) no. of dwelling									
units	2040	171	2	0	2213	Х	Х	Х	Х
Sample no. of dwelling units	153	37	2	0	192	Х	Х	Х	Х

E

Table 1: Districtwise perce	ntage distrik	oution of dw	elling units	by tenurials	status of the	e household	for each qu	intile class o	on MPCE
Kerala		Kozhi	kkod				RURAL		
		Tenurial s	tatus of dwe	elling units			Number of l	house holds	
	Household	ls with dwe	ling units	House		Estd	.(0)	San	nple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	99.8	0.2	0	0	100	321	321	22	22
20-40	100	0	0	0	100	406	406	27	27
40-60	100	0	0	0	100	453	453	36	36
60-80	93.5	6.5	0	0	100	525	525	52	52
80-100	99.9	0.1	0	0	100	663	663	55	55
All	98.5	1.5	0	0	100	2368	2368	192	192
Estd.(00) no. of dwelling									
units	2333	36	0	0	2368	Х	Х	Х	Х
Sample no. of dwelling units	188	4	0	0	192	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE
Kerala		Kozh	ikkod				URBAN		
		Tenurial st	tatus of dwe	elling units			Number of I	house holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	93.5	4.5	2	0	100	698	698	56	56
20-40	95.6	2.8	1.6	0	100	861	861	76	76
40-60	94.5	4.4	1.1	0	100	1135	1135	101	101
60-80	89.5	10.5	0	0	100	1210	1210	112	112
80-100	76.8	23.2	0	0	100	1402	1402	87	87
All	88.8	10.5	0.8	0	100	5307	5307	432	432
Estd.(00) no. of dwelling									
units	4710	557	40	0	5307	Х	Х	Х	Х
Sample no. of dwelling units	392	37	3	0	432	Х	Х	Х	Х

Kerala		Kozhi Tenurial st	kkod tatus of dwe	elling units			ALL Number of l	house holds	
	Household	ls with dwel		House		Estd		Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	95.5	3.1	1.4	0	100	1020	1020	78	78
20-40	97	1.9	1.1	0	100	1266	1266	103	103
40-60	96.1	3.1	0.8	0	100	1588	1588	137	137
60-80	90.7	9.3	0	0	100	1735	1735	164	164
80-100	84.2	15.8	0	0	100	2065	2065	142	142
All	91.8	7.7	0.5	0	100	7675	7675	624	624
Estd.(00) no. of dwelling									
units	7043	592	40	0	7675	Х	Х	Х	Х
Sample no. of dwelling units	580	41	3	Δ	624	Х	Х	Х	Х

Kerala		Malapp					RURAL		
		Tenurial s	tatus of dwe	elling units			Number of l	house holds	
	Household	ls with dwe	ling units	House		Estd	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	97.1	2.9	0	0	100	750	750	63	6
20-40	95.2	4.8	0	0	100	800	800	70	7
40-60	94.8	5.2	0	0	100	980	980	89	8
60-80	93.5	6.5	0	0	100	1124	1124	98	9
80-100	80.8	6.6	12.6	0	100	1437	1437	88	8
All	90.9	5.5	3.6	0	100	5090	5090	408	40
Estd.(00) no. of dwelling									
units	4629	280	181	0	5090	Х	Х	X	
Sample no. of dwelling units	383	20	5	0	408	Х	Х	Х	2

Table 1: Districtwise perce	ntage distrik	oution of dw	elling units	by tenurials	status of the	e household	for each qu	intile class o	on MPCE
Kerala		Malapp	uram				URBAN		
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	San	ıple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	96.5	3.1	0.3	0	100	502	502	50	50
20-40	95.1	2.9	2	0	100	699	699	73	73
40-60	79.7	16.4	4	0	100	875	875	96	96
60-80	86.9	13.1	0	0	100	832	832	94	94
80-100	87.9	12.1	0	0	100	1041	1041	71	71
All	88.2	10.5	1.3	0	100	3948	3948	384	384
Estd.(00) no. of dwelling									
units	3484	414	50	0	3948	Х	Х	Х	Х
Sample no. of dwelling units	333	46	5	0	384	Х	Х	Х	Х

Г

Kerala		Malapp	uram				ALL		
		Tenurial st	tatus of dwe	0			Number of h	nouse holds	
	Household	ls with dwel	ling units	holds with		Estd	.(0)	Samj	ple
Quintile class on UMPCE	Owned	Hired	Others	no dwelling	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	96.8	3	0.1	0	100	1252	1252	113	113
20-40	95.1	3.9	0.9	0	100	1498	1498	143	143
40-60	87.7	10.5	1.9	0	100	1854	1854	185	185
60-80	90.7	9.3	0	0	100	1956	1956	192	192
80-100	83.8	8.9	7.3	0	100	2478	2478	159	159
All	89.8	7.7	2.6	0	100	9039	9039	792	792
Estd.(00) no. of dwelling									
units	8113	694	231	0	9039	Х	Х	Х	Х
Sample no. of dwelling units	716	66	10	0	792	Х	Х	Х	Х

Kerala		Palakl	kad		RURAL					
		Tenurial st	tatus of dwe	elling units			Number of <b>l</b>	nouse holds		
	Household	ls with dwel	ling units	House		Estd.(0)		Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	98	1.4	0.6	0	100	892	892	70	70	
20-40	97.4	1.4	1.2	0	100	916	916	76	76	
40-60	98.2	1.7	0.2	0	100	996	996	84	84	
60-80	97.4	1.3	1.3	0	100	984	984	85	85	
80-100	96.5	3.5	0.1	0	100	1141	1141	117	117	
All	97.4	1.9	0.6	0	100	4929	4929	432	432	
Estd.(00) no. of dwelling										
units	4803	95	31	0	4929	Х	Х	X	Х	
Sample no. of dwelling units	411	9	12	0	432	Х	Х	Х	Х	

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE		
Kerala		Palakl	kad				URBAN				
		Tenurial s	tatus of dwe	lling units		Number of house holds					
	Household	ls with dwe	ling units	House		Este	l.(0)	Sample			
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	100	0	0	0	100	298	298	20	20		
20-40	100	0	0	0	100	299	299	21	21		
40-60	92.2	7.8	0	0	100	396	396	30	30		
60-80	88	12	0	0	100	390	390	37	37		
80-100	79.7	18.4	1.9	0	100	430	430	36	36		
All	90.9	8.6	0.5	0	100	1813	1813	144	144		
Estd.(00) no. of dwelling											
units	1648	157	8	0	1813	Х	Х	Х	Х		
Sample no. of dwelling units	130	13	1	0	144	Х	Х	Х	Х		

Kerala		Palak	kad		ALL					
		Tenurial st	tatus of dwe		Number of house ho				lds	
	Household	ls with dwel	ling units	House holds with		Estd.(0)		Sample		
Quintile class on UMPCE	Owned	Hired	Others	no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	98.5	1.1	0.4	0	100	1191	1191	90	90	
20-40	98.1	1.1	0.9	0	100	1215	1215	97	97	
40-60	96.5	3.4	0.1	0	100	1391	1391	114	114	
60-80	94.7	4.4	0.9	0	100	1374	1374	122	122	
80-100	91.9	7.6	0.6	0	100	1571	1571	153	153	
All	95.7	3.7	0.6	0	100	6742	6742	576	576	
Estd.(00) no. of dwelling										
units	6451	252	39	0	6742	Х	Х	Х	Х	
Sample no. of dwelling units	541	22	13	0	576	Х	Х	Х	Х	

Kerala		Thris	ssur		RURAL						
		Tenurial st	tatus of dwe	lling units	Number of house holds						
	Household	ls with dwel	ling units	House		Estd.(0)		Sample			
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	88.3	6.9	4.8	0	100	373	373	27	27		
20-40	93.3	6.7	0	0	100	385	385	35	35		
40-60	85.9	10	4.1	0	100	442	442	36	36		
60-80	90.2	6.5	3.2	0	100	550	550	45	45		
80-100	92.5	7.5	0	0	100	505	505	37	37		
All	90.1	7.5	2.4	0	100	2255	2255	180	180		
Estd.(00) no. of dwelling											
units	2031	170	54	0	2255	Х	Х	Х	Х		
Sample no. of dwelling units	159	18	3	0	180	Х	Х	Х	Х		

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE	
Kerala		Thri	ssur				URBAN			
		Tenurial st	tatus of dwe	lling units		Number of house holds				
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	93	5.4	1.6	0	100	900	900	60	60	
20-40	96	4	0	0	100	969	969	68	68	
40-60	84.8	13.5	1.7	0	100	1198	1198	85	85	
60-80	81.8	14	4.1	0	100	1350	1350	98	98	
80-100	72.9	27.1	0	0	100	1485	1485	121	121	
All	84.2	14.2	1.5	0	100	5902	5902	432	432	
Estd.(00) no. of dwelling										
units	4970	841	91	0	5902	Х	Х	Х	Х	
Sample no. of dwelling units	371	56	5	0	432	Х	Х	Х	Х	

Kerala		Thris Tenurial st	sur tatus of dwe	elling units			ALL Number of l	house holds	
	Household	ls with dwel		House		Estd.(0)		Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	91.6	5.8	2.6	0	100	1273	1273	87	87
20-40	95.3	4.7	0	0	100	1355	1355	103	103
40-60	85.1	12.6	2.3	0	100	1640	1640	121	121
60-80	84.3	11.9	3.9	0	100	1899	1899	143	143
80-100	77.9	22.1	0	0	100	1989	1989	158	158
All	85.8	12.4	1.8	0	100	8157	8157	612	612
Estd.(00) no. of dwelling									
units	7001	1011	145	0	8157	Х	Х	Х	Х
Sample no. of dwelling units	530	74	8	0	612	Х	Х	Х	Х

Kerala		Ernak	kulam		RURAL					
		Tenurial st	tatus of dwe	elling units	Number of house holds					
	Household	ls with dwel	ling units	House		Estd.(0)		Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	95.9	4.1	0	0	100	359	359	31	31	
20-40	90.1	9	0.9	0	100	447	447	28	28	
40-60	99.8	0.2	0	0	100	480	480	28	28	
60-80	92	8	0	0	100	639	639	37	37	
80-100	94.9	5.1	0	0	100	823	823	56	56	
All	94.4	5.4	0.1	0	100	2749	2749	180	180	
Estd.(00) no. of dwelling										
units	2595	150	4	0	2749	Х	Х	X	Х	
Sample no. of dwelling units	158	21	1	0	180	Х	Х	Х	Х	

n

Kerala		Ernak	culam		URBAN					
		Tenurial st	tatus of dwe	elling units	Number of house holds					
Quintile class on UMPCE	Household	ls with dwel	ling units	House		Estd	.(0)	Sample		
	Owned	Hired	Others	holds with no dwelling	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	93.4	6.6	0	0	100	900	900	65	65	
20-40	87.9	11.2	0.8	0	100	1088	1088	87	87	
40-60	87	12.1	0.8	0	100	1099	1099	94	94	
60-80	84.7	15.3	0	0	100	1276	1276	113	113	
80-100	61.6	38.4	0	0	100	1645	1645	114	114	
All	80.7	19	0.3	0	100	6007	6007	473	473	
Estd.(00) no. of dwelling										
units	4849	1141	18	0	6007	Х	Х	Х	Х	
Sample no. of dwelling units	391	80	2	0	473	Х	Х	Х	Х	

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	untile class o	on MPCE	
Kerala		Ernak	kulam		ALL					
		Tenurial st	tatus of dwe	elling units	Number of house holds					
	Household	ls with dwel	ling units	House		Estd.(0)		Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	94.1	5.9	0	0	100	1258	1258	96	96	
20-40	88.6	10.6	0.8	0	100	1536	1536	115	115	
40-60	90.9	8.5	0.6	0	100	1579	1579	122	122	
60-80	87.2	12.8	0	0	100	1915	1915	150	150	
80-100	72.7	27.3	0	0	100	2468	2468	170	170	
All	85	14.7	0.3	0	100	8756	8756	653	653	
Estd.(00) no. of dwelling										
units	7444	1290	22	0	8756	Х	Х	Х	Х	
Sample no. of dwelling units	549	101	3	0	653	Х	Х	Х	Х	

-

Г
Kerala		Idukk	ci 👘 👘				RURAL		
		Tenurial st	tatus of dwe	elling units			Number of <b>l</b>	nouse holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	100	0	0	0	100	504	504	41	41
20-40	92.2	0	7.8	0	100	498	498	43	43
40-60	79.6	13.4	7	0	100	560	560	52	52
60-80	83.1	5.9	11	0	100	486	486	44	44
80-100	88.7	10.4	0.9	0	100	597	597	60	60
All	88.6	6.3	5.2	0	100	2645	2645	240	240
Estd.(00) no. of dwelling									
units	2342	166	136	0	2645	Х	Х	Х	Х
Sample no. of dwelling units	211	12	17	0	240	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE
Kerala		Idukk	ki				URBAN		
		tenurial st	atus of dwe	lling units			number of	house holds	
	household	ls with dwel	ling units	house		Esta	l.(0)	San	nple
Quintile class on UMPCE	owned	hired	others	holds with no dwelling units	all	all	all	all	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	70.9	29.1	0	0	100	36	36	6	6
20-40	100	0	0	0	100	51	51	8	8
40-60	13.8	86.2	0	0	100	67	67	12	12
60-80	22.3	74.3	3.4	0	100	86	86	16	16
80-100	92.3	7.7	0	0	100	54	54	6	6
All	52.7	46.3	1	0	100	295	295	48	48
Estd.(00) no. of dwelling									
units	155	136	3	0	295	Х	Х	Х	Х
Sample no. of dwelling units	23	24	1	0	48	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	untile class o	on MPCE
Kerala		Idukk	ki				ALL		
		Tenurial st	tatus of dwe	elling units			Number of I	house holds	
	Household	ls with dwel	ling units	House		Estc	l.(0)	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	98	2	0	0	100	540	540	47	47
20-40	93	0	7	0	100	549	549	51	51
40-60	72.6	21.1	6.3	0	100	627	627	64	64
60-80	73.9	16.3	9.8	0	100	572	572	60	60
80-100	89	10.2	0.8	0	100	651	651	66	66
All	85	10.3	4.7	0	100	2939	2939	288	288
Estd.(00) no. of dwelling									
units	2498	302	139	0	2939	Х	Х	Х	Х
Sample no. of dwelling units	234	36	18	0	288	Х	Х	Х	Х

Kerala		Kottay	yam				RURAL		
		Tenurial st	tatus of dwe	elling units			Number of h	nouse holds	
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	98	2	0	0	100	602	602	43	43
20-40	91.3	8.7	0	0	100	639	639	47	47
40-60	96.3	3.7	0	0	100	656	656	48	48
60-80	86.1	13.9	0	0	100	783	783	64	64
80-100	91.2	8.8	0	0	100	870	870	70	70
All	92.2	7.8	0	0	100	3550	3550	272	272
Estd.(00) no. of dwelling									
units	3272	278	0	0	3550	Х	X	Х	Х
Sample no. of dwelling units	254	18	0	0	272	Х	Х	Х	Х

Kerala		Kotta	yam				URBAN		
		Tenurial st	tatus of dwe	elling units			Number of <b>l</b>	house holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	90.1	9.9	0	0	100	184	184	13	13
20-40	71.8	28.2	0	0	100	291	291	18	18
40-60	95.3	4.7	0	0	100	294	294	20	20
60-80	75.6	24.4	0	0	100	332	332	22	22
80-100	62.5	37.5	0	0	100	533	533	22	22
All	75.8	24.2	0	0	100	1634	1634	95	95
Estd.(00) no. of dwelling									
units	1238	395	0	0	1634	Х	Х	Х	Х
Sample no. of dwelling units	77	18	0	0	95	Х	Х	Х	Х

Kerala		Kotta	yam				ALL			
		Tenurial st	tatus of dwe	elling units		]	Number of <b>I</b>	house holds		
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	96.1	3.9	0	0	100	786	786	56	56	
20-40	85.2	14.8	0	0	100	929	929	65	65	
40-60	96	4	0	0	100	951	951	68	68	
60-80	82.9	17.1	0	0	100	1115	1115	86	86	
80-100	80.3	19.7	0	0	100	1403	1403	92	92	
All	87	13	0	0	100	5184	5184	367	367	
Estd.(00) no. of dwelling										
units	4511	673	0	0	5184	Х	Х	Х	Х	
Sample no. of dwelling units	331	36	0	0	367	Х	Х	Х	Х	

Table 1: Districtwise perce Kerala	8	Alapp	uzha	-			RURAL		
			tatus of dwe	elling units			Number of l	house holds	
	Household	ls with dwel	ling units	House		Estc	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	95.6	0.6	3.8	0	100	467	467	37	37
20-40	100	0	0	0	100	476	476	42	42
40-60	100	0	0	0	100	508	508	39	39
60-80	89.7	10.3	0	0	100	500	500	43	43
80-100	97.4	2.6	0	0	100	519	519	31	31
All	96.5	2.8	0.7	0	100	2469	2469	192	192
Estd.(00) no. of dwelling									
units	2384	68	18	0	2469	Х	Х	Х	Х
Sample no. of dwelling units	187	4	1	0	192	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class	on MPCE
Kerala		Alapı	puzha				URBAN		
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esto	l.(0)	San	nple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	90.6	9.4	0	0	100	499	499	42	42
20-40	87.6	11.1	1.3	0	100	550	550	51	51
40-60	75.8	24.2	0	0	100	590	590	60	60
60-80	80.4	19.6	0	0	100	533	533	50	50
80-100	90.5	9.5	0	0	100	628	628	37	37
All	85	14.8	0.3	0	100	2800	2800	240	240
Estd.(00) no. of dwelling									
units	2379	414	7	0	2800	Х	Х	Х	Х
Sample no. of dwelling units	206	33	1	0	240	Х	Х	Х	Х

Kerala		Alapp	ouzha				ALL		
		Tenurial s	tatus of dwe	elling units			Number of <b>l</b>	nouse holds	
Quintile close on UMDCE	Household	ls with dwel	ling units	House holds with		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	93	5.1	1.8	0	100	966	966	79	79
20-40	93.4	5.9	0.7	0	100	1026	1026	93	93
40-60	87	13	0	0	100	1098	1098	99	99
60-80	84.9	15.1	0	0	100	1033	1033	93	93
80-100	93.6	6.4	0	0	100	1147	1147	68	68
All	90.4	9.1	0.5	0	100	5270	5270	432	432
Estd.(00) no. of dwelling									
units	4763	482	25	0	5270	Х	Х	Х	Х
Sample no. of dwelling units	393	37	2	0	432	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE
Kerala	Pa	thanamthit	ta		RURAL				
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	94.5	5.5	0	0	100	551	551	37	37
20-40	87.5	12.5	0	0	100	540	540	31	31
40-60	99.2	0.8	0	0	100	569	569	33	33
60-80	79.3	20.7	0	0	100	592	592	38	38
80-100	95.8	4.2	0	0	100	820	820	53	53
All	91.6	8.4	0	0	100	3072	3072	192	192
Estd.(00) no. of dwelling									
units	2813	259	0	0	3072	Х	Х	Х	Х
Sample no. of dwelling units	175	17	0	0	192	Х	Х	Х	Х

Kerala		Pathana	mthitta				URBAN		
		Tenurial s	tatus of dwo	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	49.8	50.2	0	0	100	68	68	11	11
20-40	92.4	7.6	0	0	100	54	54	7	7
40-60	63.9	36.1	0	0	100	91	91	11	11
60-80	84.6	15.4	0	0	100	80	80	9	9
80-100	87.5	12.5	0	0	100	110	110	10	10
All	75.9	24.1	0	0	100	403	403	48	48
Estd.(00) no. of dwelling									
units	306	97	0	0	403	Х	Х	Х	Х
Sample no. of dwelling units	35	13	0	0	48	Х	Х	Х	Х

r

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	untile class o	on MPCE
Kerala		Pathana	amthitta				ALL		
		Tenurial st	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	Sample	
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	89.6	10.4	0	0	100	619	619	48	48
20-40	88	12	0	0	100	594	594	38	38
40-60	94.4	5.6	0	0	100	660	660	44	44
60-80	79.9	20.1	0	0	100	671	671	47	47
80-100	94.8	5.2	0	0	100	931	931	63	63
All	89.7	10.3	0	0	100	3475	3475	240	240
Estd.(00) no. of dwelling									
units	3119	356	0	0	3475	Х	Х	Х	Х
Sample no. of dwelling units	210	30	0	0	240	Х	Х	Х	Х

Kerala		Kol	lam		RURAL						
		Tenurial st	tatus of dwe	elling units			Number of <b>l</b>	house holds			
	Household	ls with dwel	ling units	House		Estd.(0)		Sample			
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	97.2	2.8	0	0	100	618	618	45	45		
20-40	100	0	0	0	100	745	745	51	51		
40-60	95	5	0	0	100	750	750	54	54		
60-80	92.5	7.5	0	0	100	927	927	70	70		
80-100	97.1	2.9	0	0	100	1024	1024	68	68		
All	96.2	3.8	0	0	100	4064	4064	288	288		
Estd.(00) no. of dwelling											
units	3909	155	0	0	4064	Х	Х	Х	Х		
Sample no. of dwelling units	277	11	0	0	288	Х	Х	Х	Х		

r

Kerala		Kol				URBAN Number of house holds					
	Household	lenurial s	tatus of dwe ling units	House		Estd	1	house holds Sam	ıple		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	91.6	6.3	2.1	0	100	479	479	34	34		
20-40	90.1	8.8	1.1	0	100	493	493	37	37		
40-60	95.2	2.1	2.7	0	100	565	565	42	42		
60-80	83.5	16.5	0	0	100	730	730	59	59		
80-100	83.8	12.7	3.5	0	100	863	863	68	68		
All	88	10.1	1.9	0	100	3131	3131	240	240		
Estd.(00) no. of dwelling											
units	2754	316	61	0	3131	Х	Х	Х	Х		
Sample no. of dwelling units	210	25	5	0	240	Х	Х	Х	Х		

Table 1: Districtwise perce	ntage distrik	oution of dw	elling units	by tenurials	status of th	e household	for each qu	iintile class o	on MPCE
Kerala		Kol	lam				ALL		
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	San	nple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	94.8	4.3	0.9	0	100	1097	1097	79	79
20-40	96.1	3.5	0.4	0	100	1238	1238	88	88
40-60	95.1	3.8	1.2	0	100	1315	1315	96	96
60-80	88.5	11.5	0	0	100	1658	1658	129	129
80-100	91	7.4	1.6	0	100	1887	1887	136	136
All	92.6	6.5	0.8	0	100	7194	7194	528	528
Estd.(00) no. of dwelling									
units	6663	471	61	0	7194	Х	Х	Х	Х
Sample no. of dwelling units	487	36	5	0	528	Х	Х	Х	Х

Г

Kerala	,	Thiruvanan	thapuram				RURAL				
		Tenurial s	tatus of dwe	elling units			Number of I	house holds	holds		
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample			
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
00-20	97.3	0	2.7	0	100	741	741	41	41		
20-40	89.6	2.8	7.6	0	100	713	713	53	53		
40-60	97.1	2.9	0	0	100	811	811	52	52		
60-80	92.6	5.2	2.2	0	100	932	932	60	60		
80-100	93.7	6.3	0	0	100	919	919	81	81		
All	94.1	3.6	2.3	0	100	4116	4116	287	287		
Estd.(00) no. of dwelling											
mita	3871	150	94	0	4116	Х	Х	Х	Х		
units	5071	100		-							

Kerala	,	Thiruvanan	thapuram				URBAN		
		Tenurial st	tatus of dwo	elling units			Number of <b>l</b>	nouse holds	
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	83.4	13.5	3.1	0	100	869	869	61	61
20-40	85.3	9.1	5.5	0	100	1003	1003	70	70
40-60	86.8	9	4.3	0	100	1074	1074	72	72
60-80	78.2	19.2	2.6	0	100	1279	1279	89	89
80-100	70.2	28.6	1.2	0	100	1339	1339	87	87
All	80	16.8	3.2	0	100	5563	5563	379	379
Estd.(00) no. of dwelling									
units	4453	933	177	0	5563	Х	Х	Х	Х
Sample no. of dwelling units	308	59	12	0	379	Х	Х	Х	Х

Г

Kerala	, ,	Thiruvanan	thapuram				ALL		
		Tenurial s	tatus of dwe	elling units			Number of <b>l</b>	house holds	
	Household	ls with dwel	ling units	House		Estd	.(0)	Sam	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	89.8	7.3	2.9	0	100	1610	1610	102	102
20-40	87.1	6.5	6.4	0	100	1716	1716	123	123
40-60	91.2	6.3	2.4	0	100	1885	1885	124	124
60-80	84.2	13.3	2.4	0	100	2210	2210	149	149
80-100	79.8	19.5	0.7	0	100	2257	2257	168	168
All	86	11.2	2.8	0	100	9679	9679	666	666
Estd.(00) no. of dwelling									
units	8324	1083	272	0	9679	Х	Х	X	Х
Sample no. of dwelling units	578	71	17	0	666	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of the	e household	for each qu	intile class o	on MPCE
Kerala		AL	L				RURAL		
		Tenurial s	tatus of dwe	elling units			Number of	house holds	
	Household	ls with dwel	ling units	House		Esta	l.(0)	San	ple
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
00-20	96.6	2.5	0.9	0	100	7052	7052	535	535
20-40	94.6	4	1.4	0	100	7627	7627	585	585
40-60	95.2	4.1	0.7	0	100	8439	8439	660	660
60-80	91.6	7.3	1.1	0	100	9343	9343	740	740
80-100	92.6	5.6	1.8	0	100	10681	10681	823	823
All	93.9	4.9	1.2	0	100	43142	43142	3343	3343
Estd.(00) no. of dwelling									
units	40516	2108	519	0	43142	Х	Х	Х	Х
Sample no. of dwelling units	3122	176	45	0	3343	Х	Х	Х	Х

Table 1: Districtwise perce	ntage distrik	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE	
Kerala		AL	L				URBAN			
		Tenurial st	tatus of dwe	elling units			Number of <b>l</b>	house holds		
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	91.4	6.9	1.7	0	100	6152	6152	489	489	
20-40	91.4	7.2	1.4	0	100	7221	7221	609	609	
40-60	87.1	11.2	1.7	0	100	8278	8278	728	728	
60-80	84.6	14.4	1	0	100	9206	9206	823	823	
80-100	76	23.5	0.5	0	100	10778	10778	746	746	
All	85.1	13.8	1.2	0	100	41635	41635	3395	3395	
Estd.(00) no. of dwelling										
units	35412	5730	493	0	41635	Х	Х	Х	Х	
Sample no. of dwelling units	2908	448	39	0	3395	Х	Х	Х	Х	

Г

Table 1: Districtwise perce	ntage distrib	oution of dw	elling units	by tenurials	status of th	e household	for each qu	intile class o	on MPCE	
Kerala		AL	L				ALL			
		Tenurial st	tatus of dwe	elling units			Number of	house holds		
	Household	ls with dwel	ling units	House		Estd	l.(0)	Sample		
Quintile class on UMPCE	Owned	Hired	Others	holds with no dwelling units	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
00-20	94.2	4.6	1.3	0	100	13203	13203	1024	1024	
20-40	93	5.6	1.4	0	100	14848	14848	1194	1194	
40-60	91.2	7.6	1.2	0	100	16717	16717	1388	1388	
60-80	88.1	10.8	1.1	0	100	18549	18549	1563	1563	
80-100	84.3	14.6	1.1	0	100	21459	21459	1569	1569	
All	89.6	9.2	1.2	0	100	84777	84777	6738	6738	
Estd.(00) no. of dwelling										
units	75927	7838	1012	0	84777	Х	Х	Х	Х	
Sample no. of dwelling units	6030	624	84	0	6738	Х	Х	Х	Х	

r

Kerala		Kasargoo	1						ŀ	RURAL	
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ouseholo	ds
		C		Commu	inity use			Estd (00)		Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	85.2	0	14.8	0	0	0	100	300	300	33	3.
20-40	88.4	11.6		0	•	0	100	334	334	23	2
40-60	78.7	10.6	3.4	3.4	3.9	0	100	349	349	27	2
60-80	100	0	0	0	0	0	100	382	382	32	32
80-100	100		0	0	-	0	100	377	377	29	29
All	90.9	4.4	3.2	0.7	0.8	0	100	1742	1742	144	14
Estd.(00) no. of dwelling units	1584	76	56	12	14	0	1742	X	Х	Х	2
Sample no. of dwelling units	131	4	7	1	1	0	144	х	х	Х	

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile	
	Kerala		Ka	sargod		URBAN						
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds	
				Commu	nity use			Estd (00)		Sam	ple	
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
00-20	94.2	0	5.8	0	0	0	100	166	166	14	14	
20-40	82.3	12.3	5.4	0	0	0	100	250	250	19	19	
40-60	96.7	0	0	3.3	0	0	100	235	235	18	18	
60-80	100	0	0	0	0	0	100	248	248	17	17	
80-100	89.4	5.4	2.6	0	2.7	0	100	284	284	28	28	
All	92.3	3.9	2.6	0.7	0.7	0	100	1182	1182	96	96	
Estd.(00) no. of dwelling units	1091	46	30	8	8	0	1182	Х	X	X	X	
Sample no. of dwelling units	88	3	3	1	1	0	96	X	X	X	X	

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wat	ter for e	ach qui	ntile
	Kerala			Kasargo	d			ALL			
		Acces	s to the princip	al source of drin	nking water			Number of households			
Orientile aleger an		~		Commu	nity use			Estd (00)		Sample	
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	88.4	0	11.6	0	0	0	100	466	466	47	47
20-40	85.8	11.9	2.3	0	0	0	100	584	584	42	42
40-60	85.9	6.3	2	3.4	2.3	0	100	584	584	45	45
60-80	100	0	0	0	0	0	100	630	630	49	49
80-100	95.4	2.3	1.1	0	1.2	0	100	660	660	57	57
All	91.5	4.2	3	0.7	0.7	0	100	2924	2924	240	240
Estd.(00) no. of dwelling units	2675	122	87	20	21	0	2924	X	X	X	X
Sample no. of dwelling units	219	7	10	2	2	0	240	X	X	X	X

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
	Keral	a		Kannur			RU	RAL			
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	89.3	0	10.7	0	0	0	100	261	261	24	24
20-40	96.7	0	3.3	0	0	0	100	396	396	36	36
40-60	99.8	0	0.2	0	0	0	100	436	436	48	48
60-80	100	0	0	0	0	0	100	423	423	38	38
80-100	99.9	0	0.1	0	0	0	100	479	479	46	-
All	97.9	0	2.1	0	0	0	100	1995	1995	192	192
Estd.(00) no. of dwelling units	1953	0	42	0	0	0	1995	Х	Х	Х	Х
Sample no. of dwelling units	183	0	9	0	0	0	192	X	X	X	X

Kerala				Kannı	ır					URBAN	J
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds
				Commu	inity use			Estd (	00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	89.1	0	10.9	0	0	0	100	544	544	53	5.
20-40	89.5	0	6	2	0	2.5	100	596	596	66	6
40-60	88.8	2.3	6.2	2.1	0.6	0	100	647	647	78	7
60-80	88.3		5.5		0	0	100	841	841	89	89
80-100	89.9		3.1		0	0	100	907	907	50	
All	89.1	2.7	5.9	1.8	0.1	0.4	100	3534	3534	336	33
Estd.(00) no. of dwelling units	3150	94	209	62	4	15	3534	X	Х	х	2
Sample no. of dwelling units	299	6	23	6	1	1	336	X	X	Х	2

Table 2: Districtw	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
				class on MPC	E						
Kerala	1			Kannur						LL	
		Acces	s to the princip	al source of drin	nking water	-	-	Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	89.2	0	10.8	0	0	0	100	805	805	77	77
20-40	92.4	0	4.9	1.2	0	1.5	100	991	991	102	102
40-60	93.2	1.4	3.8	1.2	0.4	0	100	1083	1083	126	126
60-80	92.2	1.2	3.7	2.9	0	0	100	1264	1264	127	127
80-100	93.3	4.6	2	0	0	0	100	1387	1387	96	96
All	92.3	1.7	4.6	1.1	0.1	0.3	100	5529	5529	528	528
Estd.(00) no. of											
dwelling units	5103	94	252	62	4	15	5529	Х	Х	X	X
Sample no. of dwelling units	482	6	32	6	1	1	528	Х	X	X	X

Table 2: District	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
				class on MPC							
Kerala		Wayanad				RAL					
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	46.2	0	5.3	35.3	0	13.1	100	312	312	21	21
20-40	85.9	1.7	0.2	5	0.3	7	100	333	333	23	23
40-60	71.9	7.7	20.1	0.1	0	0.1	100	448	448	34	34
60-80	70.9	0.6	17.1	0	3.3	8.1	100	496	496	34	34
80-100	68.6	14.7	8.9	3.3	0	4.6	100	507	507	32	32
All	69.2	5.6	11.3	6.9	0.8	6.1	100	2097	2097	144	144
Estd.(00) no. of dwelling units	1452	118	237	144	18	128	2097	X	X	Х	X
Sample no. of dwelling units	95	13	15	10	2	9	144	X	X	Х	X

Table 2: Districtv	vise percentage	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala			Wayana		URBA	AN .					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	74.5	25.5	0	0	0	0	100	8	8	4	4
20-40	64.5	28.9	0	0	0	6.6	100	17	17	8	8
40-60	90.6	1.7	0	0	0	7.7	100	15	15	9	9
60-80	89.1	10.9	0	0	0	0	100	21	21	18	18
80-100	26.6	73.4	0	0	0	0	100	55	55	9	9
All	54.8	43.2	0	0	0	2	100	116	116	48	48
Estd.(00) no. of											
dwelling units	64	50	0	0	0	2	116	Х	Х	Х	X
Sample no. of dwelling units	29	17	0	0	0	2	48	Х	Х	X	X

Table 2: Districty	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
				class on MPC	E						
Kerala			Wayaı	nad				ALL			
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	47	0.7	5.2	34.4	0	12.8	100	321	321	25	25
20-40	84.8	3.1	0.2	4.7	0.3	6.9	100	350	350	31	31
40-60	72.5	7.5	19.5	0.1	0	0.4	100	463	463	43	43
60-80	71.6	1	16.4	0	3.2	7.8	100	517	517	52	52
80-100	64.4	20.5	8	2.9	0	4.1	100	563	563	41	41
All	68.5	7.6	10.7	6.5	0.8	5.9	100	2213	2213	192	192
Estd.(00) no. of											
dwelling units	1516	168	237	144	18	130	2213	Х	Х	Х	Х
Sample no. of dwelling units	124	30	15	10	2	11	192	Х	Х	Х	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala	ŀ	Kozhikkod		RUR	AL						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	83.7	0	16.3	0	0	0	100	321	321	22	22
20-40	71.2	0	24.3	0	0	4.5	100	406	406	27	27
40-60	96.7	0	3.3	0	0	0	100	453	453	36	36
60-80	81.7	3.1	15.2	0	0	0	100	525	525	52	52
80-100	95.2	2.5	2.3	0	0	0	100	663	663	55	55
All	86.8	1.4	11	0	0	0.8	100	2368	2368	192	192
Estd.(00) no. of dwelling units	2057	33	261	0	0	18	2368	Х	X	X	X
Sample no. of dwelling units	156	4	31	0	0	1	192	Х	X	X	X

Table 2: Districtv	vise percentage	e distribution o	of households	•	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
				class on MPC	E						
Kerala			Ko	zhikkod				URB			
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	76	2	11.7	10.3	0	0	100	698	698	56	56
20-40	83.6	1.4	9.3	4.2	0	1.5	100	861	861	76	76
40-60	82.1	2.1	14.7	1.1	0	0	100	1135	1135	101	101
60-80	81.9	5.2	10.9	1.9	0	0	100	1210	1210	112	112
80-100	86.6	10.6	2.9	0	0	0	100	1402	1402	87	87
All	82.7	4.9	9.4	2.7	0	0.2	100	5307	5307	432	432
Estd.(00) no. of											
dwelling units	4388	261	501	144	0	13	5307	Х	Х	Х	X
Sample no. of											
dwelling units	357	22	41	11	0	1	432	Х	Х	Х	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
				class on MPC							
Kerala				Kozhi						ALI	
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	78.4	1.4	13.1	7.1	0	0	100	1020	1020	78	78
20-40	79.7	0.9	14.1	2.9	0	2.4	100	1266	1266	103	103
40-60	86.3	1.5	11.4	0.8	0	0	100	1588	1588	137	137
60-80	81.9	4.6	12.2	1.3	0	0	100	1735	1735	164	164
80-100	89.3	8	2.7	0	0	0	100	2065	2065	142	142
All	84	3.8	9.9	1.9	0	0.4	100	7675	7675	624	624
Estd.(00) no. of											
dwelling units	6445	294	761	144	0	31	7675	Х	Х	Х	X
Sample no. of dwelling units	513	26	72	11	0	2	624	X	X	Х	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
	Kerala		Mala	ppuram				RURAL	1		
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	67.6	1.4	27.8	3.2	0	0	100	750	750	63	63
20-40	75.7	1.2	19.2	3.9	0	0	100	800	800	70	70
40-60	73.3	1.1	22.5	2.1	0	1.1	100	980	980	89	89
60-80	79.2	2.4	16.2	0	0	2.1	100	1124	1124	98	98
80-100	78.6	13.2	8.2	0	0	0	100	1437	1437	88	88
All	75.6	4.9	17.3	1.5	0	0.7	100	5090	5090	408	408
Estd.(00) no. of											
dwelling units	3851	248	882	76	0	34	5090	Х	Х	Х	X
Sample no. of dwelling units	311	11	76	7	0	3	408	X	Х	x	х

Table 2: Districty	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
				class on MPC	E						
Kerala		Malappuram	l					UR	BAN		
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	78.5	1.9	19.6	0	0	0	100	502	502	50	50
20-40	82.4	4.4	11.7	1.6	0	0	100	699	699	73	73
40-60	72.9	14.8	10.8	0	0.7	0.7	100	875	875	96	96
60-80	75.9	9.5	13.7	0	0.8	0	100	832	832	94	94
80-100	79.1	11	6.6	3.3	0	0	100	1041	1041	71	71
All	77.6	9.2	11.6	1.1	0.3	0.2	100	3948	3948	384	384
Estd.(00) no. of											
dwelling units	3062	364	457	45	13	6	3948	Х	Х	Х	Х
Sample no. of dwelling units	295	38	45	3	2	1	384	X	Х	X	X

Table 2: Districty	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
	Kerala		Mala	ppuram				AI	L		
		Acces	s to the princip	al source of drin	nking water			Nurr	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	72	1.6	24.5	1.9	0	0	100	1252	1252	113	113
20-40	78.8	2.7	15.7	2.8	0	0	100	1498	1498	143	143
40-60	73.1	7.6	17	1.1	0.4	0.9	100	1854	1854	185	185
60-80	77.8	5.5	15.2	0	0.3	1.2	100	1956	1956	192	192
80-100	78.8	12.3	7.5	1.4	0	0	100	2478	2478	159	159
All	76.5	6.8	14.8	1.3	0.1	0.4	100	9039	9039	792	792
Estd.(00) no. of dwelling units	6913	612	1339	121	13	41	9039	X	X	X	X
Sample no. of dwelling units	606	49	121	10	2	4	792	X	X	X	X

-
Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		Palakkad						]	RURAL	ı	
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	inity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	60.3	0.6	21.3	17.7	0	0	100	892	892	70	70
20-40	74.5	3.6	9.6	12	0	0.4	100	916	916	76	76
40-60	74.3	3	9.1	13.4	0.2	0	100	996	996	84	84
60-80	90.7	1.5	7.8	0	0	0	100	984	984	85	85
80-100	93.4	1.5	2.8	2.4	0	0	100	1141	1141	117	117
All	79.5	2	9.7	8.7	0	0.1	100	4929	4929	432	432
Estd.(00) no. of dwelling units	3919	99	477	428	2	4	4929	Х	Х	X	X
Sample no. of dwelling units	346	13	39	31	1	2	432	X	X	X	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
				class on MPC	E						
Kerala		Palakkad				ι	J <b>RBAN</b>				
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	92.5	0	4.8	2.8	0	0	100	298	298	20	20
20-40	100	0	0	0	0	0	100	299	299	21	21
40-60	94.7	2.1	0	3.2	0	0	100	396	396	30	30
60-80	96.9	0	3.1	0	0	0	100	390	390	37	37
80-100	93.3	2.5	4.3	0	0	0	100	430	430	36	36
All	95.3	1	2.5	1.1	0	0	100	1813	1813	144	144
Estd.(00) no. of											
dwelling units	1729	19	44	21	0	0	1813	Х	Х	Х	X
Sample no. of dwelling units	136	2	4	2	0	0	144	Х	Х	X	Х

Table 2: Districtw	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
Kerala						ALL					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	68.4	0.4	17.2	14	0	0	100	1191	1191	90	90
20-40	80.8	2.7	7.2	9	0	0.3	100	1215	1215	97	97
40-60	80.1	2.7	6.5	10.5	0.1	0	100	1391	1391	114	114
60-80	92.4	1.1	6.5	0	0	0	100	1374	1374	122	122
80-100	93.4	1.8	3.2	1.7	0	0	100	1571	1571	153	153
All	83.8	1.8	7.7	6.7	0	0.1	100	6742	6742	576	576
Estd.(00) no. of dwelling units	5648	118	522	449	2	4	6742	Х	X	X	X
Sample no. of dwelling units	482	15	43	33	1	2	576	X	X	X	X

Table 2: Districtv	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala			Thr	issur		RURAL					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	57.9	0	20.2	11.3	9.5	1	100	373	373	27	27
20-40	75.7	0	18	0.6	0	5.6	100	385	385	35	35
40-60	52.6	0	5.5	16.1	24.2	1.6	100	442	442	36	36
60-80	57.9	3.5	22.1	6.6	3.2	6.6	100	550	550	45	45
80-100	81.1	2.1	6.3	5	0	5.6	100	505	505	37	37
All	65.1	1.3	14.3	7.9	7.1	4.3	100	2255	2255	180	180
Estd.(00) no. of dwelling units	1468	30	322	177	161	97	2255	X	X	X	X
Sample no. of dwelling units	118	3	23	18	9	9	180	х	X	X	X

Table 2: Districtv	vise percentage	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala			Thr	ssur		URBAN					
		Acces	s to the princip	al source of drin	nking water			Nur	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	69.8	1.7	5.8	21	0	1.6	100	900	900	60	60
20-40	70.4	1.5	8.2	17.1	1.5	1.4	100	969	969	68	68
40-60	75.9	4.6	6.5	8.1	3.2	1.7	100	1198	1198	85	85
60-80	74.9	10.5	7.5	4.3	0	2.8	100	1350	1350	98	98
80-100	68.3	21.5	5.6	1.2	1.7	1.7	100	1485	1485	121	121
All	71.9	9.2	6.7	8.9	1.3	1.9	100	5902	5902	432	432
Estd.(00) no. of dwelling units	4246	546	395	526	77	112	5902	Х	X	X	X
Sample no. of dwelling units	325	29	25	36	8	9	432	X	X	X	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for o	each qui	intile
Kerala			Thrissur		ALL						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	66.3	1.2	10.1	18.2	2.8	1.4	100	1273	1273	87	87
20-40	71.9	1.1	11	12.4	1	2.6	100	1355	1355	103	103
40-60	69.6	3.3	6.2	10.3	8.9	1.7	100	1640	1640	121	121
60-80	70	8.5	11.7	4.9	0.9	3.9	100	1899	1899	143	143
80-100	71.6	16.6	5.8	2.1	1.2	2.7	100	1989	1989	158	158
All	70	7.1	8.8	8.6	2.9	2.6	100	8157	8157	612	612
Estd.(00) no. of dwelling units	5714	576	717	704	238	209	8157	X	X	X	X
Sample no. of dwelling units	443	32	48	54	17	18	612	X	X	X	X

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		Erna	kulam	RU	RAL						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	inity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	92.2	2.7	5.1	0	0	0	100	359	359	31	31
20-40	77.7	0.3	12.3	9.7	0	0	100	447	447	28	28
40-60	99.8	0.2	0	0	0	0	100	480	480	28	28
60-80	96.3	0.2	3.5	0	0	0	100	639	639	37	37
80-100	94	6	0	0	0	0	100	823	823	56	56
All	92.6	2.3	3.5	1.6	0	0	100	2749	2749	180	180
Estd.(00) no. of											
dwelling units	2546	63	96	43	0	0	2749	Х	X	Х	X
Sample no. of dwelling units	158	15	5	2	0	0	180	Х	X	X	X

E

Kerala			Ernal	kulam				URBA	N		
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
0-20	86.6	2.3	0	9.5	0	1.6	100	900	900	65	6
0-40	84.2	4.9	2.5	3.6	0	4.8	100	1088	1088	87	8
0-60	92.9	2.4	1.3	2	1.3	0	100	1099	1099	94	9
0-80	89	5.5	0.8	3.5	0	1.2	100	1276	1276	113	11
0-100	77.1	17.7	0.9	1.3	0	2.9	100	1645	1645	114	114
.11	85.2	7.7	1.1	3.5	0.2	2.2	100	6007	6007	473	47
std.(00) no. of											
welling units	5119	463	68	213	15	130	6007	Х	Х	X	

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala		Ernakı	ılam		ALL	4					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	inity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	88.2	2.4	1.5	6.8	0	1.1	100	1258	1258	96	96
20-40	82.3	3.5	5.4	5.4	0	3.4	100	1536	1536	115	115
40-60	95	1.7	0.9	1.4	0.9	0	100	1579	1579	122	122
60-80	91.4	3.7	1.7	2.3	0	0.8	100	1915	1915	150	150
80-100	82.7	13.8	0.6	0.9	0	1.9	100	2468	2468	170	170
All	87.5	6	1.9	2.9	0.2	1.5	100	8756	8756	653	653
Estd.(00) no. of dwelling units	7666	525	164	257	15	130	8756	X	X	X	Х
Sample no. of dwelling units	570	45	10	16	1	11	653	Х	X	X	Х

vise percentage	e distribution (	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
			class on MPC	E						
	Idul	ĸki		RURAL						
	Acces			Nur	ber of h	ousehol	ds			
			Commu	nity use			Estd (	(00)	San	nple
Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
81.9	0	8.9	0.1	3.1	6.1	100	504	504	41	41
48.4	4.8	4.9	19.3	3.1	19.6	100	498	498	43	43
53.9	6.9	0	28.5	0	10.7	100	560	560	52	52
67.7	14.5	10.7	0	4.2	2.9	100	486	486	44	44
71.3	2	14.4	0	1.7	10.6	100	597	597	60	60
64.6	5.5	7.8	9.7	2.3	10	100	2645	2645	240	240
1710	145	207	256	61	266	2645	Х	Х	Х	Х
1/2	19	11	15	5	15	240	v	v	v	X
	Exclusive use of the household (2) (2) (2) (2) (2) (2) (2) (3) (48.4) (53.9) (67.7) (71.3) (64.6) (1710)	IdulIdulAccesExclusive use of the householdCommon use of households in the building(2)(3)(2)(3)(2)(3)81.9048.44.853.96.967.714.571.3264.65.5	IdukkiIdukkiAccess to the principExclusive use of the householdCommon use of households in the buildingNeighbour's source(2)(3)(4)(2)(3)(4)81.908.948.44.84.953.96.9067.714.510.771.3214.464.65.57.81710145207	class on MPCIdukkiAccess to the principal source of drinAccess to the principal source of drinCommuExclusive use of the householdCommon use of households in the buildingNeighbour's sourcePublic source restricted to particular community $(2)$ $(3)$ $(4)$ $(5)$ $81.9$ 0 $8.9$ $0.1$ $48.4$ $4.8$ $4.9$ $19.3$ $53.9$ $6.9$ 0 $28.5$ $67.7$ $14.5$ $10.7$ $0$ $71.3$ 2 $14.4$ $0$ $64.6$ $5.5$ $7.8$ $9.7$ $1710$ $145$ $207$ $256$	class on MPCEIdukkiRURALAccess to the principal source of drinking waterAccess to the principal source of drinking waterCommunity useExclusive use of the households in the buildingNeighbour's sourcePublic source restricted to particular community(2)(3)(4)(5)(6)81.908.90.13.148.44.84.919.33.153.96.9028.5067.714.510.704.271.3214.401.764.65.57.89.72.3171014520725661	class on MPCEIdukiRURALAccess to the principal source of drinking waterAccess to the principal source of drinking waterCommon use of households in the buildingPublic source restricted to particular communityPublic source restricted to particular communityOthers(2)(3)(4)(5)(6)(7) $81.9$ 0 $8.9$ 0.1 $3.1$ $6.1$ $48.4$ $4.8$ $4.9$ 19.3 $3.1$ 19.6 $53.9$ $6.9$ 0 $28.5$ 0 $10.7$ $67.7$ $14.5$ $10.7$ 0 $4.2$ $2.9$ $71.3$ $2$ $14.4$ 0 $1.7$ $10.6$ $64.6$ $5.5$ $7.8$ $9.7$ $2.3$ $10$ $1710$ $145$ $207$ $256$ $61$ $266$	class on MPCE           Iduki         RURAL           Access to the principal source of drinking water           Access to the principal source of drinking water         Community use         Public source         Others         All           (2)         (3)         (4)         (5)         (6)         (7)         (8)           81.9         0         8.9         0.1         3.1         6.1         100           48.4         4.8         4.9         19.3         3.1         19.6         100           53.9         6.9         0         28.5         0         10.7         100           67.7         14.5         10.7         0         4.2         2.9         100           71.3         2         14.4         0         1.7         10.6         100           64.6         5.5         7.8         9.7         2.3         10         100           1710         145         207         256         61         266         2645	$\begin{tabular}{ c c c c c } \hline Common use of households in the building \\ (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (2) (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (5) (6) (7) (8) (9) \\ \hline (3) (4) (6) (7) (9) \\ \hline (3) (4) (6) \\ \hline (3) (4) \\ \hline (3$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Table 2: District	wise percentag	e distribution o	of households	•	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
				class on MPC	E						
Kerala			Idukki			URBAI	N				
		Acces	s to the princip	al source of drin	nking water			Nur	nber of h	f households	
				Commu	inity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	85.4	14.6	0	0	0	0	100	36	36	6	6
20-40	100	0	0	0	0	0	100	51	51	8	8
40-60	13.8	86.2	0	0	0	0	100	67	67	12	12
60-80	42.9	57.1	0	0	0	0	100	86	86	16	16
80-100	100	0	0	0	0	0	100	54	54	6	6
All	62	38	0	0	0	0	100	295	295	48	48
Estd.(00) no. of dwelling units	183	112	0	0	0	0	295	Х	X	X	Х
Sample no. of dwelling units	28	20	0	0	0	0	48	X	X	X	X

Table 2: Districtv	wise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala			Idukki					ALL			
		Acces	s to the princip	al source of dri	nking water			Num	ber of h	ousehol	ds
				Commu	inity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	82.1	1	8.3	0.1	2.9	5.7	100	540	540	47	47
20-40	53.2	4.3	4.4	17.5	2.8	17.8	100	549	549	51	51
40-60	49.6	15.4	0	25.5	0	9.6	100	627	627	64	64
60-80	64	21	9.1	0	3.6	2.4	100	572	572	60	60
80-100	73.6	1.9	13.2	0	1.6	9.7	100	651	651	66	66
All	64.4	8.7	7.1	8.7	2.1	9	100	2939	2939	288	288
Estd.(00) no. of dwelling units	1892	257	207	256	61	266	2939	X	X	X	X
Sample no. of dwelling units	171	38	14	15	5	45	288	X	X	X	X

Kerala		Kot	ttayam		RURAL						
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ouseholo	ds
				Commu	inity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	to Others r y (7)	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	75.2	0	11.5	13.3	0	0	100	602	602	43	4
20-40	67.4	2.6	14.9	12.4	0	2.8	100	639	639	47	4′
40-60	83.1	0	13.9	3	0	0	100	656	656	48	43
60-80	82.1	1.9	13.9		0	2.1	100	783	783	64	
80-100	91	0	3.8			3.3	100	870	870	70	
All	80.6	0.9	11.2	5.5	0	1.8	100	3550	3550	272	272
Estd.(00) no. of lwelling units	2863	31	398	195	0	63	3550	Х	Х	х	2
Sample no. of Iwelling units	215		36			5	272	Х	X	х	

Table 2: Districtv	wise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala		Kot	tayam		URBAN						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	73.6	0	17.5	8.9	0	0	100	184	184	13	13
20-40	63.6	25.2	5.6	5.6	0	0	100	291	291	18	18
40-60	69.5	3	15.4	4.7	0	7.4	100	294	294	20	20
60-80	80	9.3	10.6	0	0	0	100	332	332	22	22
80-100	58.3	41.7	0	0	0	0	100	533	533	22	22
All	67.4	20.5	7.9	2.8	0	1.3	100	1634	1634	95	95
Estd.(00) no. of											
dwelling units	1101	335	129	46	0	22	1634	Х	Х	Х	Х
Sample no. of dwelling units	71	11	9	3	0	1	95	х	X	X	X

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		Kottayam						ALL			
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	74.8	0	12.9	12.2	0	0	100	786	786	56	56
20-40	66.2	9.6	12	10.3	0	1.9	100	929	929	65	65
40-60	78.9	0.9	14.4	3.5	0	2.3	100	951	951	68	68
60-80	81.5	4.1	13	0	0	1.5	100	1115	1115	86	86
80-100	78.6	15.8	2.3	1.2	0	2.1	100	1403	1403	92	92
All	76.5	7.1	10.2	4.7	0	1.6	100	5184	5184	367	367
Estd.(00) no. of dwelling units	3964	366	527	242	0	85	5184	Х	X	X	X
Sample no. of dwelling units	286	13	45	17	0	6	367	Х	X	X	X

Table 2: Districty	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala			Alappuz	zha					RURAI	<b>_</b>	
		Acces	s to the princip	al source of dri	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	65.6	3.8	13.7	0.6	11.8	4.5	100	467	467	37	37
20-40	72.8	3.2	3.9	20.1	0	0	100	476	476	42	42
40-60	90.5	0	5.9	3	0	0.5	100	508	508	39	39
60-80	85.9	0	3.7	6.3	3.6	0.5	100	500	500	43	43
80-100	98.4	0	0	0.3	0	1.3	100	519	519	31	31
All	83.1	1.3	5.3	5.9	3	1.3	100	2469	2469	192	192
Estd.(00) no. of dwelling units	2052	33	131	147	73	33	2469	Х	X	X	X
Sample no. of dwelling units	143	2	18	20	4	5	192	X	X	X	X

Table 2: Districtv	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
Kerala			Alappuzha		URBAN	N					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	73.1	2.3	6.3	11.2	0	7.1	100	499	499	42	42
20-40	67.6	0	10.2	18.8	2.1	1.3	100	550	550	51	51
40-60	57.2	3.9	0	24.7	2	12.2	100	590	590	60	
60-80	60	0	3.3	20.4	0	16.3	100	533	533	50	
80-100	65.2	4.6	1.2	16.2	0.6	12.3	100	628	628	37	37
All	64.4	2.3	4	18.4	1	10	100	2800	2800	240	240
Estd.(00) no. of dwelling units	1803	63	112	516	27	279	2800	Х	Х	Х	X
Sample no. of dwelling units	162	4	9	42	3	20	240	Х	X	X	X

Table 2: District	wise percentage	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala			Alappuzha		ALL						
		Acces	s to the princip	al source of dri	nking water			Num	ber of h	ousehol	ds
				Commu	inity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	69.5	3	9.9	6.1	5.7	5.9	100	966	966	79	79
20-40	70	1.5	7.3	19.4	1.1	0.7	100	1026	1026	93	93
40-60	72.6	2.1	2.7	14.7	1.1	6.8	100	1098	1098	99	99
60-80	72.5	0	3.5	13.6	1.7	8.7	100	1033	1033	93	93
80-100	80.2	2.5	0.6	9	0.3	7.3	100	1147	1147	68	68
All	73.2	1.8	4.6	12.6	1.9	5.9	100	5270	5270	432	432
Estd.(00) no. of dwelling units	3856	96	243	663	100	312	5270	X	X	X	X
Sample no. of dwelling units	305	6	27	62	7	25	432	X	X	X	X

-

Table 2: Districtv	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		Patha	namthitta		RURAL						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	inity use			Estd (	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	77	0	10.1	1.4	0	11.5	100	551	551	37	37
20-40	71	5.2	8.2	0	3.4	12.1	100	540	540	31	31
40-60	90.7	0.6	4.2	0.7	0	3.8	100	569	569	33	33
60-80	91.8	0	7.5	0.7	0	0	100	592	592	38	38
80-100	94.7	0	2.7	2.7	0	0	100	820	820	53	53
All	86.1	1	6.2	1.2	0.6	4.9	100	3072	3072	192	192
Estd.(00) no. of dwelling units	2644	32	190	38	18	151	3072	X	X	X	X
Sample no. of dwelling units	162	3	14	5	1	7	192	X	X	X	X

Table 2: Districtw	vise percentage	e distribution o	of households	by nature of ac	cess to the prin	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
				class on MPC	E						
Kerala			Pathanam	thitta				URBAN			
		Acces	s to the princip	al source of driv	nking water	-		Nun	nber of h	ousehol	.ds
				Commu	nity use			Estd (	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	79.1	12.1	8.8	0	0	0	100	68	68	11	11
20-40	100	0	0	0	0	0	100	54	54	7	7
40-60	90.8	4.6	0	0	0	4.6	100	91	91	11	11
60-80	94.8	0	5.2	0	0	0	100	80	80	9	9
80-100	94.6	0	5.4	0	0	0	100	110	110	10	10
All	91.9	3.1	4	0	0	1	100	403	403	48	48
Estd.(00) no. of											
dwelling units	371	12	16	0	0	4	403	Х	Х	X	X
Sample no. of dwelling units	41	3	3	0	0	1	48	X	X	X	X

Kerala		Pathan	amthitta				А	LL			
		Acces	s to the princip	al source of driv	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	77.2	1.3	10	1.2	0	10.3	100	619	619	48	4
20-40	73.7	4.8	7.4	0	3.1	11	100	594	594	38	3
40-60	90.7	1.1	3.6	0.6	0	3.9	100	660	660	44	2
60-80	92.2	0	7.2	0.6	0	0	100	671	671	47	2
80-100	94.7	0	3	2.3	0	0	100	931	931	63	(
All	86.7	1.3	5.9	1.1	0.5	4.5	100	3475	3475	240	24
Estd.(00) no. of dwelling units	3014	44	206	38	18	155	3475	X	Х	X	
Sample no. of dwelling units	203	6	17	5	1	8	240	Х	х	X	

Table 2: Districtv	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		K	ollam		R	URAL					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	89.3	0	8.1	2.2	0	0.4	100	618	618	45	45
20-40	86.5	0	11	1.8	0	0.7	100	745	745	51	51
40-60	85.9	5	4.2	4.2	0	0.7	100	750	750	54	54
60-80	88.3	2	5.8	1.7	0	2.2	100	927	927	70	70
80-100	99.8	0.1	0	0	0	0.1	100	1024	1024	68	68
All	90.6	1.4	5.3	1.8	0	0.8	100	4064	4064	288	288
Estd.(00) no. of dwelling units	3681	57	217	74	0	34	4064	Х	Х	X	X
Sample no. of dwelling units	253	4	13	5	0	13	288	X	X	X	X

Table 2: Districtv	vise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala			Kollam	U	RBAN						
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	91.7	0	8.3	0	0	0	100	479	479	34	34
20-40	92.1	0	5.4	2.4	0	0	100	493	493	37	37
40-60	90.5	0	7.6	1.8	0	0	100	565	565	42	42
60-80	97.8	0	0	2.2	0	0	100	730	730	59	59
80-100	94	1.8	2.8	1.4	0	0	100	863	863	68	68
All	93.6	0.5	4.3	1.6	0	0	100	3131	3131	240	240
Estd.(00) no. of dwelling units	2931	16	134	50	0	0	3131	Х	х	X	X
Sample no. of dwelling units	224	1	11	4	0	0	240	X	X	Х	X

Table 2: Districtv	wise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	intile
Kerala		Kollam				ALL					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	lds
				Commu	nity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	90.4	0	8.2	1.2	0	0.2	100	1097	1097	79	79
20-40	88.7	0	8.8	2	0	0.4	100	1238	1238	88	88
40-60	87.9	2.9	5.7	3.2	0	0.4	100	1315	1315	96	96
60-80	92.5	1.1	3.2	1.9	0	1.2	100	1658	1658	129	129
80-100	97.1	0.9	1.3	0.6	0	0.1	100	1887	1887	136	136
All	91.9	1	4.9	1.7	0	0.5	100	7194	7194	528	528
Estd.(00) no. of dwelling units	6612	73	351	124	0	34	7194	X	Х	X	X
Sample no. of dwelling units	477	5	24	9	0	13	528	Х	Х	X	X

Г

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		Thiruvana	nthapuram		RURAL	1					
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
00-20	95.1	0	4.9	0	0	0	100	741	741	41	41
20-40	100	0	0	0	0	0	100	713	713	53	53
40-60	91.1	0	5.1	3.8	0	0	100	811	811	52	52
60-80	94.5	1.9	0	3.7	0	0	100	932	932	60	60
80-100	95.3	0	4.7	0	0	0	100	919	919	81	81
All	95.1 0.4 2.9 1.6 0						100	4116	4116	287	287
Estd.(00) no. of dwelling units	3913	18	120	65	0	0	4116	Х	X	X	X
Sample no. of dwelling units	275	1	7	4	0	0	287	Х	X	X	X

Table 2: Districtv	wise percentag	e distribution (	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	inking wa	ter for e	each qui	intile
Kerala			Thiruvanantl	hapuram		URB	AN				
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	ds Neighbour's source Public source particular community		Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	93	0	1.6	5.4	0	0	100	869	869	61	61
20-40	91.5	1.7	1.5	2.5	0	2.7	100	1003	1003	70	70
40-60	91.6	0	4.7	2.4	0	1.4	100	1074	1074	72	
60-80	90	5.6	1.2	3.2	0	0	100	1279	1279	89	
80-100	90.2	3	0	1.6	0	5.2	100	1339	1339	87	
All	91.1	2.3	1.7	2.9	0	2	100	5563	5563	379	379
Estd.(00) no. of dwelling units	5069	128	95	159	0	111	5563	X	Х	Х	Х
Sample no. of dwelling units	346	7	6	13	0	7	379	X	Х	Х	X

Table 2: Districtv	vise percentag	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	ach qui	ntile
Kerala			Thiruvanar	ıthapuram		ALL					
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehol	ds
				Commu	nity use			Estd (	(00)	Sam	ple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	source restricted to restricted to particular particular community community				All	All	All	All
(1)	(2)	) (3) (4) (5) (6)					(8)	(9)	(10)	(11)	(12)
00-20	94	0	3.1	2.9	0	0	100	1610	1610	102	102
20-40	95.1	1	0.9	1.5	0	1.6	100	1716	1716	123	123
40-60	91.4	0	4.8	3	0	0.8	100	1885	1885	124	124
60-80	91.9	4	0.7	3.4	0	0	100	2210	2210	149	149
80-100	92.3	1.8	<u> </u>	1 2.3	0	3.1	100	2257	2257	168	168
All	92.8	0	1.1	100	9679	9679	666	666			
Estd.(00) no. of dwelling units	8982 146 215 224					111	9679	X	X	X	X
Sample no. of dwelling units	621         8         13         17					7	666	X	X	X	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		ALI	Ĺ		RURAL						
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community		All	All	All	All	All
(1)	(2)	(3)	(4)	(8)	(9)	(10)	(11)	(12)			
00-20	75.8	0.6	13.5	6.2	1.5	2.3	100	7052	7052	535	535
20-40	77.9	2.3	9.7	6.4	0.5	3.3	100	7627	7627	585	585
40-60	81.1	2.3	7.9	5.9	1.5	1.3	100	8439	8439	660	660
60-80	85	2.2	9.1	1.3	0.8	1.6	100	9343	9343	740	740
80-100	90	3.5	4	1	0.1	1.4	100	10681	10681	823	823
All	82.7	2.3	8.4	3.8	0.8	1.9	100	43142	43142	3343	3343
Estd.(00) no. of dwelling units	35693	982	3636	1655	346	828	43142	Х	X	X	X
Sample no. of dwelling units	2689	93	307	132	23	99	3343	Х	X	X	X

Table 2: Districtv	vise percentage	e distribution o	of households	by nature of ac class on MPC	-	cipal sourc	e of dri	nking wa	ter for e	each qui	ntile
Kerala		ALL					URBA	N			
		Acces	s to the princip	al source of drin	nking water			Nun	nber of h	ousehol	ds
				Commu	nity use			Estd	(00)	San	nple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	restricted to restricted to Others particular particular community community				All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	82.7	1.4	7.1	7.7	0	1	100	6152	6152	489	489
20-40	82.8	3.3	6	5.8	0.4	1.8	100	7221	7221	609	609
40-60	82.4	4.2	6.4	4.4	0.9	1.7	100	8278	8278	728	728
60-80	83.9	5.7	5.3	3.5	0.1	1.5	100	9206	9206	823	823
80-100	80.8	12.2	2.8	1.9	0.3	2	100	10778	10778	746	746
All	82.4	6	5.3	4.3	0.3	1.7	100	41635	41635	3395	3395
Estd.(00) no. of dwelling units	34306	2510	2191	1790	144	693	41635	X	X	X	X
Sample no. of dwelling units	2813	193	184	135	16	54	3395	Х	X	X	X

	Kerala			ALL				ALL			
		Acces	s to the princip	al source of drin	nking water			Num	ber of h	ousehold	ds
				Commu	nity use			Estd (	00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of the household	Common use of households in the building	Neighbour's source	Public source restricted to particular community	Public source restricted to particular community	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
00-20	79	1	10.5	6.9	0.8	1.7	100	13203	13203	1024	1024
20-40	80.3	2.7	7.9	6.1	0.4	2.6	100	14848	14848	1194	1194
40-60	81.7		7.2	5.1	1.2	1.5	100	16717	16717	1388	138
60-80	84.5		7.2	2.4	0.4	1.6	100	18549	18549	1563	1563
80-100	85.4	7.8	3.4	1.5	0.2	1.7	100	21459	21459	1569	1569
All	82.6	4.1	6.9	4.1	0.6	1.8	100	84777	84777	6738	673
Estd.(00) no. of dwelling units	69999	3492	5828	3446	490	1522	84777	X	Х	X	Σ
Sample no. of dwelling units	5502			267		153	6738	X	X	X	

Kerala		Kasargod					RUF	RAL		
		A	ccess to bathroo	m			Ν	umber of	of households	
			Public/				Estd.	(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of household	Common use of households in the building	community use	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	99.5	0.0	0.0	0.5	0.0	100.0	300	300	33	3
20-40	100.0	0.0	0.0	0.0	0.0	100.0	334	334	23	2
40-60	100.0	0.0	0.0	0.0	0.0	100.0	349	349	27	2
60-80	100.0	0.0	0.0	0.0	0.0	100.0	382	382	32	3
80-100	100.0	0.0	0.0	0.0	0.0	100.0	377	377	29	2
all	99.9	0.0	0.0	0.1	0.0	100.0	1742	1742	144	144
Estd.(00) number of households	1741	0	0	2	0	1742	X	X	X	
Sample number of households	143	0	0	1	0	144	X	х	Х	

Kerala		Kasa	argod				-	URBAN		
		А	access to bathroo	m			N	umber of	household	S
Quintile class on	Evalueiva vea of	Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	94.2	5.8	0.0	0.0	0.0	100.0	166	166	14	14
20-40	87.7	12.3	0.0	0.0	0.0	100.0	250	250	19	19
40-60	100.0	0.0	0.0	0.0	0.0	100.0	235	235	18	18
60-80	100.0	0.0	0.0	0.0	0.0	100.0	248	248	17	17
80-100	100.0	0.0	0.0	0.0	0.0	100.0	284	284	28	28
all	96.6	3.4	0.0	0.0	0.0	100.0	1182	1182	96	96
Estd.(00) number of households	1142	40	0	0	0	1182	X	X	X	Х
Sample number of households	93	3	0	0	0	96	X	X	Х	X

Table 3: Districtwi	ise percentage di	stribution of hous	eholds by facilit	y of bathroom	and access	s to bathro	oom for ea	ach quinti	le class on	MPCE
Kerala		Kas	argod				ALL			
		A	ccess to bathroo	m			Ν	lumber of	of households	
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	97.6	2.1	0.0	0.3	0.0	100.0	466	466	47	47
20-40	94.7	5.3	0.0	0.0	0.0	100.0	584	584	42	42
40-60	100.0	0.0	0.0	0.0	0.0	100.0	584	584	45	45
60-80	100.0	0.0	0.0	0.0	0.0	100.0	630	630	49	49
80-100	100.0	0.0	0.0	0.0	0.0	100.0	660	660	57	57
all	98.6	1.4	0.0	0.1	0.0	100.0	2924	2924	240	240
Estd.(00) number of										
households	2882	40	0	2	0	2924	Х	Х	Х	Х
Sample number of										
households	236	3	0	1	0	240	Х	Х	Х	Х

Kerala		I	Kannur				RURAL			
		A	access to bathroo	om			N	lumber of	household	s
Quintile class on UMPCE	Exclusive use of	Common use of	Public/ community use	No hothus and	Others	A 11	Estd	.(00)	Sam	ıple
OWI CE	household	households in the building	without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	261	261	24	24
20-40	100.0	0.0	0.0	0.0	0.0	100.0	396	396	36	36
40-60	100.0	0.0	0.0	0.0	0.0	100.0	436	436	48	48
60-80	100.0	0.0	0.0	0.0	0.0	100.0	423	423	38	38
80-100	100.0	0.0	0.0	0.0	0.0	100.0	479	479	46	46
all	100.0	0.0	0.0	0.0	0.0	100.0	1995	1995	192	192
Estd.(00) number of										
households	1995	0	0	0	0	1995	Х	Х	Х	Х
Sample number of										
households	192	0	0	0	0	192	Х	Х	Х	Х

Table 3: Districtwi	ise percentage di	stribution of hous	eholds by facilit	y of bathroom	and access	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala		Ka	nnur				URB	AN		
		A	ccess to bathroo	m			Ν	Number of households		
Quintile class on	E- 1- in the first second second	Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	544	544	53	53
20-40	99.3	0.0	0.0	0.7	0.0	100.0	596	596	66	66
40-60	100.0	0.0	0.0	0.0	0.0	100.0	647	647	78	78
60-80	100.0	0.0	0.0	0.0	0.0	100.0	841	841	89	89
80-100	91.3	8.7	0.0	0.0	0.0	100.0	907	907	50	50
all	97.6	2.2	0.0	0.1	0.0	100.0	3534	3534	336	336
Estd.(00) number of										
households	3451	79	0	4	0	3534	Х	Х	Х	Х
Sample number of										
households	332	3	0	1	0	336	Х	Х	Х	Х

Kerala			Kannur				A	ALL		
		A	access to bathroom	m			N	lumber of	household	S
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	805	805	77	77
20-40	99.6	0.0	0.0	0.4	0.0	100.0	991	991	102	102
40-60	100.0	0.0	0.0	0.0	0.0	100.0	1083	1083	126	126
60-80	100.0	0.0	0.0	0.0	0.0	100.0	1264	1264	127	127
80-100	94.3	5.7	0.0	0.0	0.0	100.0	1387	1387	96	96
all	98.5	1.4	0.0	0.1	0.0	100.0	5529	5529	528	528
Estd.(00) number of										
households	5446	79	0	4	0	5529	Х	Х	Х	Х
Sample number of										
households	524	3	0	1	0	528	Х	Х	Х	Х
Table 3: Districtwide	ise percentage di	stribution of hous	eholds by facilit	y of bathroom	and access	s to bathro	oom for ea	ich quinti	le class on	MPCE
-----------------------	-------------------------------	-------------------------------	-------------------------------------	---------------	------------	-------------	------------	------------	-------------	------
Kerala			Wayanad				RU	RAL		
		A	ccess to bathroo	m			N	lumber of	household	S
Quintile class on		Common use of	Public/				Estd.	(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	92.6	0.0	7.4	0.0	0.0	100.0	312	312	21	21
20-40	98.3	1.7	0.0	0.0	0.0	100.0	333	333	23	23
40-60	92.3	7.7	0.0	0.0	0.0	100.0	448	448	34	34
60-80	99.4	0.6	0.0	0.0	0.0	100.0	496	496	34	34
80-100	98.4	1.6	0.0	0.0	0.0	100.0	507	507	32	32
all	96.4	2.5	1.1	0.0	0.0	100.0	2097	2097	144	144
Estd.(00) number of										
households	2023	51	23	0	0	2097	Х	Х	Х	Х
Sample number of										
households	132	11	1	0	0	144	Х	Х	Х	Х

T.L. 2. D. MDOD . •• ... . . . ~

Kerala			Wayanad				URE	BAN		
		A	ccess to bathroo	m			N	umber of	household	S
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	8	8	4	4
20-40	100.0	0.0	0.0	0.0	0.0	100.0	17	17	8	8
40-60	100.0	0.0	0.0	0.0	0.0	100.0	15	15	9	(
60-80	100.0	0.0	0.0	0.0	0.0	100.0	21	21	18	18
80-100	26.6	73.4	0.0	0.0	0.0	100.0	55	55	9	ç
all	65.0	35.0	0.0	0.0	0.0	100.0	116	116	48	48
Estd.(00) number of										
households	75	41	0	0	0	116	Х	Х	Х	Х
Sample number of households	44	4	0	0	0	48	х	Х	Х	Х

Table 3: Districtwi	ise percentage di	stribution of hous	eholds by facilit	y of bathroom	and access	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala			Wayanad				ALL			
		A	ccess to bathroo	m			N	lumber of	household	.S
Quintile class on	Exclusive use of	Common use of	Public/ community use		0.1	4 11	Estd	.(00)	San	nple
UMPCE	household	households in the building	without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	92.8	0.0	7.2	0.0	0.0	100.0	321	321	25	25
20-40	98.4	1.6	0.0	0.0	0.0	100.0	350	350	31	31
40-60	92.5	7.5	0.0	0.0	0.0	100.0	463	463	43	43
60-80	99.4	0.6	0.0	0.0	0.0	100.0	517	517	52	52
80-100	91.3	8.7	0.0	0.0	0.0	100.0	563	563	41	41
all	94.8	4.2	1.0	0.0	0.0	100.0	2213	2213	192	192
Estd.(00) number of										
households	2098	92	23	0	0	2213	Х	Х	Х	Х
Sample number of households	176	15	1	0	0	192	Х	X	Х	X

ſ

Table 3: Districtwi	se percentage di	stribution of hous	eholds by facilit	ty of bathroom	and access	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala			Kozhikkod					RURAL		
		А	ccess to bathroo	m			N	lumber of	household	S
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	321	321	22	22
20-40	100.0	0.0	0.0	0.0	0.0	100.0	406	406	27	27
40-60	100.0	0.0	0.0	0.0	0.0	100.0	453	453	36	36
60-80	99.9	0.0	0.0	0.1	0.0	100.0	525	525	52	52
80-100	100.0	0.0	0.0	0.0	0.0	100.0	663	663	55	55
all	100.0	0.0	0.0	0.0	0.0	100.0	2368	2368	192	192
Estd.(00) number of										
households	2368	0	0	0	0	2368	Х	Х	Х	Х
Sample number of										
households	191	0	0	1	0	192	Х	Х	Х	Х

Table 3: Districtwi	ise percentage di	stribution of hous	eholds by facilit	y of bathroom	and access	s to bathro	oom for ea	ich quinti	le class on	MPCE
Kerala		K	ozhikkod				U	RBAN		
		A	access to bathroo	m			N	lumber of	household	S
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	98.7	0.0	0.0	0.0	1.3	100.0	698	698	56	56
20-40	97.0	1.4	0.0	1.6	0.0	100.0	861	861	76	76
40-60	97.0	1.8	0.0	1.2	0.0	100.0	1135	1135	101	101
60-80	98.3	1.7	0.0	0.0	0.0	100.0	1210	1210	112	112
80-100	90.8	9.2	0.0	0.0	0.0	100.0	1402	1402	87	87
all	95.9	3.4	0.0	0.5	0.2	100.0	5307	5307	432	432
Estd.(00) number of										
households	5089	181	0	28	9	5307	Х	Х	Х	Х
Sample number of										
households	414	15	0	2	1	432	Х	Х	Х	Х

Table 3: Districtwi	se percentage di		•	y of bathroom	and access			ach quinti	le class or	ı MPCE
Kerala		Koz	hikkod			ALL	1			
		A	ccess to bathroo	m			N	lumber of	household	ls
Quintile class on	Exclusive use of	Common use of	Public/ community use				Estd.	.(00)	San	nple
UMPCE	household	households in the building	without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	99.1	0.0	0.0	0.0	0.9	100.0	1020	1020	78	78
20-40	98.0	0.9	0.0	1.1	0.0	100.0	1266	1266	103	103
40-60	97.9	1.3	0.0	0.9	0.0	100.0	1588	1588	137	137
60-80	98.8	1.2	0.0	0.0	0.0	100.0	1735	1735	164	164
80-100	93.8	6.2	0.0	0.0	0.0	100.0	2065	2065	142	142
all	97.2	2.4	0.0	0.4	0.1	100.0	7675	7675	624	624
Estd.(00) number of										
households	7457	181	0	28	9	7675	Х	Х	Х	X
Sample number of										
households	605	15	0	3	1	624	Х	Х	Х	Х

Kerala		Malappu	ram			R	URAL			
		A	ccess to bathroo	m			N	umber of	household	S
Quintile class on	Exclusive use of	Common use of	Public/ community use				Estd.	(00)	San	nple
UMPCE	household	households in the building	without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	93.1	0.0	0.0	3.7	3.1	100.0	750	750	63	63
20-40	100.0	0.0	0.0	0.0	0.0	100.0	800	800	70	70
40-60	98.9	1.1	0.0	0.0	0.0	100.0	980	980	89	89
60-80	96.3	2.4	0.0	1.3	0.0	100.0	1124	1124	98	98
80-100	87.4	10.2	0.0	0.0	2.4	100.0	1437	1437	88	88
all	94.4	3.6	0.0	0.8	1.1	100.0	5090	5090	408	408
Estd.(00) number of households	4806	185	0	42	58	5090	X	X	X	X
Sample number of households	395	7	0	3	3	408	X	X	Х	Х

## Table 3: Districtwise percentage distribution of households by facility of bathroom and access to bathroom for each quintile class on MPCE

Kerala		Malappuram				τ	JRBAN			
		A	ccess to bathroo	m			Ν	umber of	household	S
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	95.6	0.3	0.0	4.1	0.0	100.0	502	502	50	50
20-40	95.9	2.0	0.0	0.0	2.1	100.0	699	699	73	73
40-60	82.7	17.3	0.0	0.0	0.0	100.0	875	875	96	96
60-80	100.0	0.0	0.0	0.0	0.0	100.0	832	832	94	94
80-100	90.8	9.2	0.0	0.0	0.0	100.0	1041	1041	71	71
all	92.5	6.7	0.0	0.5	0.4	100.0	3948	3948	384	384
Estd.(00) number of										
households	3651	263	0	20	15	3948	Х	Х	Х	Х
Sample number of										
households	358	24	0	1	1	384	Х	X	Х	Х

Table 3: Districtwi	se percentage di	stribution of hous	eholds by facilit	y of bathroom	and acces	s to bathro	oom for ea	ach quinti	ile class or	n MPCE
Kerala		Ν	Ialappuram				A	LL		
		A	access to bathroo	m			Ν	lumber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	94.1	0.1	0.0	3.9	1.9	100.0	1252	1252	113	113
20-40	98.1	0.9	0.0	0.0	1.0	100.0	1498	1498	143	143
40-60	91.3	8.7	0.0	0.0	0.0	100.0	1854	1854	185	185
60-80	97.9	1.4	0.0	0.7	0.0	100.0	1956	1956	192	192
80-100	88.8	9.8	0	0.0	1.4	100.0	2478	2478	159	159
all	93.6	4.9	0	0 0.7	0.8	100.0	903	903	792	792
Estd.(00) number of households	8457	447	0	62	72	9039	X	X	X	X
Sample number of households	753	31	0	4	4	792	X	X	X	X

Г

Table 3: Districtwi	se percentage di	stribution of hous	eholds by facilit	y of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class or	I MPCE
Kerala		Palakkad		RURAL						
		A	ccess to bathroo	m			Ν	lumber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	97.9	0.6	0.0	0.1	1.4	100.0	892	892	70	70
20-40	99.0	0.8	0.0	0.2	0.0	100.0	916	916	76	76
40-60	99.8	0.0	0.0	0.2	0.0	100.0	996	996	84	84
60-80	97.2	1.3	0.0	0.0	1.5	100.0	984	984	85	85
80-100	99.8	0.2	0.0	0.0	0.0	100.0	1141	1141	117	117
all	98.8	0.5	0.0	0.1	0.6	100.0	4929	4929	432	432
Estd.(00) number of										
households	4870	27	0	5	27	4929	Х	Х	Х	Х
Sample number of										
households	418	9	0	3	2	432	Х	Х	Х	Х

Kerala		Р	alakkad		UR	BAN				
		A	ccess to bathroo	om			Nı	imber of	household	ls
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	298	298	20	20
20-40	100.0	0.0	0.0	0.0	0.0	100.0	299	299	21	21
40-60	96.5	3.5	0.0	0.0	0.0	100.0	396	396	30	30
60-80	100.0	0.0	0.0	0.0	0.0	100.0	390	390	37	37
80-100	100.0	0.0	0.0	0.0	0.0	100.0	430	430	36	36
all	99.2	0.8	0.0	0.0	0.0	100.0	1813	1813	144	144
Estd.(00) number of										
nouseholds	1799	14	0	0	0	1813	Х	Х	Х	У
Sample number of										
nouseholds	142	2	0	0	0	144	Х	Х	Х	У

Table 3: Districtwi	se percentage di	stribution of house	eholds by facili	ty of bathroom	and access	s to bathro	oom for ea	ach quinti	le class on	MPCE
Kerala		Palakkad		ALI						
		A	ccess to bathro	om			N	umber of	householo	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	98.4	0.4	0.0	0.1	1.1	100.0	1191	1191	90	90
20-40	99.3	0.6	0.0	0.1	0.0	100.0	1215	1215	97	97
40-60	98.9	1.0	0.0	0.1	0.0	100.0	1391	1391	114	114
60-80	98.0	0.9	0.0	0.0	1.1	100.0	1374	1374	122	122
80-100	99.9	0.1	0.0	0.0	0.0	100.0	1571	1571	153	153
all	98.9	0.6	0.0	0.1	0.4	100.0	6742	6742	576	576
Estd.(00) number of										
households	6669	41	0	5	27	6742	Х	Х	Х	Х
Sample number of										
households	560	11	0	3	2	576	Х	Х	Х	Х

Kerala		Thris	sur	RU	JRAL					
		Α	ccess to bathroo	)m			Nı	umber of	household	ls
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	99.0	0.0	0.0	1.0	0.0	100.0	373	373	27	27
20-40	98.4	0.0	0.0	1.6	0.0	100.0	385	385	35	35
40-60	97.6	0.0	0.0	2.4	0.0	100.0	442	442	36	36
60-80	93.3	3.5	0.0	0.4	2.8	100.0	550	550	45	45
80-100	94.5	5.2	0.0	0.3	0.0	100.0	505	505	37	37
all	96.2	2.0	0.0	1.1	0.7	100.0	2255	2255	180	180
Estd.(00) number of										
households	2170	46	0	24	15	2255	Х	Х	X	Х
~										
Sample number of										

Table 3: Districtwi	se percentage di	stribution of hous	eholds by facili	ty of bathroom	and access	s to bathro	oom for ea	ich quinti	le class on	MPCE
Kerala		J	hrissur			U	RBAN			
		A	ccess to bathroo	)m			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	95.2	4.8	0.0	0.0	0.0	100.0	900	900	60	60
20-40	96.8	3.2	0.0	0.0	0.0	100.0	969	969	68	68
40-60	95.7	1.7	0.0	1.1	1.5	100.0	1198	1198	85	85
60-80	86.8	11.8	0.0	0.0	1.3	100.0	1350	1350	98	98
80-100	92.1	7.6	0.0	0.3	0.0	100.0	1485	1485	121	121
all	92.9	6.2	0.0	0.3	0.6	100.0	5902	5902	432	432
Estd.(00) number of										
households	5481	367	0	17	36	5902	Х	Х	Х	Х
Sample number of										
households	406	22	0	2	2	432	Х	Х	Х	Х

Table 3: Districtwis	se percentage di	stribution of house	eholds by facili	ty of bathroom	and access	s to bathro	oom for ea	ach quinti	le class on	MPCE
Kerala		Thrissur		AI	LL					
		A	ccess to bathroo	om			Ν	umber of	householo	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	96.3	3.4	0.0	0.3	0.0	100.0	1273	1273	87	87
20-40	97.3	2.3	0.0	0.4	0.0	100.0	1355	1355	103	103
40-60	96.2	1.2	0.0	1.5	1.1	100.0	1640	1640	121	121
60-80	88.7	9.4	0.0	0.1	1.8	100.0	1899	1899	143	143
80-100	92.7	7.0	0.0	0.3	0.0	100.0	1989	1989	158	158
all	93.8	5.1	0.0	0.5	0.6	100.0	8157	8157	612	612
Estd.(00) number of										
households	7651	413	0	42	51	8157	Х	Х	Х	Х
Sample number of households	573	26	0	10	3	612	X	Х	X	X

Table 3: Districtwi	se percentage di	stribution of house	eholds by facili	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala		Ernakulam		RURAL						
		A	ccess to bathroo	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	98.0	2.0	0.0	0.0	0.0	100.0	359	359	31	31
20-40	95.6	0.3	0.0	0.0	4.1	100.0	447	447	28	28
40-60	99.8	0.2	0.0	0.0	0.0	100.0	480	480	28	28
60-80	99.8	0.2	0.0	0.0	0.0	100.0	639	639	37	37
80-100	100.0	0.0	0.0	0.0	0.0	100.0	823	823	56	56
all	98.9	0.4	0.0	0.0	0.7	100.0	2749	2749	180	180
Estd.(00) number of households	2720	11	0	0	18	2749	Х	Х	Х	X
Sample number of households	170	9	0	0	1	180	X	X	X	X

Kerala		Ernakulam		URB	BAN					
		Α	ccess to bathroo	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd.	.(00)	Sam	ıple
Quintile class on UMPCE	Exclusive use of household	Common use of households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	99.3	0.7	0.0	0.0	0.0	100.0	900	900	65	65
20-40	90.8	9.2	0.0	0.0	0.0	100.0	1088	1088	87	87
40-60	91.4	8.6	0.0	0.0	0.0	100.0	1099	1099	94	94
60-80	87.6	12.4	0.0	0.0	0.0	100.0	1276	1276	113	113
80-100	82.7	17.3	0.0	0.0	0.0	100.0	1645	1645	114	114
all	89.3	10.7	0.0	0.0	0.0	100.0	6007	6007	473	473
Estd.(00) number of										
households	5364	644	0	0	0	6007	Х	Х	Х	Х
Sample number of										
households	428	45	0	0	0	473	Х	Х	Х	Х

	Kerala		Ernak				AL	L		
		A	ccess to bathroo	om			Nı	umber of	household	ls
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	98.9	1.1	0.0	0.0	0.0	100.0	1258	1258	96	96
20-40	92.2	6.6	0.0	0.0	1.2	100.0	1536	1536	115	115
40-60	94.0	6.0	0.0	0.0	0.0	100.0	1579	1579	122	122
60-80	91.7	8.3	0.0	0.0	0.0	100.0	1915	1915	150	150
80-100	88.5	11.5	0.0	0.0	0.0	100.0	2468	2468	170	170
all	92.3	7.5	0.0	0.0	0.2	100.0	8756	8756	653	653
Estd.(00) number of households	8083	654	0	0	18	8756	Х	X	X	Х
Sample number of households	598	54	0	0	1	653	х	X	X	y

Table 3: Districtwi	se percentage di	stribution of house	eholds by facili	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala		Idukki		RURAL						
		A	ccess to bathroo	om		-	N	umber of	household	ls
		Cf	Public/				Estd	.(00)	Sam	nple
Quintile class on UMPCE	Exclusive use of household	Common use of households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	96.6	3.4	0.0	0.0	0.0	100.0	504	504	41	41
20-40	92.6	7.2	0.0	0.2	0.0	100.0	498	498	43	43
40-60	89.4	0.0	0.0	10.6	0.0	100.0	560	560	52	52
60-80	95.3	4.6	0.0	0.2	0.0	100.0	486	486	44	44
80-100	98.0	0.0	0.0	2.0	0.0	100.0	597	597	60	60
all	94.4	2.8	0.0	2.8	0.0	100.0	2645	2645	240	240
Estd.(00) number of households	2496	75	0	73	0	2645	Х	Х	X	X
Sample number of households	222	5	0	13	0	240	X	X	X	X

Kerala		Idukki		RBAN						
		A	ccess to bathroo	)m			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sam	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	36	36	6	6
20-40	100.0	0.0	0.0	0.0	0.0	100.0	51	51	8	8
40-60	63.8	36.2	0.0	0.0	0.0	100.0	67	67	12	12
60-80	59.3	40.7	0.0	0.0	0.0	100.0	86	86	16	16
80-100	100.0	0.0	0.0	0.0	0.0	100.0	54	54	6	6
all	79.9	20.1	0.0	0.0	0.0	100.0	295	295	48	48
Estd.(00) number of										
households	235	59	0	0	0	295	Х	Х	Х	Х
Sample number of										
households	40	8	0	0	0	48	Х	Х	Х	Х

Kerala			Idukki		ALL					
		A	ccess to bathro	om			Ni	umber of	household	ls
Quintile class on	Exclusive use	Common use of	Public/ community	N. L. dhara and		A 11	Estd.	(00)	Sam	ıple
UMPCE	of household	households in the building	use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	96.8	3.2	0.0	0.0	0.0	100.0	540	540	47	47
20-40	93.3	6.5	0.0	0.2	0.0	100.0	549	549	51	51
40-60	86.7	3.9	0.0	9.5	0.0	100.0	627	627	64	64
60-80	89.8	10.0	0.0	0.2	0.0	100.0	572	572	60	60
80-100	98.1	0.0	0.0	1.9	0.0	100.0	651	651	66	66
all	92.9	4.6	0.0	2.5	0.0	100.0	2939	2939	288	288
Estd.(00) number of										
households	2732	134	0	73	0	2939	Х	Х	Х	Х
Sample number of										
households	262	13	0	13	0	288	Х	Х	Х	Х

Kerala		Kottayan		RURAL						
		A	ccess to bathroo	om			Ni	umber of	household	ls
Quintile class on		Common use of	Public/				Estd.	.(00)	Sam	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	602	602	43	43
20-40	95.6	0.0	0.0	2.6	1.9	100.0	639	639	47	47
40-60	97.0	0.0	0.0	3.0	0.0	100.0	656	656	48	48
60-80	94.9	3.0	0.0	2.0	0.0	100.0	783	783	64	64
80-100	100.0	0.0	0.0	0.0	0.0	100.0	870	870	70	70
all	97.5	0.7	0.0	1.5	0.3	100.0	355	355	272	272
Estd.(00) number of										
households	3462	24	0	52	12	3550	Х	Х	Х	Х
Sample number of households	266	1	0	1	1	272	Х	Х	X	Х

Kerala		Kottayam		URBAN						
		A	ccess to bathro	om			N	umber of	household	ls
Quintile class on	Exclusive use	Common use of	Public/ community				Estd	.(00)	Sam	ıple
UMPCE	of household	households in the building	use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	184	184	13	13
20-40	71.8	28.2	0.0	0.0	0.0	100.0	291	291	18	18
40-60	95.0	0.0	0.0	5.0	0.0	100.0	294	294	20	20
60-80	95.6	4.4	0.0	0.0	0.0	100.0	332	332	22	22
80-100	64.8	35.2	0.0	0.0	0.0	100.0	533	533	22	22
all	81.7	17.4	0.0	0.9	0.0	100.0	1634	1634	95	95
Estd.(00) number of										
households	1335	284	0	15	0	1634	Х	Х	Х	Х
Sample number of										
households	85	9	0	1	0	95	Х	Х	Х	X

Table 3: Districtwise percentage distribution of households by facility of bathroom and access to bathroom for each quintile class on MPCE

Kerala		Kottay	yam		ALL	1				
		Α	ccess to bathro	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd.	.(00)	Sam	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	786	786	56	50
20-40	88.1	8.8	0.0	1.8	1.3	100.0	929	929	65	65
40-60	96.4	0.0	0.0	3.6	0.0	100.0	951	951	68	68
60-80	95.1	3.4	0.0	1.4	0.0	100.0	1115	1115	86	86
80-100	86.6	13.4	0.0	0.0	0.0	100.0	1403	1403	92	92
all	92.5	5.9	0.0	1.3	0.2	100.0	5184	5184	367	367
Estd.(00) number of households	4797	308	0	67	12	5184	X	X	Х	Σ
Sample number of households	351	10	0	5	1	367	X	X	Х	Х

Kerala		Alapp			RURAL					
		A	ccess to bathro	)m			N	umber of l	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	89.0	0.0	0.0	3.5	7.5	100.0	467	467	37	37
20-40	98.9	0.0	0.0	1.1	0.0	100.0	476	476	42	42
40-60	99.6	0.0	0.0	0.0	0.4	100.0	508	508	39	39
60-80	99.5	0.0	0.0	0.5	0.0	100.0	500	500	43	43
80-100	100.0	0.0	0.0	0.0	0.0	100.0	519	519	31	31
all	97.5	0.0	0.0	1.0	1.5	100.0	2469	2469	192	192
Estd.(00) number of										
households	2408	0	0	24	37	2469	Х	Х	Х	Х
Sample number of households	180	0	0	9	2	192	X	х	X	Σ

Varala	F8		•	URB						
Kerala		Alappuzha A	ccess to bathroo		AIN		Ν	umber of	household	ls
Quintile class on	<b>.</b>	Common use of	Public/				Estd	.(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	100.0	0.0	0.0	0.0	0.0	100.0	499	499	42	42
20-40	96.8	3.2	0.0	0.0	0.0	100.0	550	550	51	51
40-60	87.4	11.7	0.0	0.9	0.0	100.0	590	590	60	60
60-80	100.0	0.0	0.0	0.0	0.0	100.0	533	533	50	50
80-100	100.0	0.0	0.0	0.0	0.0	100.0	628	628	37	37
all	96.7	3.1	0.0	0.2	0.0	100.0	2800	2800	240	240
Estd.(00) number of										
households	2708	86	0	5	0	2800	Х	Х	Х	Х
Sample number of										
households	231	8	0	1	0	240	Х	Х	Х	Х

Table 3: Districtwise percentage distribution of households by facility of bathroom and access to bathroom for each quintile class on MPCE

Table 3: Districtwis	se percentage di	stribution of house	eholds by facili	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class on	MPCE
Kerala		Alappuzha		A	ALL					
			ccess to bathroo	om			N	umber of	householo	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	94.7	0.0	0.0	1.7	3.6	100.0	966	966	79	79
20-40	97.8	1.7	0.0	0.5	0.0	100.0	1026	1026	93	93
40-60	93.1	6.3	0.0	0.5	0.2	100.0	1098	1098	99	99
60-80	99.7	0.0	0.0	0.3	0.0	100.0	1033	1033	93	93
80-100	100.0	0.0	0.0	0.0	0.0	100.0	1147	1147	68	68
all	97.1	1.6	0.0	0.6	0.7	100.0	5270	5270	432	432
Estd.(00) number of										
households	5116	86	0	30	37	5270	Х	Х	Х	Х
Sample number of households	411	8	0	10	3	432	Х	X	X	Х

Table 3: Districtwis	se percentage dis	stribution of house	eholds by facili	ty of bathroom	and access	s to bathro	oom for ea	ach quinti	le class on	MPCE
Kerala		Pathanamthitta		RURA	Ĺ					
		A	ccess to bathro	)m			N	umber of	householo	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	ple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	91.1	0.6	0.0	0.0	8.3	100.0	551	551	37	37
20-40	91.5	0.8	0.0	3.3	4.4	100.0	540	540	31	31
40-60	100.0	0.0	0.0	0.0	0.0	100.0	569	569	33	33
60-80	99.3	0.7	0.0	0.0	0.0	100.0	592	592	38	38
80-100	97.3	2.7	0.0	0.0	0.0	100.0	820	820	53	53
all	96.0	1.1	0.0	0.6	2.3	100.0	3072	3072	192	192
Estd.(00) number of										
households	2950	34	0	18	70	3072	Х	Х	Х	Х
Sample number of										
households	184	4	0	1	3	192	Х	Х	Х	Х

Kerala		Path	anamthitta		URBA	N				
		A	ccess to bathro	om			N	umber of	household	ls
Quintile class on	Exclusive use	Common use of	Public/ community				Estd	.(00)	Sam	ıple
UMPCE	of household	households in the building	use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	70.0	30.0	0.0	0.0	0.0	100.0	68	68	11	11
20-40	77.5	22.5	0.0	0.0	0.0	100.0	54	54	7	7
40-60	81.9	18.1	0.0	0.0	0.0	100.0	91	91	11	11
60-80	84.6	15.4	0.0	0.0	0.0	100.0	80	80	9	ç
80-100	94.6	5.4	0.0	0.0	0.0	100.0	110	110	10	10
all	83.3	16.7	0.0	0.0	0.0	100.0	403	403	48	48
Estd.(00) number of										
households	336	67	0	0	0	403	Х	Х	Х	Х
Sample number of										
households	40	8	0	0	0	48	Х	Х	Х	Х

Kerala		Pathanamthitta	ı		ALL					
		A	ccess to bathroo	om			Nı	imber of	household	ls
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	88.7	3.9	0.0	0.0	7.4	100.0	619	619	48	48
20-40	90.2	2.8	0.0	3.0	4.0	100.0	594	594	38	38
40-60	97.5	2.5	0.0	0.0	0.0	100.0	660	660	44	44
60-80	97.6	2.4	0.0	0.0	0.0	100.0	671	671	47	47
80-100	96.9	3.1	0.0	0.0	0.0	100.0	931	931	63	63
all	94.6	2.9	0.0	0.5	2.0	100.0	3475	3475	240	240
Estd.(00) number of										
nouseholds	3286	102	0	18	70	3475	Х	Х	Х	Х
Sample number of households	224	12	0	1	3	240	Х	X	Х	y

Table 3: Districtwis	se percentage di	stribution of house	eholds by facilit	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class on	I MPCE
Kerala		Kollam		RURA	<b>AL</b>					
		A	ccess to bathroo	)m			N	umber of	householo	ls
Quintile class on	Exclusive use	Common use of	Public/ community				Estd.	.(00)	Sam	nple
UMPCE	of household	households in the building	use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	92.7	0.0	0.0	7.3	0.0	100.0	618	618	45	45
20-40	97.0	0.0	0.0	3.0	0.0	100.0	745	745	51	51
40-60	95.0	5.0	0.0	0.0	0.0	100.0	750	750	54	54
60-80	96.0	2.0	0.0	0.0	2.0	100.0	927	927	70	70
80-100	97.7	0.0	0.0	2.3	0.0	100.0	1024	1024	68	68
all	95.9	1.4	0.0	2.2	0.4	100.0	4064	4064	288	288
Estd.(00) number of										
households	3899	56	0	91	18	4064	Х	X	X	Х
Sample number of households	278	3	0	6	1	288	X	Х	х	Х

Kerala		Kolla	m		URBA	N				
		A	ccess to bathroo	om			Nı	imber of	household	ls
Quintile class on		Common use of	Public/				Estd.	(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	94.9	0.0	0.0	5.1	0.0	100.0	479	479	34	34
20-40	98.2	1.8	0.0	0.0	0.0	100.0	493	493	37	37
40-60	100.0	0.0	0.0	0.0	0.0	100.0	565	565	42	42
60-80	96.1	0.0	0.0	3.9	0.0	100.0	730	730	59	59
80-100	99.0	1.0	0.0	0.0	0.0	100.0	863	863	68	68
all	97.8	0.6	0.0	1.7	0.0	100.0	3131	3131	240	240
Estd.(00) number of										
households	3060	17	0	53	0	3131	Х	Х	Х	Х
Sample number of households	234	2	0	4	0	240	Х	Х	、	У

Table 3: Districtwis	se percentage dis	stribution of house	eholds by facili	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class or	n MPCE
Kerala			Kollam				AL	L		
		A	ccess to bathro	om			Ν	umber of	househol	ds
Quintile class on	г. і.	Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	93.6	0.0	0.0	6.4	0.0	100.0	1097	1097	79	79
20-40	97.5	0.7	0.0	1.8	0.0	100.0	1238	1238	88	88
40-60	97.1	2.9	0.0	0.0	0.0	100.0	1315	1315	96	96
60-80	96.1	1.1	0.0	1.7	1.1	100.0	1658	1658	129	129
80-100	98.3	0.5	0.0	1.2	0.0	100.0	1887	1887	136	136
all	96.7	1.0	0.0	2.0	0.3	100.0	7194	7194	528	528
Estd.(00) number of										
households	6959	74	0	144	18	7194	Х	Х	Х	Х
Sample number of										
households	512	5	0	10	1	528	Х	Х	Х	Х

Kerala		Thiruvananthap	uram	RU	JRAL						
		Α	ccess to bathroo	om			N	umber of	household	ls	
Quintile class on		C	Public/				Estd	.(00)	Sample		
UMPCE	Exclusive use of household	Common use of households in the building	community use without payment	No bathroom	Others	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
0-20	86.1	0.0	0.0	13.9	0.0	100.0	741	741	41	41	
20-40	97.7	0.0	0.0	2.3	0.0	100.0	713	713	53	53	
40-60	88.5	0.0	0.0	11.5	0.0	100.0	811	811	52	52	
60-80	90.5	0.0	0.0	7.4	2.1	100.0	932	932	60	60	
80-100	100.0	0.0	0.0	0.0	0.0	100.0	919	919	81	81	
all	92.7	0.0	0.0	6.8	0.5	100.0	4116	4115	287	287	
Estd.(00) number of											
nouseholds	3816	0	0	281	20	4116	Х	Х	Х	Х	
Sample number of											
	270		0	16		287	X	Х	Х	Х	

Table 3: Districtwi	se percentage di	stribution of house	eholds by facili	ty of bathroom	and acces	s to bathro	oom for ea	ach quinti	le class or	MPCE
Kerala	Thiru	ıvananthapuram		URBAN	I					
		A	ccess to bathroo	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	San	nple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	96.2	1.8	0.0	2.0	0.0	100.0	869	869	61	61
20-40	93.6	0.0	0.0	6.4	0.0	100.0	1003	1003	70	70
40-60	98.3	0.0	0.0	1.7	0.0	100.0	1074	1074	72	72
60-80	97.5	1.4	0.0	1.1	0.0	100.0	1279	1279	89	89
80-100	95.2	1.3	0.0	1.0	2.5	100.0	1339	1339	87	87
all	96.2	0.9	0.0	2.3	0.6	100.0	5563	5563	379	379
Estd.(00) number of households	5351	51	0	128	33	5563	Х	Х	Х	Х
Sample number of households	367		0	8	1	379	X	X	X	Х

Г

Kerala		Thiruvanantha	puram		ALL					
		Α	ccess to bathro	om			Nı	umber of	household	ls
Quintile class on	Exclusive use	Common use of	Public/ community	Na katharan	Oth and	A 11	Estd.	(00)	Sam	ıple
UMPCE	of household	households in the building	use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	91.6	0.9	0.0	7.5	0.0	100.0	1610	1610	102	102
20-40	95.3	0.0	0.0	4.7	0.0	100.0	1716	1716	123	123
40-60	94.1	0.0	0.0	5.9	0.0	100.0	1885	1885	124	124
60-80	94.5	0.8	0.0	3.8	0.9	100.0	2210	2210	149	149
80-100	97.1	0.8	0.0	0.6	1.5	100.0	2257	2257	168	168
all	94.7	0.5	0.0	4.2	0.5	100.0	9679	9679	666	666
Estd.(00) number of										
households	9167	51	0	409	53	9679	Х	Х	Х	Х
Sample number of	(27	2	0	24	2		V	V	V	
households	637	3	0	24	2	666	Х	Х	X	Σ
Kerala		ALL		RURAL	I					
---------------------	-------------------------------	----------------------------	-------------------------------------	-------------	--------	-------	-------	----------	-----------	------
		A	ccess to bathro	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sam	ıple
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	94.7	0.5	0.3	2.8	1.7	100.0	7052	7052	535	535
20-40	97.4	0.7	0.0	1.1	0.7	100.0	7627	7627	585	585
40-60	96.8	1.0	0.0	2.2	0.0	100.0	8439	8439	660	660
60-80	96.7	1.4	0.0	1.1	0.7	100.0	9343	9343	740	740
80-100	97.4	1.9	0.0	0.3	0.3	100.0	10681	10681	823	823
all	96.7	1.2	0.1	1.4	0.6	100.0	43142	43142	3343	3343
Estd.(00) number of										
households	41723	509	23	612	275	43142	Х	Х	Х	Х
Sample number of										
households	3208	53	1	65	16	3343	Х	Х	Х	Х

Kerala		ALL		U	RBAN					
		A	ccess to bathroo	om			N	umber of	household	ls
Quintile class on		Common use of	Public/				Estd	.(00)	Sample	
UMPCE	Exclusive use of household	households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	97.3	1.6	0.0	1.0	0.1	100.0	6152	6152	489	489
20-40	94.4	4.3	0.0	1.1	0.2	100.0	7221	7221	609	609
40-60	94.1	4.9	0.0	0.8	0.2	100.0	8278	8278	728	728
60-80	94.8	4.5	0.0	0.5	0.2	100.0	9206	9206	823	823
80-100	90.6	8.9	0.0	0.2	0.3	100.0	10778	10778	746	746
all	93.9	5.3	0.0	0.7	0.2	100.0	41635	41635	3395	3395
Estd.(00) number of households	39077	2195	0	271	93	41635	Х	X	X	Х
Sample number of households	3214	156	0	20	5	3395	Х	X	X	Х

Table 3: Districtwis			eholds by facili	ty of bathroom		s to bathro	oom for e	ach quinti	ile class or	MPCE
Kerala	A	ALL A	ccess to bathroo	m	ALL		N	umber of	household	16
Orintile class on			Public/					.(00)		ıple
Quintile class on UMPCE	Exclusive use of household	Common use of households in the building	community use without payment	No bathroom	Others	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0-20	95.9	1.0	0.2	2.0	1.0	100.0	13203	13203	1024	1024
20-40	96.0	2.4	0.0	1.1	0.5	100.0	14848	14848	1194	1194
40-60	95.4	2.9	0.0	1.5	0.1	100.0	16717	16717	1388	1388
60-80	95.8	3.0	0.0	0.8	0.5	100.0	18549	18549	1563	1563
80-100	94.0	5.4	0.0	0.3	0.3	100.0	21459	21459	1569	1569
all	95.3	3.2	0.0	0.1	0.4	100.0	84777	84777	6738	6738
Estd.(00) number of households	80800	2704	23	882	368	84777	Х	Х	Х	Х
Sample number of households	6422	209	1	85	21	6738	X	Х	X	X

Kerala	Kasargod					RURAL			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	69	31	0.0	0	100	300	300	33	33
20-40	46.5	53.5	0.0	0	100	334	334	23	23
40-60	56.8	43.2	0.0	0	100	349	349	27	27
60-80	58.1	41.9	0.0	0	100	382	382	32	32
80-100	85.2	14.8	0.0	0	100	377	377	29	29
all	63.4	36.6	0.0	0	100	1742	1742	144	144
Estd.(00) number of households having access to latrine	1104	638	0	0	1742	X	X	X	Х
Sample number of households having access to latrine	86	58	0	0	144	х	Х	Х	2

Kerala	Kasargo	d				URBAN	I		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	30.6	69.4	0.0	0	100	166	166	14	14
20-40	64.5	35.5	0.0	0	100	250	250	19	19
40-60	49.2	50.8	0.0	0	100	235	235	18	18
60-80	10.4	84.6	0.0	5	100	248	248	17	1′
80-100	84.5	15.5	0.0	0	100	284	284	28	23
all	50.2	48.8	0.0	1	100	1182	1182	96	90
Estd.(00) number of households									
having access to latrine	593	577	0	12	1182	Х	Х	Х	2
Sample number of households having access to latrine	48	47	0	1	96	Х	Х	Х	2

Kerala	Kasargo	od				ALL			
		Flush/p	our-flush to			Estd	(00)	Sample	
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	55.3	44.7	0.0	0	100	466	466	47	47
20-40	54.2	45.8	0.0	0	100	584	584	42	42
40-60	53.8	46.2	0.0	0	100	584	584	45	43
60-80	39.3	58.7	0.0	2	100	630	630	49	49
80-100	84.9	15.1	0.0	0	100	660	660	57	57
all	58	41.6	0.0	0.4	100	2924	2924	240	240
Estd.(00) number of households									
having access to latrine	1697	1215	0	12	2924	Х	Х	Х	Х
Sample number of households having access to latrine	134	105	0	1	240	Х	Х	X	X

Kerala	Kann	ur				RURA	L		
		Flush/p	our-flush to			Estd	(00)	Sample	
Quintile class on UMPCE (1)	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	261	261	24	24
20-40	96.8	3.2	0.0	0	100	396	396	36	36
40-60	97.1	2.9	0.0	0	100	436	436	48	48
60-80	97.1	2.9	0.0	0	100	423	423	38	38
80-100	97.4	2.6	0.0	0	100	479	479	46	46
all	97.5	2.5	0.0	0	100	1995	1995	192	192
Estd.(00) number of households									
having access to latrine	1945	50	0	0	1995	Х	Х	Х	Х
Sample number of households having access to latrine	188	4	0	0	192	Х	X	Х	X

Kerala	Kan	nur				URF	BAN		
		Flush/p	our-flush to			Estd	(00)	San	nple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	95	5	0.0	0	100	544	544	53	53
20-40	97.9	2.1	0.0	0	100	591	591	65	65
40-60	91.6	8.4	0.0	0	100	647	647	78	78
60-80	98.2	1.8	0.0	0	100	841	841	89	89
80-100	98.6	1.4	0.0	0	100	907	907	50	50
all	96.6	3.4	0.0	0	100	3530	3530	335	335
estd.(00) number of households having access to latrine	3409	121	0	0	3530	X	Х	Х	X
sample number of households having access to latrine	326	9	0	0	335	X	Х	Х	X

Kerala	K	annur					ALL		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	96.6	3.4	0.0	0	100	805	805	77	77
20-40	97.5	2.5	0.0	0	100	987	987	101	101
40-60	93.8	6.2	0.0	0	100	1083	1083	126	120
60-80	97.8	2.2	0.0	0	100	1264	1264	127	12
80-100	98.2	1.8	0.0	0	100	1387	1387	96	96
all	96.9	3.1	0.0	0	100	5525	5525	527	527
estd.(00) number of households									
having access to latrine	5354	171	0	0	5525	Х	Х	Х	Σ
sample number of households having access to latrine	514	13	0	0	527	Х	Х	X	2

Kerala	Wayanad					RURAI	Ĺ		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	76.8	23.2	0.0	0	100	312	312	21	21
20-40	89.1	10.9	0.0	0	100	333	333	23	23
40-60	63.2	36.8	0.0	0	100	448	448	34	34
60-80	74.1	25.9	0.0	0	100	496	496	34	34
80-100	89.6	10.4	0.0	0	100	507	507	32	32
all	78.3	21.7	0.0	0	100	2097	2097	144	144
Estd.(00) number of households									
having access to latrine	1642	455	0	0	2097	Х	Х	Х	X
Sample number of households									
having access to latrine	123	21	0	0	144	Х	Х	Х	Х

-

Kerala Way	yanad					URBAN			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	8	8	4	4
20-40	100	0	0.0	0	100	17	17	8	8
40-60	98.3	1.7	0.0	0	100	15	15	9	9
60-80	89.1	10.9	0.0	0	100	21	21	18	18
80-100	33.7	66.3	0.0	0	100	55	55	9	ç
all	66.2	33.8	0.0	0	100	116	116	48	48
Estd.(00) number of households									
having access to latrine	77	39	0	0	116	Х	Х	Х	Х
Sample number of households having access to latrine	36	12	0	0	48	Х	Х	X	Х

.

Kerala	Wayanad			AL	L				
		Flush/p	our-flush to			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	77.4	22.6	0.0	0	100	321	321	25	25
20-40	89.7	10.3	0.0	0	100	350	350	31	31
40-60	64.3	35.7	0.0	0	100	463	463	43	43
60-80	74.7	25.3	0.0	0	100	517	517	52	52
80-100	84.1	15.9	0.0	0	100	563	563	41	41
all	77.7	22.3	0.0	0	100	2213	2213	192	192
Estd.(00) number of households									
having access to latrine	1719	494	0	0	2213	Х	Х	Х	Х
Sample number of households having access to latrine	159	33	0	0	192	Х	Х	Х	X

## Table 4. Districtor л с . INDOR •• • • . . . . . . . . -• • . . . . .

Kerala	Kozhikkod			RUF	RAL				
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	99.7	0.3	0.0	0	100	321	321	22	2
20-40	99.9	0.1	0.0	0	100	406	406	27	2
40-60	99.8	0.2	0.0	0	100	453	453	36	3
60-80	99.6	0.4	0.0	0	100	525	525	52	5
80-100	100	0	0.0	0	100	663	663	55	5
all	99.8	0.2	0.0	0	100	2368	2368	192	19
Estd.(00) number of households									
having access to latrine	2364	4	0	0	2368	Х	Х	Х	
Sample number of households having access to latrine	183	9	0	0	192	Х	Х	Х	

Kerala	Kozhikkod	τ	JRBAN						
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	90.5	9.5	0.0	0	100	698	698	56	56
20-40	92.7	7.3	0.0	0	100	861	861	76	76
40-60	97.6	2.4	0.0	0	100	1135	1135	101	101
60-80	99.2	0.8	0.0	0	100	1210	1210	112	112
80-100	99.1	0.9	0.0	0	100	1402	1402	87	87
all	96.6	3.4	0.0	0	100	5307	5307	432	432
Estd.(00) number of households									
having access to latrine	5126	180	0	0	5307	Х	Х	Х	Х
Sample number of households having access to latrine	418	14	0	0	432	Х	X	Х	Х

Kerala	Kozhikkod					А	LL		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	93.4	6.6	0.0	0	100	1020	1020	78	78
20-40	95	5	0.0	0	100	1266	1266	103	103
40-60	98.2	1.8	0.0	0	100	1588	1588	137	13'
60-80	99.3	0.7	0.0	0	100	1735	1735	164	164
80-100	99.4	0.6	0.0	0	100	2065	2065	142	142
all	97.6	2.4	0.0	0	100	7675	7675	624	624
Estd.(00) number of households									
having access to latrine	7490	185	0	0	7675	Х	Х	Х	Х
Sample number of households having access to latrine	601	23	0	0	624	Х	Х	Х	Х

Kerala	Malappuram				RURA	<b>AL</b>			
		Flush/p	our-flush to			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	97.4	2.6	0.0	0	100	750	750	63	6.
20-40	98.9	1.1	0.0	0	100	800	800	70	7(
40-60	99.1	0.9	0.0	0	100	969	969	88	88
60-80	98.5	1.5	0.0	0	100	1124	1124	98	98
80-100	98.1	1.9	0.0	0	100	1437	1437	88	88
all	98.4	1.6	0.0	0	100	5080	5080	407	407
Estd.(00) number of households									
having access to latrine	4999	81	0	0	5080	Х	Х	Х	Х
Sample number of households having access to latrine	400	7	0	0	407	Х	Х	Х	Σ

Kerala	Mala	appuram				URB	AN		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	502	502	50	5
20-40	98.2	1.8	0.0	0	100	699	699	73	7
40-60	99.2	0.8	0.0	0	100	875	875	96	ç
60-80	96.8	3.2	0.0	0	100	832	832	94	ç
80-100	94.6	5.4	0.0	0	100	1041	1041	71	
all	97.4	2.6	0.0	0	100	3948	3948	384	38
Estd.(00) number of households									
having access to latrine	3846	103	0	0	3948	Х	Х	Х	
Sample number of households having access to latrine	363	21	0	0	384	Х	Х	Х	

Kerala	Malapp	uram					ALI		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	98.4	1.6	0.0	0	100	1252	1252	113	113
20-40	98.6	1.4	0.0	0	100	1498	1498	143	143
40-60	99.2	0.8	0.0	0	100	1844	1844	184	184
60-80	97.7	2.3	0.0	0	100	1956	1956	192	192
80-100	96.6	3.4	0.0	0	100	2478	2478	159	159
all	98	2	0.0	0	100	9029	9029	791	791
Estd.(00) number of households									
having access to latrine	8845	184	0	0	9029	Х	Х	X	Х
Sample number of households having access to latrine	763	28	0	0	791	Х	Х	Х	Х

Kerala	Р	alakkad			RURAI				
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0		100	891	891	69	69
20-40	100	0	0.0	0	100	899	899	74	74
40-60	100	0	0.0	0	100	996	996	84	84
60-80	100	0	0.0	0	100	984	984	85	85
80-100	100	0	0.0	0	100	1141	1141	117	117
all	100	0	0.0	0	100	4911	4911	429	429
Estd.(00) number of households having access to latrine	4911	0	0	0	4911	Х	Х	Х	Х
Sample number of households having access to latrine	429	0	0	0	429	X	х	Х	Х

Kerala	Pa	alakkad				UR	BAN		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	298	298	20	2
20-40	100	0	0.0	0	100	299	299	21	2
40-60	100	0	0.0	0	100	396	396	30	3
60-80	100	0	0.0	0	100	390	390	37	3
80-100	98.1	1.9	0.0	0	100	430	430	36	3
all	99.5	0.5	0.0	0	100	1813	1813	144	14
Estd.(00) number of households									
having access to latrine	1805	8	0	0	1813	Х	Х	Х	
Sample number of households having access to latrine	143	1	0	0	144	Х	Х	Х	

Г

Kerala	Palakkad				ALL	i			
		Flush/p	our-flush to			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	1189	1189	89	89
20-40	100	0	0.0	0	100	1199	1199	95	9:
40-60	100	0	0.0	0	100	1391	1391	114	114
60-80	100	0	0.0	0	100	1374	1374	122	122
80-100	99.5	0.5	0.0	0	100	1571	1571	153	153
all	99.9	0.1	0.0	0	100	6724	6724	573	573
Estd.(00) number of households									
having access to latrine	6716	8	0	0	6724	Х	Х	Х	Х
Sample number of households having access to latrine	572	1	0	0	573	Х	Х	X	Σ

Kerala	Thris	sur				RURAI	1		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	99	1	0.0	0	100	373	373	27	27
20-40	89.9	9.5	0.0	0.6	100	382	382	34	34
40-60	97	3	0.0	0	100	442	442	36	36
60-80	86.6	13.4	0.0	0	100	550	550	45	45
80-100	94.7	5.3	0.0	0	100	503	503	36	36
all	93.1	6.8	0.0	0.1	100	2250	2250	178	178
Estd.(00) number of households									
having access to latrine	2094	153	0	2	2250	Х	Х	Х	Х
Sample number of households having access to latrine	153	24	0	1	178	Х	X	Х	Х

Kerala	Thrissur				URBAN				
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	89.1	10.9	0.0	0	100	900	900	60	6
20-40	93.1	6.9	0.0	0	100	969	969	68	68
40-60	89.4	10.6	0.0	0	100	1198	1198	85	8:
60-80	89.2	10.8	0.0	0	100	1350	1350	98	98
80-100	94	6	0.0	0	100	1485	1485	121	12
all	91	9	0.0	0	100	5902	5902	432	432
Estd.(00) number of households									
having access to latrine	5373	528	0	0	5902	Х	Х	Х	Σ
Sample number of households having access to latrine	394	38	0	0	432	х	х	Х	3

	-								
Kerala	Thris	sur				ALL			
		Flush/p	our-flush to			Estd	(00)	San	nple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	92	8	0.0	0	100	1273	1273	87	87
20-40	92.2	7.7	0.0	0.2	100	1351	1351	102	102
40-60	91.4	8.6	0.0	0	100	1640	1640	121	121
60-80	88.4	11.6	0.0	0	100	1899	1899	143	143
80-100	94.1	5.9	0.0	0	100	1988	1988	157	157
all	91.6	8.4	0.0	0	100	8152	8152	610	610
Estd.(00) number of households									
having access to latrine	7468	682	0	2	8152	Х	Х	Х	Х
Sample number of households having access to latrine	547	62	0	1	610	Х	Х	Х	Х

Kerala		Ernak	ulam			R	URAL		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	92.6	7.4	0.0	0	100	359	359	31	
20-40	100	0	0.0	0	100	447	447	28	
40-60	100	0	0.0	0	100	480	480	28	,
60-80	96.5	3.5	0.0	0	100	639	639	37	-
80-100	100	0	0.0	0	100	823	823	56	
all	98.2	1.8	0.0	0	100	2749	2749	180	13
Estd.(00) number of households									
having access to latrine	2700	49	0	0	2749	Х	Х	Х	
Sample number of households having access to latrine	177	3	0	0	180	Х	Х	Х	

Table 4: Districtwise percentag	ge distribution of	nousenoius na	lving access	to fatrine D	y type of fat	rine used ic	or each quin	the class on	UNIFCE
Kerala	Ernakulan	n			U	RBAN			
		Flush/p	our-flush to			Estd	(00)	San	nple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	900	900	65	65
20-40	98.5	1.5	0.0	0	100	1088	1088	87	87
40-60	100	0	0.0	0	100	1099	1099	94	94
60-80	98.7	1.3	0.0	0	100	1276	1276	113	113
80-100	100	0	0.0	0	100	1645	1645	114	114
all	99.5	0.5	0.0	0	100	6007	6007	473	473
Estd.(00) number of households									
having access to latrine	5974	33	0	0	6007	Х	Х	Х	Х
Sample number of households having access to latrine	471	2	0	0	473	X	Х	X	X

Kerala	Erna	kulam					ALL		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	97.9	2.1	0.0	0	100	1258	1258	96	9
20-40	98.9	1.1	0.0	0	100	1536	1536	115	11
40-60	100	0	0.0	0	100	1579	1579	122	12
60-80	98	2	0.0	0	100	1915	1915	150	15
80-100	100	0	0.0	0	100	2468	2468	170	17
all	99.1	0.9	0.0	0	100	8756	8756	653	65
Estd.(00) number of households									
having access to latrine	8674	82	0	0	8756	Х	Х	Х	
Sample number of households having access to latrine	648	5	0	0	653	Х	Х	Х	

Kerala	Idu	kki				RURAL			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	89.1	10.9	0.0	0	100	504	504	41	4]
20-40	89	11	0.0	0	100	497	497	41	41
40-60	96.3	3.7	0.0	0	100	501	501	46	46
60-80	100	0	0.0	0	100	485	485	42	42
80-100	100	0	0.0	0	100	597	597	58	58
all	95	5	0.0	0	100	2583	2583	228	228
Estd.(00) number of households									
having access to latrine	2455	128	0	0	2583	Х	Х	Х	Х
Sample number of households having access to latrine	221	7	0	0	228	Х	X	X	Х

Kerala	Idukki				UR	RBAN			
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	36	36	6	(
20-40	100	0	0.0	0	100	51	51	8	8
40-60	100	0	0.0	0	100	67	67	12	12
60-80	100	0	0.0	0	100	86	86	16	16
80-100	100	0	0.0	0	100	54	54	6	(
all	100	0	0.0	0	100	295	295	48	48
Estd.(00) number of households									
having access to latrine	295	0	0	0	295	Х	Х	Х	Х
Sample number of households having access to latrine	48	0	0	0	48	Х	х	Х	Х

Kerala	Idukki				Α	LL			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	89.8	10.2	0.0	0	100	540	540	47	4
20-40	90	10	0.0	0	100	548	548	49	4
40-60	96.8	3.2	0.0	0	100	568	568	58	5
60-80	100	0	0.0	0	100	571	571	58	5
80-100	100	0	0.0	0	100	651	651	64	6
all	95.6	4.4	0.0	0	100	2878	2878	276	27
Estd.(00) number of households									
having access to latrine	2750	128	0	0	2878	Х	Х	Х	
Sample number of households having access to latrine	269	7	0	0	276	Х	Х	Х	

Kerala	Kottayam				RURA	4L			
		Flush/p	our-flush to			Estd	(00)	Sam	nple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	91.1	8.9	0.0	0	100	602	602	43	43
20-40	100	0	0.0	0	100	622	622	46	46
40-60	94.5	5.5	0.0	0	100	656	656	48	48
60-80	100	0	0.0	0	100	783	783	64	64
80-100	100	0	0.0	0	100	870	870	70	70
all	97.5	2.5	0.0	0	100	3534	3534	271	271
Estd.(00) number of households									
having access to latrine	3444	90	0	0	3534	Х	Х	Х	Х
Sample number of households having access to latrine	266	5	0	0	271	Х	Х	Х	Х

Kerala	Kottayam					URBAN			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	184	184	13	1
20-40	100	0	0.0	0	100	291	291	18	1
40-60	100	0	0.0	0	100	294	294	20	2
60-80	100	0	0.0	0	100	332	332	22	22
80-100	100	0	0.0	0	100	533	533	22	22
all	100	0	0.0	0	100	1634	1634	95	95
Estd.(00) number of households									
having access to latrine	1634	0	0	0	1634	Х	Х	X	У
Sample number of households having access to latrine	95	0	0	0	95	Х	X	Х	X

Kerala	Kottayam					ALL			
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	93.2	6.8	0.0	0	100	786	786	56	5
20-40	100	0	0.0	0	100	913	913	64	64
40-60	96.2	3.8	0.0	0	100	951	951	68	68
60-80	100	0	0.0	0	100	1115	1115	86	80
80-100	100	0	0.0	0	100	1403	1403	92	92
all	98.3	1.7	0.0	0	100	5167	5167	366	360
Estd.(00) number of households									
having access to latrine	5078	90	0	0	5167	Х	Х	Х	Σ
Sample number of households having access to latrine	361	5	0	0	366	Х	х	Х	Σ

Kerala	Alappuzha					RURAL			
		Flush/p	our-flush to			Estd	(00)	Sam	ıple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	467	467	37	37
20-40	100	0	0.0	0	100	476	476	42	42
40-60	100	0	0.0	0	100	508	508	39	39
60-80	100	0	0.0	0	100	500	500	43	43
80-100	100	0	0.0	0	100	519	519	31	31
all	100	0	0.0	0	100	2469	2469	192	192
Estd.(00) number of households									
having access to latrine	2469	0	0	0	2469	Х	Х	Х	Х
Sample number of households having access to latrine	192	0	0	0	192	Х	X	X	Х

Kerala	Alappuzha					URBAN			
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	486	486	41	4
20-40	100	0	0.0	0	100	550	550	51	5
40-60	98.7	1.3	0.0	0	100	585	585	59	5
60-80	100	0	0.0	0	100	533	533	50	5
80-100	100	0	0.0	0	100	628	628	37	3
all	99.7	0.3	0.0	0	100	2782	2782	238	23
Estd.(00) number of households									
having access to latrine	2775	7	0	0	2782	Х	Х	Х	
Sample number of households having access to latrine	237	1	0	0	238	Х	X	Х	

Kerala	Alappu	ızha				ALL			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	953	953	78	78
20-40	100	0	0.0	0	100	1026	1026	93	93
40-60	99.3	0.7	0.0	0	100	1092	1092	98	98
60-80	100	0	0.0	0	100	1033	1033	93	93
80-100	100	0	0.0	0	100	1147	1147	68	68
all	99.9	0.1	0.0	0	100	5251	5251	430	430
Estd.(00) number of households									
having access to latrine	5244	7	0	0	5251	Х	Х	Х	Х
Sample number of households having access to latrine	429	1	0	0	430	Х	x	Х	Х
Kerala	Pathanamthitta					RURAL			
--	-----------------------	--------------------------	--------------	----------	------	-------	-------	-----	------
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	551	551	37	3
20-40	100	0	0.0	0	100	540	540	31	3
40-60	100	0	0.0	0	100	569	569	33	3
60-80	100	0	0.0	0	100	592	592	38	3
80-100	100	0	0.0	0	100	820	820	53	5
all	100	0	0.0	0	100	3072	3072	192	192
Estd.(00) number of households									
having access to latrine	3072	0	0	0	3072	Х	Х	Х	У
Sample number of households having access to latrine	192	0	0	0	192	Х	X	Х	У

Kerala	Path	anamthitta				URE	BAN		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	68	68	11	1
20-40	100	0	0.0	0	100	54	54	7	
40-60	100	0	0.0	0	100	91	91	11	1
60-80	100	0	0.0	0	100	80	80	9	
80-100	100	0	0.0	0	100	110	110	10	1
all	100	0	0.0	0	100	403	403	48	4
Estd.(00) number of households									
having access to latrine	403	0	0	0	403	Х	X	Х	
Sample number of households having access to latrine	48	0	0	0	48	Х	Х	X	

Kerala		Pathanamthi	tta			ALI	Ĺ			
		Flush/p	our-flush to			Estd	(00)	Sam	ple	
Quintile class on UMPCE	system (2)	Pit latrine with slab	Others	Not used	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
0-20	100	0	0.0	0	100	619	619	48	4	
20-40	100	0	0.0	0	100	594	594	38	3	
40-60	100	0	0.0	0	100	660	660	44	4	
60-80	100	0	0.0	0	100	671	671	47	4	
80-100	100	0	0.0	0	100	931	931	63	6	
all	100	0	0.0	0	100	3475	3475	240	24	
Estd.(00) number of households										
having access to latrine	3475	0	0	0	3475	Х	Х	Х		
Sample number of households having access to latrine	240	0	0	0	240	Х	х	Х		

Kerala	Kollam				RURAL				
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	618	618	45	4
20-40	100	0	0.0	0	100	745	745	51	5
40-60	100	0	0.0	0	100	750	750	54	5
60-80	100	0	0.0	0	100	927	927	70	7
80-100	100	0	0.0	0	100	1024	1024	68	6
all	100	0	0.0	0	100	4064	4064	288	28
Estd.(00) number of households									
having access to latrine	4064	0	0	0	4064	Х	Х	Х	
Sample number of households having access to latrine	288	0	0	0	288	Х	X	Х	

Kerala	Kollam				U	RBAN			
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	with slab Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	96.4	0	3.6	0	100	479	479	34	34
20-40	100	0	0.0	0	100	493	493	37	37
40-60	100	0	0.0	0	100	565	565	42	42
60-80	100	0	0.0	0	100	730	730	59	59
80-100	100	0	0.0	0	100	863	863	68	68
all	99.5	0	0.5	0	100	3131	3131	240	240
Estd.(00) number of households									
having access to latrine	3113	0	17	0	3131	Х	Х	Х	Х
Sample number of households having access to latrine	239	0	1	0	240	Х	Х	Х	Х

Kerala	K	ollam					ALL		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer systemPit latrine with slab(2)(3)	- Others N	Not used	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	98.4	0	1.6	0	100	1097	1097	79	79
20-40	100	0	0.0	0	100	1238	1238	88	88
40-60	100	0	0.0	0	100	1315	1315	96	96
60-80	100	0	0.0	0	100	1658	1658	129	129
80-100	100	0	0.0	0	100	1887	1887	136	136
all	99.8	0	0.2	0	100	7194	7194	528	528
Estd.(00) number of households									
having access to latrine	7177	0	17	0	7194	Х	Х	Х	Х
Sample number of households having access to latrine	527	0	1	0	528	Х	Х	Х	Х

Kerala	Thiruvananthapu	ram				RUI	RAL		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	741	741	41	4
20-40	100	0	0.0	0	100	713	713	53	53
40-60	100	0	0.0	0	100	811	811	52	52
60-80	100	0	0.0	0	100	914	914	59	5
80-100	100	0	0.0	0	100	919	919	81	8
all	100	0	0.0	0	100	4098	4098	286	280
Estd.(00) number of households									
having access to latrine	4098	0	0	0	4098	Х	Х	Х	У
Sample number of households having access to latrine	286	0	0	0	286	Х	Х	Х	У

Kerala Thiru	ivananthapuram					URBA	AN		
		Flush/p	our-flush to			Estd	.(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	869	869	61	61
20-40	100	0	0.0	0	100	1003	1003	70	70
40-60	100	0	0.0	0	100	1074	1074	72	72
60-80	100	0	0.0	0	100	1279	1279	89	89
80-100	100	0	0.0	0	100	1339	1339	87	87
all	100	0	0.0	0	100	5563	5563	379	379
Estd.(00) number of households									
having access to latrine	5563	0	0	0	5563	Х	Х	Х	Х
Sample number of households having access to latrine	379	0	0	0	379	Х	Х	Х	Х

Kerala	Thiruvananth	apuram				ALI	Ĺ		
		Flush/p	our-flush to			Estd	(00)	San	nple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	100	0	0.0	0	100	1610	1610	102	102
20-40	100	0	0.0	0	100	1716	1716	123	123
40-60	100	0	0.0	0	100	1885	1885	124	124
60-80	100	0	0.0	0	100	2193	2193	148	148
80-100	100	0	0.0	0	100	2257	2257	168	168
all	100	0	0.0	0	100	9661	9661	665	665
Estd.(00) number of households									
having access to latrine	9661	0	0	0	9661	Х	Х	Х	Х
Sample number of households									
having access to latrine	665	0	0	0	665	Х	Х	Х	Х

Table 4: Districtwise percentage distribution of households having access to latrine by type of latrine used for each quintile class on UMPCE

Kerala	ALL				RU	RAL			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	95.4	4.6	0.0	0	100	7051	7051	534	534
20-40	95.7	4.3	0.0	0	100	7589	7589	579	579
40-60	95.2	4.8	0.0	0	100	8370	8370	653	653
60-80	95.5	4.5	0.0	0	100	9325	9325	737	737
80-100	98.4	1.6	0.0	0	100	10679	10679	820	820
all	96.2	3.8	0.0	0	100	43013	43013	3323	3323
Estd.(00) number of households									
having access to latrine	41362	1649	0	2	43013	Х	Х	Х	Х
Sample number of households having access to latrine	3184	138	0	1	3323	Х	х	Х	Х

Kerala	ALL					URBAN			
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	Piped sewer system	Pit latrine with slab	Others	Not used	All	All	All	All	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	94.7	5	0.3	0	100	6139	6139	488	488
20-40	96.4	3.6	0.0	0	100	7217	7217	608	608
40-60	95.9	4.1	0.0	0	100	8273	8273	727	727
60-80	95.2	4.6	0.0	0.1	100	9206	9206	823	823
80-100	97.6	2.4	0.0	0	100	10778	10778	746	746
all	96.1	3.8	0.0	0	100	41613	41613	3392	3392
Estd.(00) number of households									
having access to latrine	39986	1597	17	12	41613	Х	Х	Х	Х
Sample number of households									
having access to latrine	3245	145	1	1	3392	Х	Х	Х	Х

Kerala		ALL				А	LL		
		Flush/p	our-flush to			Estd	(00)	Sam	ple
Quintile class on UMPCE	system with slab	Others	Not used	All	All	All	All	All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0-20	95.1	4.8	0.1	0	100	13189	13189	1022	1022
20-40	96	4	0.0	0	100	14806	14806	1187	1187
40-60	95.5	4.5	0.0	0	100	16642	16642	1380	1380
60-80	95.4	4.6	0.0	0.1	100	18531	18531	1560	1560
80-100	98	2	0.0	0	100	21457	21457	1566	1566
all	96.1	3.8	0.0	0	100	84626	84626	6715	6715
Estd.(00) number of households									
having access to latrine	81348	3246	17	15	84626	Х	X	Х	Х
Sample number of households having access to latrine	6429	283	1	2	6715	Х	Х	Х	X

# Appendix - B RSE Tables

### Appendix – B RSE Tables

Table 1 : RSE - Districtwise Percentage distribution of dwelling units by tenurials status of the   household			
Kerala		Rural	
District	Households	Households with dwelling units	
District	Owned	Hired	
Kasargod	0.00	0.00	
Kannur	0.10	0.00	
Wayanad	2.10	71.69	
Kozhikkode	0.06	0.00	
Malappuram	3.20	52.74	
Palakkad	0.84	86.87	
Thrissur	2.52	30.63	
Ernakulam	2.08	25.55	
Idukki	5.93	109.22	
Kottayam	1.89	20.28	
Alappuzha	2.03	159.32	
Pathanamthitta	2.46	34.15	
Kollam	0.90	100.68	
Thiruvananthapuram	2.68	40.71	

Table 2: RSE - Districtwise Percentage distribution of dwelling units by tenurial status of the household		
Kerala		Urban
	Households	with dwelling units
District	Owned	Hired
1	2	3
Kasargod	0.00	0.00
Kannur	1.52	44.28
Wayanad	1.57	4.76
Kozhikkode	5.37	21.79
Malappuram	4.30	19.54
Palakkad	3.88	20.13
Thrissur	3.61	14.57
Ernakulam	4.43	12.32
Idukki	23.41	17.14
Kottayam	15.34	18.07
Alappuzha	5.01	15.68
Pathanamthitta	10.88	14.93
Kollam	4.90	24.42
Thiruvananthapuram	4.43	11.78

Table 3: RSE - Districtwise Percentage distribution of dwelling units by tenurial status of the     household			
Kerala All			
	Households	Households with dwelling units	
District	Owned	Hired	
1	2	3	
Kasargod	0.00	0.00	
Kannur	1.94	41.69	
Wayanad	4.49	29.14	
Kozhikkode	3.66	24.30	
Malappuram	2.69	22.33	
Palakkad	1.50	29.28	
Thrissur	2.88	13.83	
Ernakulam	3.11	12.86	
Idukki	6.82	56.34	
Kottayam	4.57	16.53	
Alappuzha	3.18	19.16	
Pathanamthitta	2.32	24.12	
Kollam	2.48	24.26	
Thiruvananthapuram	2.73	13.90	

Table 4: RSE - District-wise Percentage distribution of households by nature of access to theprincipal source of drinking water for Kerala (Rural)		
	Access to the principal source of drinking water	
District	Exclusive use of the household	Common use of households in the building
Kasargod	90.47	9.14
Kannur	74.59	0
Wayanad	47.31	7.74
Kozhikkode	62.49	23.37
Malappuram	53.54	14.06
Palakkad	58.87	7.57
Thrissur	46.24	0
Ernakulam	81.56	9.53
Idukki	45.68	16.77
Kottayam	57.79	7.80
Alappuzha	66.49 8.55	
Pathanamthitta	68.41	8.25
Kollam	71.47	0
Thiruvananthapuram	67.86	0

Table 5: RSE - District-wise Percentage distribution of households by nature of access to the principal   source of drinking water for Kerala (Urban)		
	Access to the principal s	ource of drinking water
District	Exclusive use of the household	Common use of households in the building
Kasargod	65.60	0
Kannur	63.30	10.98
Wayanad	74.10	125.59
Kozhikkode	64.26	13.18
Malappuram	54.71	17.19
Palakkad	69.52	0
Thrissur	52.46	21.27
Ernakulam	68.54	23.90
Idukki	43.48	7.02
Kottayam	52.53	51.19
Alappuzha	47.90	6.73
Pathanamthitta	0	0
Kollam	66.37	0
Thiruvananthapuram	69.74	12.47

Table 6: RSE - District-wise Percentage distribution of households by nature of access to the principal source of drinking water for Kerala (All)		
District	Access to the principal source of drinking	
	water	
	Exclusive use of the household	Common use of households in
		the building
Kasargod	85.60	9.36
Kannur	65.78	11.05
Wayanad	46.96	10.83
Kozhikkode	61.92	13.82
Malappuram	54.08	21.02
Palakkad	61.72	12.27
Thrissur	49.60	21.00
Ernakulam	71.02	25.07
Idukki	45.41	15.65
Kottayam	55.77	49.69
Alappuzha	52.63	9.73
Pathanamthitta	67.21	9.83
Kollam	67.57	0
Thiruvananthapuram	68.42	14.27

Г

Table 7 : RSE Percentage distribution of Households by facility of bathroom and access tobathroom (Rural)		
	A	ccess to bathroom
District	Exclusive use of household	Common use of households in the building
Kasargod	0	0
Kannur	0	0
Wayanad	73.29	8.80
Kozhikkode	0	0
Malappuram	72.05	14.17
Palakkad	72.03	8.40
Thrissur	0	0
Ernakulam	0	0
Idukki	0	0
Kottayam	70.12	0
Alappuzha	94.84	0
Pathanamthitta	68.72	8.28
Kollam	69.89	0
Thiruvananthapuram	84.97	0

Table 9 : RSE Percentage distribution of Households by facility of bathroom and access tobathroom (Urban)		
	Access to bathroom	
District	Exclusive use of household	Common use of households in the building
Kasargod	75.20	8.14
Kannur	0	0
Wayanad	70.72	10.13
Kozhikkode	83.26	0
Malappuram	71.89	13.90
Palakkad	73.65	7.70
Thrissur	67.01	15.44
Ernakulam	63.57	15.52
Idukki	65.98	16.08
Kottayam	74.43	59.84
Alappuzha	91.58	0
Pathanamthitta	70.36	17.05
Kollam	73.37	0
Thiruvananthapuram	74.29	0

Table 10: RSE Percentage distribution of Households by facility of bathroom and access tobathroom (All)		
	A	ccess to bathroom
District	Exclusive use of household	Common use of households in the building
Kasargod	77.85	8.54
Kannur	0	0
Wayanad	74.60	10.35
Kozhikkode	84.49	0.00
Malappuram	66.16	17.86
Palakkad	70.83	10.65
Thrissur	67.20	15.80
Ernakulam	83.93	55.30
Idukki	0	0
Kottayam	83.93	55.30
Alappuzha	91.58	0
Pathanamthitta	0.90	2.68
Kollam	71.13	8.34
Thiruvananthapuram	69.24	0

## Appendix - C Sample Design and Estimation Procedure

### Note on sample design and estimation procedure of NSS 76<sup>th</sup> round

#### 1. Introduction

1.1 The National Sample Survey (NSS), set up by the Government of India in 1950 to collect socio-economic data employing scientific sampling methods, started its seventy sixth round from  $1^{st}$  July 2018. The survey will continue up to  $31^{st}$  December 2018.

1.2 **Subject Coverage**: NSS 76<sup>th</sup> round covers the subjects 'Drinking water, Sanitation, Hygiene and Housing Condition' and 'Persons with Disabilities'.

#### 2. Outline of Survey Programme

2.1 **Geographical coverage**: The survey covers whole of the Indian Union *except the* villages in Andaman and Nicobar Islands which are difficult to access.

2.2 **Period of survey and work programme**: The survey commenced from 1<sup>st</sup> July, 2018. The survey period is of six months' duration.

There is no sub-round restriction in the sample design of this round. However, considering the operational convenience and workload in the field, it is felt that even though sub-round wise allocation was not done in sample design, sub-round assignment was useful for uniform spread of work in field. Hence distribution of sample units was made uniform over two quarters of the survey.

2.3 Schedules of enquiry: During this round, the following schedules of enquiry are canvassed:

Schedule 0.0 :	list of households
Schedule 1.2 :	drinking water, sanitation, hygiene and housing condition
Schedule 26 :	survey of persons with disabilities

2.4 **Participation of States:** All the States and Union Territories except Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli and Lakshadweep participated. Following is the matching pattern of the participating States/ UTs.

State/UT	Extent of matching
Nagaland (U)	triple
Manipur, Telangana	double
Maharashtra (U)	one and half
Remaining States/ UTs	equal

#### 3. Sample Design

#### 3.1 Formation of sub-units (SUs):

3.1.1 **<u>Rural areas</u>**: In usual NSS rounds, large sample villages are divided into a number of sub-divisions called hamlet-groups based on population (approximate present population) of the villages during survey. This procedure is modified in this round. During this round, a rural village was notionally divided into a number of sub-units (SU) of more or less equal population during the preparation of frame. Census 2011 population of villages was projected by applying suitable growth rates and the number of SUs formed in a village was determined apriori.

3.1.2 The above procedure of SU formation was implemented in the villages with population *more than or equal to 1000 as per Census 2011*. In the remaining villages, no SU was formed.

3.1.3 The number of SUs formed in the villages (with Census 2011 population 1000 or more) of the frame was decided before selection of the samples following the criteria given below:

projected population of the village	no. of SUs formed
less than 1200	1
1200 to 2399	2
2400 to 3599	3
3600 to 4799	4
4800 to 5999	5
and so on	

#### 3.1.4 Special case:

3.1.4.1 For rural areas of (i) Himachal Pradesh, (ii) Sikkim, (iii) Andaman & Nicobar Islands, (iv) Uttarakhand (except four districts Dehradun, Nainital, Hardwar and Udham Singh Nagar), (v) Punch, Rajouri, Udhampur, Reasi, Doda, Kishtwar, Ramban, Ladakh region (Leh and Kargil districts) of Jammu and Kashmir and (vi) Idukki district of Kerala, numbers of SUs formed in a village were determined in such a way that each SU contains 600 or less projected population. Further, SUs were not formed in the villages in the above mentioned districts/States with population less than 500 as per Census 2011. In the remaining villages, the number of SUs formed for these States/districts is as follows:

projected population of the village	no. of SUs formed
less than 600	1
600 to 1199	2
1200 to 1799	3
1800 to 2399	4
2400 to 2999	5
and so on	

3.1.4.2 For rural parts of Kerala, similar procedure as mentioned in para 3.1.3 above was adopted with the modification that the SUs were formed within Panchayat Wards instead of villages.

3.1.5 <u>Urban areas</u>: SUs were formed in urban sector also. The procedure was similar to that adopted in rural areas except that SUs were formed on the basis of households in the UFS frame instead of population, since UFS frame does not have population. Each UFS block with number of households more than or equal to 200 was divided into a number of SUs. In the remaining UFS blocks, no SU was formed.

3.2 **Outline of sample design:** A stratified two stage design has been adopted for the 76<sup>th</sup> round survey. *The first stage units (FSU) are villages/UFS blocks/sub-units (SUs) as per the situation.* The ultimate stage units (USU) are households in both the sectors.

#### **3.3 Sampling Frame for First Stage Units:**

3.3.1 There was no SU formation in uninhabited villages and villages (Panchayat wards for Kerala) with population less than 1000 as per Census 2011 (less than 500 as per Census 2011 for the areas mentioned in para 3.1.4.1) and entire village was considered as one FSU. All such villages (Panchayat wards for Kerala) were the First Stage Units (FSUs).

3.3.2 In the remaining villages, notional sub-units (SUs) following the procedure as described in para 3.1.1 were formed. Such SUs were considered as First Stage Units (FSUs).

3.3.3 For the UFS blocks with less than 200 households, the entire UFS block was considered as one FSU. In the remaining UFS blocks, the SUs were considered as First Stage Units (FSUs).

3.3.4 List of FSUs as described above was the sampling frame for respective cases.

#### 3.4 Stratification:

- (a) Each district was a stratum. Within each district of a State/UT, generally speaking, two basic strata were formed: (i) rural stratum comprising of all rural areas of the district and (ii) urban stratum comprising of all the urban areas of the district. However, within the urban areas of a district, if there were one or more towns with population one million or more as per Census 2011, each of them formed a separate basic stratum and the remaining urban areas of the district was considered as another basic stratum.
- (b) A special stratum, in the rural areas only, was formed at State/UT level before district level strata were formed in each State/UT. This stratum comprised all the uninhabited villages of the State/UT as per Census 2011. However, this special stratum was formed if at least 50 such villages were available in a State/UT.

#### 3.5 Sub-stratification:

3.5.1 **Rural sector:** Two groups of villages were formed within each stratum (except special stratum):

Group 1: all villages (Panchayat wards for Kerala) with Census 2011 population less than 1000 (less than 500 for special cases mentioned in 3.1.4.1)

Group 2: remaining villages

In both the groups, number of sub-strata was formed in the following manner:

The sample size for a rural stratum was allocated among 2 groups in proportion to population. Let  $r_1$  and  $r_2$  be the allocations to Group 1 and Group 2 respectively. The villages within each group were first arranged in ascending order of population. Then ' $r_1/2$ ' and ' $r_2/2$ ' sub-strata were demarcated in Group 1 and Group 2 respectively in such a way that each sub-stratum comprised of a group of villages (all SUs of a village considered together) of the arranged frame and had more or less equal population. Sub-stratum numbers in Group 2 started from 11.

If number of villages in Group 1 was very small, no sub-stratum was formed.

3.5.2 **Urban sector**: Let 'u' be the sample size allocated for an urban stratum. For all strata, if 'u/2' >1, implying formation of 2 or more sub-strata, all the UFS blocks within the stratum were first arranged in ascending order of total number of households in the UFS blocks as per urban frame. Then sub-strata were demarcated in such a way that each sub-stratum comprised a group of UFS blocks (all SUs within the block taken together) having more or less equal number of households.

3.6 **Total sample size (FSUs):** 9000 FSUs have been allocated for the central sample at all-India level. For the state sample, there are 9690 FSUs allocated for all-India.

3.7 Allocation of total sample to States and UTs: The total number of sample FSUs has been allocated to the States and UTs in proportion to population as per Census 2011 subject to a minimum sample allocation to each State/UT.

3.8 Allocation of State/ UT level sample to rural and urban sectors: State/UT level sample size has been allocated between two sectors in proportion to population as per Census 2011 with 1.5 weightage to urban sector. A minimum of 4 FSUs, each for rural and urban sector separately, have been allocated to each State/UT. For more urbanised big States like Maharashtra, Tamil Nadu etc., the urban allocation was limited to rural sample size to avoid undue weightage to urban sector.

3.9 Allocation to strata: Within each sector of a State/ UT, the respective sample size has been allocated to the different strata in proportion to the population as per Census 2011. Stratum level allocation was adjusted to multiples of 2 with a minimum sample size of 2.

For special stratum formed at state level as mentioned in para 3.4(b), 2 FSUs were allocated.

#### 3.10 Allocation to sub-strata:

3.10.1 **Rural:** Allocation was 2 for each sub-stratum.

3.10.2 Urban: Allocation was 2 for each sub-stratum for urban sector.

#### 3.11 Selection of FSUs within a stratum/sub-stratum:

3.11.1 From all the sub-strata of Group 1 within each stratum of rural sector, required number of FSUs was selected by Probability Proportional to Size With Replacement (PPSWR) scheme with Census 2011 population as size.

3.11.2 From the remaining sub-strata of a rural stratum, and all sub-strata in urban sector within each stratum, required number of FSUs was selected by Simple Random Sampling With Replacement (SRSWR) scheme.

3.11.3 FSUs were selected by Simple Random Sampling With Replacement (SRSWR) scheme in the special stratum formed in rural sector at the State/UT level.

3.11.4 No sub-sample wise selection was done in this round and FSUs were selected in the form of single sample only.

#### 3.12 Formation of sub-units and listing of households

3.12.1 **Procedure of formation of SUs:** After identification of the boundaries of the village/ UFS block which contains the sample FSU, the village/ UFS block is to be divided into the number of SUs (say, D) as given in the sample list by more or less equalising the present population of the village/UFS block in which the sample FSUs are located. It is to be ensured that SUs formed are clearly identifiable in terms of physical landmarks. For villages/blocks where the number of SUs to be formed is 1 as per the sample list, no SU formation is required.

3.12.2 **Listing of households:** All the households of the sample FSU will be listed. Temporarily locked households will also be listed after ascertaining the temporariness of locking of households through local enquiry.

#### 3.13 Formation of second stage strata (SSS) and allocation of households in different SSS:

3.13.1 Schedule 26 (Survey of persons with disabilities): Different types of disabilities have been identified in "Rights of Persons with Disability" Act 2016, some of which are of very rare type.

Considering the types of disabilities and their rarity, a suitable strategy for SSS formation has been adopted. The households are grouped into seven second stage strata (SSS) in the following manner:

SSS no.	Composition of SSS	Disability Group	Allocation of households
1	<ul><li>households having person(s) with any of the 11 rare disabilities:</li><li>(i) acid attack victims, (ii) autism spectrum disorder, (iii)</li></ul>	I	8
	cerebral palsy, (iv) dwarfism, (v) haemophilia, (vi) multiple sclerosis, (vii) muscular dystrophy, (viii) other chronic neurological conditions, (ix) Parkinson's disease, (x) sickle cell disease, (xi) thalassemia	1	8
2	from the remaining, households having at least one person with mental disability		
3	from the remaining, households having at least one person with speech disability		
4	from the remaining, households having at least one person with visual disability	II	10
5	from the remaining, households having at least one person with hearing disability		
6	from the remaining, households having at least one person with locomotor disability		
7	households without any disability	No disability	2

3.13.2 **Schedule 1.2** (Drinking water, Sanitation, Hygiene and Housing Condition): A cut-off point 'A' has been determined from household's usual monthly consumer expenditure collected in Schedule 21.1: Domestic Tourism Expenditure of NSS  $72^{nd}$  round (July 2014 – June 2015) data (with proper adjustments using price indices) for each NSS region for both rural and urban areas separately, in such a way that top 10% of the population have MPCE more than or equal to 'A'.

3.13.3 Composition of the SSS and number of households to be surveyed from different SSS for both rural and urban sectors is as follows:

SSS	composition of SSS	number of households allocated
SSS 1:	households having MPCE $\ge$ A	2
SSS 2:	remaining households	10
Total		12

3.14 **Selection of households:** The sample households from each SSS for each of the schedules are selected by SRSWOR.

#### 4. Estimation Procedure

#### 4.1 Notations:

- s = subscript for s-th stratum
- t = subscript for t-th sub-stratum
- i = subscript for i-th FSU [SU/ village (panchayat ward)/ block]
- j = subscript for j-th second stage stratum in an FSU
- k = subscript for k-th sample household within an FSU
- N = total number of FSUs in any rural/urban sub-stratum
- Z = total size of villages in a rural sub-stratum (where villages are selected as FSUs i.e. substratum numbers 01 - 10)
- z = size of sample FSU used for selection in sub-stratum numbers 01 10
- n = number of sample FSUs surveyed including 'uninhabited' and 'zero cases' but excluding casualty for a particular sub-stratum
- H = total number of households listed in a second-stage stratum of an FSU
- h = number of households surveyed in a second-stage stratum of an FSU

x, y = observed value of characteristics *x*, *y* under estimation

 $\hat{X}$ ,  $\hat{Y}$  = estimate of population total X, Y for the characteristics x, y

Under the above symbols,

 $y_{stijk}$  = observed value of the characteristic y for the k-th household of the j-th second stage stratum of the i-th FSU for the t-th sub-stratum of s-th stratum.

However, for ease of understanding, a few symbols have been suppressed in following paragraphs where they are obvious.

4.2 Formulae for Estimation of Aggregates for a stratum × sub-stratum:

4.2.1 Schedules 1.2, 26:

#### 4.2.1.1 **Rural:**

- 4.2.1.1.1 Case 1: Sub-strata of special stratum (i.e. stratum = 99 and sub-stratum = 01)
  - (i) For j-th second-stage:

$$\hat{Y}_{j} = \frac{N}{n_{j}} \sum_{i=1}^{n_{j}} \left[ \frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

#### 4.2.1.1.2 Case 2: Sub-strata of Group 1 villages (sub-stratum number: 01, 02, ...., 10)

(i) For j-th second-stage stratum of a stratum  $\times$  sub-stratum:

$$\hat{Y}_{j} = \frac{Z}{n_{j}} \sum_{i=1}^{n_{j}} \frac{1}{z_{i}} \left[ \frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

#### 4.2.1.1.3 Case 3: Sub-strata of Group 2 villages (sub-stratum number: 11 onwards)

(i) For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_{j} = \frac{N}{n_{j}} \sum_{i=1}^{n_{j}} \left[ \frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

#### 4.2.1.1.3 For all second-stage strata combined:

$$\hat{Y} = \sum_{j} \hat{Y}_{j}$$

#### 4.2.1.2 Urban:

4.2.1.2.1 (i) For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_{j} = \frac{N}{n_{j}} \sum_{i=1}^{n_{j}} \left[ \frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

(ii) For all second-stage strata combined:

$$\hat{Y} = \sum_{j} \hat{Y}_{j}$$

#### 4.3 Overall Estimate for Aggregates for a stratum:

Overall estimate for a stratum ( $\hat{Y}_s$ ) will be obtained as

$$\hat{Y}_s = \sum_t \hat{Y}_{st}$$

....

#### 4.4 Overall Estimate of Aggregates at State/UT/all-India level:

The overall estimate  $\hat{Y}$  at the State/ UT/ all-India level is obtained by summing the stratum estimates  $\hat{Y}_s$  over all strata belonging to the State/ UT/ all-India.

#### 4.5 Estimates of Ratios:

Let  $\hat{Y}$  and  $\hat{X}$  be the overall estimates of the aggregates Y and X for two characteristics y and x respectively at the State/UT/ all-India level.

Then the combined ratio estimate  $(\hat{R})$  of the ratio  $(R = \frac{Y}{X})$  will be obtained as  $\hat{R} = \frac{\hat{Y}}{\hat{X}}.$ 

4.6 Estimates of Error: The estimated variances of the above estimates will be as follows:

4.6.1 For aggregate  $\hat{Y}$ :

$$V\hat{a}r(\hat{Y}) = \sum_{s} V\hat{a}r(\hat{Y}_{s}) = \sum_{s} \sum_{t} V\hat{a}r(\hat{Y}_{st})$$

Rural

(a) Sub-strata of special stratum (i.e stratum = 99 and sub-stratum = 01):

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{srswr}(\hat{Y}_{st}) = \left[\sum_{t} \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (\frac{N_{st}\hat{Y}_{sti}}{n_{sti}} - \hat{Y}_{st})^2\right]$$
  
where  $\hat{Y}_{sti} = \sum_{j} Y_{stij}$ 

$$Y_{sti} = \sum_{j} Y_{stij}$$

(b) Sub-strata of Group 1 villages (sub-stratum number: 01, 02, ...., 10):

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{ppswr}(\hat{Y}_{st}) = \left[\sum_{t} \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (\frac{Z_{st}\hat{Y}_{sti}}{z_{sti}} - \hat{Y}_{st})^{2}\right],$$
  
where  $\hat{Y}_{sti} = \sum_{i} Y_{stij}$ 

(c) Sub-strata of Group 2 villages (sub-stratum number: 11 onwards):

 $\hat{Y}_{sti} = \sum_{i} Y_{stij}$ 

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{srswr}(\hat{Y}_{st}) = \left[\sum_{t} \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (\frac{N_{st}\hat{Y}_{sti}}{n_{sti}} - \hat{Y}_{st})^2\right]$$

where

Urban:

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{srswr}(\hat{Y}_{st}) = \left[\sum_{t} \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (\frac{N_{st}\hat{Y}_{sti}}{n_{sti}} - \hat{Y}_{st})^2\right]$$

where

$$\hat{Y}_{sti} = \sum_{j} Y_{stij}$$

4.6.2 For ratio  $\hat{R}$  :

$$M\hat{S}E(\hat{R}) = \frac{1}{\hat{X}^2} \sum_{s} \left[ \sum_{t} M_{st} + \sum_{t'} M_{st'} \right]$$

where t, t' indicate respectively the sub-strata with PPSWR and SRSWR selection at first stage.

#### **Rural:**

(a) Sub-strata of special stratum (i.e. stratum = 99 and sub-stratum = 01):

$$M_{st'} = \frac{1}{n_{st'}(n_{st'}-1)} \sum_{i=1}^{n_{st'}} \left[ \frac{N_{st'}}{n_{st'i}} (\hat{Y}_{st'i} - \hat{R}\hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R}\hat{X}_{st'}) \right]^2$$

where

$$\hat{Y}_{st'i} = \sum_{j} \hat{Y}_{st'ij}$$
,  $\hat{X}_{st'i} = \sum_{j} \hat{X}_{st'ij}$ 

(b) Sub-strata of Group 1 villages (sub-stratum number: 01, 02, ...., 10):

$$M_{st} = \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} \left[ \frac{Z_{st}}{z_{sti}} (\hat{Y}_{sti} - \hat{R}\hat{X}_{sti}) - (\hat{Y}_{st} - \hat{R}\hat{X}_{st}) \right]^2$$

where

$$\hat{Y}_{sti} = \sum_{j} \hat{Y}_{stij}$$
 ,  $\hat{X}_{sti} = \sum_{j} \hat{X}_{stij}$ 

#### (c) Sub-strata of Group 2 villages (sub-stratum number: 11 onwards):

$$M_{st'} = \frac{1}{n_{st'}(n_{st'}-1)} \sum_{i=1}^{n_{st'}} \left[ \frac{N_{st'}}{n_{st'i}} (\hat{Y}_{st'i} - \hat{R}\hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R}\hat{X}_{st'}) \right]^2$$

where

$$\hat{Y}_{st'i} = \sum_{j} \hat{Y}_{st'ij} \quad , \quad \hat{X}_{st'i} = \sum_{j} \hat{X}_{st'ij}$$

Urban:

$$M_{st'} = \frac{1}{n_{st'}(n_{st'}-1)} \sum_{i=1}^{n_{st'}} \left[ \frac{N_{st'}}{n_{st'i}} (\hat{Y}_{st'i} - \hat{R}\hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R}\hat{X}_{st'}) \right]^2$$

where

$$\hat{Y}_{st'i} = \sum_{j} \hat{Y}_{st'ij}$$
 ,  $\hat{X}_{st'i} = \sum_{j} \hat{X}_{st'ij}$ 

#### 4.6.3 Estimates of Relative Standard Error (RSE):

$$R\hat{S}E\left(\hat{Y}\right) = \frac{\sqrt{V\hat{a}r\left(\hat{Y}\right)}}{\hat{Y}} \times 100$$
$$R\hat{S}E\left(\hat{R}\right) = \frac{\sqrt{M\hat{S}E\left(\hat{R}\right)}}{\hat{R}} \times 100$$

#### 5. Multipliers:

The formulae for multipliers at stratum/sub-stratum/second-stage stratum level for a schedule type are given below:

sch type	sector	formula for multipliers
1.2, 26	rural (sub-strata of special stratum i.e. stratum = 99)	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	rural (Sub-stratum number: 01, 02,, 10)	$\frac{Z_{st}}{n_{stj}} \times \frac{1}{z_{sti}} \times \frac{H_{stij}}{h_{stij}}$
	rural (sub-stratum number: 11 onwards)	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	urban	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	j = 1, 2 for Schedule 1.2 and	
	j = 1, 2, 3, 4, 5, 6, 7 for Schedule 26	

Note:

- (i) For estimating any characteristic for any domain not specifically considered in sample design, indicator variable may be used.
- (ii) Multipliers have to be computed on the basis of information available in the listing schedule irrespective of any misclassification observed between the listing schedule and detailed enquiry schedule.

#### 6. Treatment for zero cases, casualty cases etc.:

6.1 While counting the number of FSUs surveyed ( $n_{st}$  or  $n_{stj}$ ) in a stratum/sub-stratum, all the FSUs with survey codes 1 to 6 in schedule 0.0 will be considered. In addition, if no household is available in the frame then also that FSU will be treated as surveyed. However, household of a particular schedule type are available in the frame of the FSU but none of these could be surveyed then that FSU has to be treated as casualty and it will not be treated as surveyed in respect of that schedule.

6.2 *Casualty cases*: FSUs with survey code 7 as per schedule 0.0 are treated as casualties. In addition to this, an FSU, although surveyed, may have to be treated as casualty for a particular schedule type and a particular *second stage stratum* as given in the following para:

6.2.1 FSUs with survey codes 1 or 4 as per schedule 0.0 having number of households in the frame of j-th second stage stratum greater than 0 but number of households surveyed according to data file as nil, will be taken as casualties for j-th second stage stratum.

All the FSUs with survey codes 1 to 6 as per schedule 0.0 minus the number of casualties as identified above will be taken as the number of surveyed FSUs  $(n_{stj})$  for that (stratum/substratum) ×(second stage stratum).

### 7. Treatment in cases of void second-stage strata/sub-strata /strata at FSU or household level

7.1 A stratum/sub-stratum may be void because of the casualty of all the FSUs belonging to the stratum/sub-stratum.

7.2 When a stratum/sub-stratum is void, the following procedure is recommended:

Case(I): Stratum/Sub-stratum void cases at FSU levels (i.e. all FSUs having survey code 7):

- (i) If a rural/urban sub-stratum is void then it may be merged with the other sub-stratum of the same Group of the stratum.
- (ii) If a rural/urban stratum (district) is void due to all FSUs being casualty, it may be excluded from the coverage of the survey. The state level estimates will be based on the estimates of districts for which estimates are available and remarks to that effect may be added in appropriate places.

*Case (II): Stratum/Sub-stratum void case at second stage stratum level (i.e. all the FSUs were casualties for a particular second stage stratum)*:

An FSU may be a casualty for a particular *second stage stratum* although survey code was not 7. If all the FSUs of a stratum/sub-stratum become casualties in this manner for a particular *second stage stratum*, the stratum/sub-stratum will become void. In such cases, sub-stratum may be merged with other non-void sub-stratum for all the second stage strata.

# Appendix - D Concepts and Definitions
# Appendix – D Concepts and Definitions

The Concepts and definitions of some important terms used in this report are described below.

**Population coverage:** The following rules regarding the coverage of population were adhered to in listing of households and persons during the survey operation.

- 1. Under-trial prisoners in jails and indoor patients of hospitals, nursing homes etc., were excluded, but residential staff therein was listed while listing was done in such institutions. The persons of the first category were considered as members of their parent households and were counted there. Convicted prisoners undergoing sentence were outside the coverage of the survey.
- 2. Floating population, i.e., persons without any normal residence were not listed. But households residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place, were listed.
- 3. Neither foreign nationals nor their domestic servants were listed, if by definition the latter belonged to the foreign national's household. If, however, a foreign national became an Indian citizen for all practical purposes, he or she was covered.
- 4. Persons residing in barracks of military and paramilitary forces (like police, BSF, etc.) were kept outside the survey coverage due to difficulty in conduct of survey therein. However, civilian population residing in their neighbourhood, including the family quarters of service personnel, were covered.
- 5. Orphanages, rescue homes, *ashrams* and vagrant houses were outside the survey coverage. However, persons staying in old age homes, students staying in *ashrams/hostels* and the residential staff (other than monks/nuns) of these ashrams/hostels were listed. For orphanages, although orphans were not to be listed, the persons looking after them and staying there were considered for listing.

**House:** Every structure, tent, shelter, etc. was considered as a house irrespective of its use. It might have been used for residential or non-residential purpose or both or even might have been vacant.

**Household:** A group of persons who normally lived together and took food from a common kitchen constituted a household. It included temporary stay-aways (those whose total period of absence from the household was expected to be less than 6 months) but excluded temporary

visitors and guests (expected total period of stay less than 6 months). Even though the determination of the actual composition of a household was left to the judgment of the head of the household, the following procedures was adopted as guidelines.

- Each inmate (including residential staff) of a hostel, mess, hotel, boarding and lodging house, etc., was considered as a single-member household. If a group of persons among them normally pooled their income for spending, they were considered to form a single household. For example, a family living in a hotel was treated as a single household.
- In deciding the composition of a household, more emphasis was given on 'normally living together' than on 'ordinarily taking food from a common kitchen'. In case the place of residence of a person was different from the place of boarding, he or she was treated as a member of the household with whom he or she resided.
- A resident employee, or domestic servant, or a paying guest (but not just a tenant in the household) was considered as a member of the household with whom he or she resided even though he or she was not a member of the same family.
- When a person usually slept in one place (say, in a shop or in a room in another house because of space shortage) but took food with his or her family, he or she was not treated as a single member household but as a member of the household in which other members of his or her family stayed.
- If a member of a family (say, a son or a daughter of the head of the family) stayed elsewhere (say, in hostel for studies or for any other reason), he/she was not considered as a member of his/her parent's household. However, he/she was listed as a single member household if the hostel was listed.

Household size: Total number of persons in the household constituted the household size.

**Dwelling unit:** In this survey, dwelling unit was defined as the accommodation availed of by a household for its residential purpose. It might be an entire structure or a part thereof or consisting of more than one structure. There might be cases of more than one household occupying a single structure such as those living in independent flats or sharing a single housing unit, in which case, number of dwelling units was same as the number of households sharing the structure. There might also be cases of one household occupying more than one structure (i.e. detached structures for sitting, sleeping, cooking, bathing etc) for its housing accommodation. In this case, all the structures together constituted a single dwelling unit. In general, a dwelling unit consists of living room, kitchen, store, bath, latrine, garage, open and closed veranda etc. A structure or a portion thereof used exclusively for non-residential purposes or let out to other

households did not form part of the dwelling unit of the household under consideration. However, a portion of a structure used for both residential and non-residential purposes was treated as part of the dwelling unit except when the use of such portion for residential purpose was very nominal. The dwelling unit covered all pucca, semi-pucca and katcha structures used by a household. Households living more or less regularly in tents, under bridges, in pipes, under staircase, in purely temporary flimsy improvisations built by the road side (which are liable to be removed at any moment) etc., were considered to have no dwelling.

**Principal source of drinking water:** The different principal sources of drinking water considered for the survey are:

**Bottled drinking water:** Drinking water packaged in bottles, jars, pouches, and similar containers was classified as bottled drinking water. Generally this packaged drinking water meets certain safety standards and are considered safe for drinking. Tap water, well water, etc., kept by households in bottles, for convenience, was not treated as bottled drinking water.

**Piped water into dwelling and piped water to yard/plot:** If an arrangement was made by corporation, municipality, panchayat or other local authorities or any private or public housing estate or agency to supply water through pipe and if the sample household availed such facility for drinking, then such sources of drinking water was considered as piped water. Piped water into dwelling was defined as a piped water connection to one or more taps to the dwelling unit (e.g., in the kitchen). Piped water to yard/plot was defined as a piped water connection to a tap placed outside the dwelling unit of the household but in the yard or plot within the household premises.

**Piped water from neighbour:** If an arrangement was made by the sample household to avail drinking water from the piped water of the neighbour household supplied by corporation/municipality/panchayat or other local authorities or any private or public housing estate or agency, then the source of drinking water for the sample household was considered as 'piped water from neighbour'. If the sample household collected drinking water from more than one neighbour, then also source of drinking water for the sample household was considered as 'piped water from neighbour'.

**Public tap/standpipe:** Public tap or standpipe is a water point for community use in which water is supplied through pipe by corporation/municipality/panchayath or other local authorities or any private agency. Public tap/standpipe can have one or more taps and are typically made of brickwork, masonry or concrete.

**Tube well and Hand pump:** Tube well and hand pump are bore well used for extracting ground water for drinking purpose. If the pump of the bore well is operated by animal, wind, electric, diesel or solar means etc., it is known as tube well and if the pump is operated manually by hand using human power and mechanical advantage to lift ground water, it is known as hand pump.

**Protected well/unprotected well:** A well is considered as protected if it has generally the following protective measures to lower the risk of contamination:

- a. A headwall around the well with a properly fitting cover
- b. A concrete drainage platform around the well with a drainage channel
- c. A hand pump or bucket with windlass

If instead of hand pump or bucket with windlass, electric pump was used to pump water from such wells, where the conditions (a) and (b) exist, it was considered as protected well. A well which was not protected by the above measures, e.g., the well not protected from runoff water or the well not protected from bird droppings and animals, was classified as unprotected well.

**Tanker-truck: public/private:** In 'tanker-truck', drinking water is trucked to a locality and supplied from tanker to the households of the locality. If the 'tanker-truck' was operated by any government agencies (central/state/local bodies etc.) and the sample household reported that it was their principal source of drinking water then the source of drinking water of the household was recorded as 'public tanker-truck'. In case the 'tanker-truck' was operated by private agencies (NGOs, trusts etc.) and the sample household reported that it was their principal source of drinking water of the household reported that it was their principal source of drinking water of the sample household reported that it was their principal source of drinking water, then the source of drinking water of the household was considered as 'private tanker-truck'.

**Protected spring/unprotected spring:** A spring was considered as protected, if it was protected from runoff, bird droppings and animals by a 'spring box', constructed of brick, masonry or concrete and built around the spring so that water flowed directly out of the box into a pipe or cistern, without being exposed to outside pollution. A spring which was not protected was called unprotected spring.

**Rainwater collection:** Rainwater refers to rain that is collected or harvested from surfaces (by roof or ground catchment) and stored in a container, tank or cistern until used. Traditionally, rainwater collection has been practised in arid and semi-arid areas to get drinking water of the household and water for other uses. When such water was used for drinking purpose, the source of drinking water was considered as rainwater collection.

**Surface water:** Surface water is water located above ground and includes rivers, dams, lakes, ponds, streams, canals and irrigation channels. For surface water, two distinct categories were provided, one for 'tank/pond' and another for 'other surface water (river, dam, stream, canal, lake, etc.).

Others (cart with small tank or drum, etc.): In 'cart with small tank or drum', water is supplied in small tank or drum to a locality by donkey carts, motorized vehicles and other means.

The source of drinking water of same type located at two different places was not treated as two different sources of drinking water. Drinking water carried through pipe from sources like tanker-truck, well, tank, river, etc., by the owner/occupants only for convenience of the household was not treated as piped water (i.e., piped water into dwelling or piped water to yard/plot). Instead, the actual source from which water was carried through pipe had been considered as the principal source of drinking water. When a household made arrangement for getting drinking water by hiring the services of persons, the source of water was considered as the one from which water was collected by the hired person.

**Type of latrine used by the household:** The different types of latrine considered for the survey are:

**Flush/pour-flush:** Flush latrine uses a cistern or holding tank for flushing water, and a water seal (which is a U-shaped pipe below the seat or squatting pan) that prevents the passage of flies and odours. A pour-flush latrine uses a water seal, but unlike a flush latrine, it uses water poured by hand for flushing (no cistern is used). Depending on the system/site where human excreta and waste water are disposed off, flush/pour-flush latrine can be of the following types: (i) piped sewer system, (ii) septic tank, (iii) twin leach pit, (iv) single pit, (v) elsewhere (open drain, open pit, open field, etc.).

**Flush/pour-flush to piped sewer system:** Piped sewer system is a system of sewer pipes, also called sewerage that is designed to collect human excreta and waste water and remove them from the household environment.

**Flush/pour-flush to septic tank:** Septic tank is an excreta collection device consisting of a water-tight settling tank, which is normally located underground. The treated effluent of a septic tank usually seeps into the ground through a leaching pit.

**Flush/pour-flush to twin leach pits/single pit:** In twin pit flush/ pour-flush latrine, the excreta are carried into subsurface leach pits through pipes or covered drains and one pit is used at a time. The liquid infiltrates into the soil through the holes in the pit lining. The gases also disperse into the soil, and therefore, the provision of a vent pipe for its outlet is not necessary. When one pit is full, the excreta are diverted to the second pit. The filled pit can be conveniently emptied after a rest period of one and a half years, during which pathogens are inactivated and the organic matter decomposed. Thus the two pits can be used alternately and continuously. In a single pit system desludging is required immediately after the pit has filled up, and therefore involves handling of fresh and undigested excreta which is hazardous to health. Single leach pits are appropriate only if mechanical deluding vacuum tanker is readily available, or if the pit is abandoned when full.

Flush/pour-flush to elsewhere (open drain, open pit, open field, etc): This type of latrine refers to the system of flush/pour-flush latrine where excreta are disposed of near the household environment (not into a pit, septic tank, or sewer). Excreta may be flushed to the open drain, open pit, open field, etc.

**Ventilated improved pit latrine:** This is a dry pit latrine ventilated by a pipe that extends above the latrine roof. The open end of the vent pipe is covered with gauze mesh or fly-proof netting and the inside of the super structure is kept dark.

**Pit latrine with slab:** This is a dry pit latrine that uses a hole in the ground to collect the excreta and a squatting slab or platform that is firmly supported on all sides, easy to clean and raised above the surrounding ground level to prevent surface water from entering the pit. The platform has a squatting hole, or is fitted with a seat. Unlike the ventilated improved pit latrine, in this type of latrine vent pipe is not used.

**Pit latrine without slab/open pit:** Pit latrine without slab uses a hole in the ground for excreta collection and does not have a squatting slab, platform or seat.

**Composting latrine:** This is a dry latrine into which carbon-rich material (vegetable wastes, straw, grass, sawdust, ash) are added to the excreta and special conditions maintained to produce inoffensive compost.

**Others:** Examples of such latrine are (i) hanging latrine which is built over the sea, a river, or other body of water, into which excreta drops directly, (ii) service latrine which are serviced by scavengers.

# Appendix - E Survey Schedule 1.2

Schedule 1.2:1

RURAL	*
URBAN	

CENTRAL	*
STATE	

# GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY OFFICE SOCIO-ECONOMIC SURVEY SEVENTY-SIXTH ROUND: JULY 2018 – DECEMBER 2018 SCHEDULE 1.2: DRINKING WATER, SANITATION, HYGIENE and HOUSING CONDITION

[0] descriptive identification of sample household						
1. state/u.t.:5. investigator unit number /block number:						
2. district:	6. sample sub-unit (SU) number					
3. sub-district/tehsil/town:*	7. name of head of household:					
4. village name:	8. name of informant:					

[1] ide	ntification of sample household								
item	item		cod	e	item	item	code		
no.					no.				
1.	srl. no. of sample FSU				6.	serial number of informant (as in column 1 of block 3)			
2.	round number	7	7 6		7.	response code			
3.	schedule number	1	2	0	8.	survey code			
4.	second-stage stratum number (1/2)				· · ·		9.	reason for substitution of	
5.	sample household number				2.	original household (code)			

## **Codes for Block 1**

*item* 7: *response code*: informant: *co-operative and capable - 1, co-operative but not capable - 2, busy - 3, reluctant - 4, others - 9.* 

*item 8: survey code*: household surveyed: *original - 1, substitute - 2; casualty - 3.* 

item 9: reason for substitution of original household:

informant busy - 1, members away from home - 2, informant non-cooperative - 3, others - 9.

\* tick mark ( $\sqrt{}$ ) may be put in the appropriate place.

[3] D	emographic and other <b>p</b>	particu	ılars	of hou	iseholo	d mem	bers						
								al prin activit				to 4 and 9 n 25, block 5	
									1 to 51 col. 8		for 1 in col. 11	for 01 to 04, 06, 07 and 10 in col. 12	for 3 in col. 11
srl. no.	name	relation to head (code)	gender (code)	age (years)	marital status (code)	highest level of education (code)	status (code)	industry (2 digit code )	occupation (2 digit code )	use of latrine (code)	type of latrine used (code)	whether latrine used is for exclusive use of the household ? $(yes - I, no - 2)$	reason for not using latrine (code)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Note: col. 11 to col. 14 will be filled in after canvassing block 5.

#### **Codes for Block 3**

col. 3: **relation to head:** self - 1, spouse of head - 2, married child - 3, spouse of married child - 4, unmarried child - 5, grandchild - 6, father/mother/father-in-law/mother-in-law - 7, brother/sister/brother-in-law/sister-in-law/other relatives - 8, servant/employees/other non-relatives - 9.

col. 4: gender: male -1, female - 2, transgender - 3.

- col. 6: marital status: never married 1, currently married 2, widowed -3, divorced/separated 4.
- col. 7: highest level of education: not literate 01, literate without any schooling 02, literate without formal schooling: through NFEC 03, through TLC/AEC 04, others 05; literate with formal schooling: below primary 06, primary 07, upper primary/middle 08, secondary 10, higher secondary -11, diploma /certificate course (upto secondary) -12, diploma/certificate course (higher secondary) -13, diploma/certificate course (graduation & above) -14, graduate -15, post graduate and above -16.

#### col. 8: usual principal activity status:

worked in household enterprise (self-employed):own account worker - 11, employer - 12, worked as helper in household enterprise (unpaid family worker) - 21; worked as regular salaried/ wage employee - 31; worked as casual wage labour: in public works - 41, in other types of work - 51; did not work but was seeking and/or available for work - 81, attended educational institution - 91, attended domestic duties only - 92, attended domestic duties and was also engaged in free collection of goods (vegetables, roots, firewood, cattle feed, etc.), sewing, tailoring, weaving, etc. for household use - 93, rentiers, pensioners , remittance recipients, etc. - 94, not able to work due to disability - 95, others (including begging, prostitution, etc.) - 97.

- col. 9: industry: 2-digit code as per NIC -2008.
- col. 10: occupation: 2-digit code as per NCO -2004.
- col. 11: use of latrine: regularly 1, occasionally 2, never 3.
- col. 12: type of latrine used: flush/pour-flush to: piped sewer system 01, septic tank 02, twin leach pit 03, single pit - 04, elsewhere (open drain, open pit, open field, etc) - 05; ventilated improved pit latrine - 06, pit latrine with slab - 07, pit latrine without slab/open pit - 08, composting latrine - 10, others - 19.
- col. 14: reason for not using latrine: latrine has no superstructure 1, latrine is not clean/sufficient water is not available in the latrine - 2, malfunctioning of the latrine - 3, shortage of latrine - 4, latrine is used for other purposes - 5, lack of privacy/safety - 6, personal preference - 7, cannot afford charges for paid latrine - 8, others - 9.

[4] h	ousehold characteristics						
1.	household size	amount spent by the household on construction/first-hand purchase of houses/ flats for residential purpose and sources of finance					
2.	religion (code)	12.	whether spent and 365 days? (yes-1)		during last		
3.	social group (code)	13.		amount	spent (Rs.)		
4.	land possessed as on the date of survey (code)		for 1	sources			
ho	usehold's usual monthly consumer expenditure (Rs.)	14.	in item 12	(four sources			
5.	usual consumer expenditure in a month for household purposes out of purchase (A)			descend of finance	amount		
6.	imputed value of usual consumption in a month from home grown stock (B)	schem	it received by thes for drinking fication, LPG conn	g water	r, sanitatio		
7.	imputed value of usual consumption in a month from wages in kind, free collection, gifts, etc. (C)			received any <i>I</i> , <i>no</i> - 2,	any benefit, ed benefit ( <i>yes</i> - <i>I</i> , - 3)	if received any benefit during last 3 years,	
8.	expenditure on purchase of household durables <b>during last</b> <b>365 days</b> (D)		facility	whether ever re benefit? ( <i>yes</i> - 1, not known - 3)	if ever received any l whether received during last 3 years ( <i>yes</i> no - 2, not known - 3)	scheme from which maximum benefit was received (code)	
		15.1	drinking water				
	usual monthly consumer	15.2	sanitation				
9.	expenditure	15.3	housing				
	[A + B + C + (D/12)]	15.4	electrification				
		15.5	LPG connection				
10.	tenurial status of dwelling (code)	maxin	num distance norm	•	*	ace of work:	
		16.1	among the male e				
	for 1 to 5 or 9 in item 10, area	16.2	among the female	e earners (	(code)		
11.	type in which the dwelling unit is located (code)		among the transgo	ender eari	ners (code)		

08

09 10

11

### Codes for Block 4

- item 2: **religion:** Hinduism 1, Islam 2, Christianity 3, Sikhism 4, Jainism 5, Buddhism 6, Zoroastrianism - 7, others - 9.
- *item 3:* social group: scheduled tribe (ST) 1, scheduled caste (SC) 2, other backward class (OBC) 3, others 9.
- item 4: land possessed:

area in hectare	code	area in hectare	code
less than 0.005	01	2.01 – 3.01	07
0.005 - 0.02	02	3.01 - 4.01	08
0.02 - 0.21	03	4.01 - 6.01	10
0.21 - 0.41	04	6.01 - 8.01	11
0.41 - 1.01	05		10
1.01 – 2.01	06	greater than or equal to 8.01	12

- *item 10: tenurial status of dwelling*: owned: *freehold 1, leasehold 2*; hired: *employer quarter -3, hired dwelling unit with written contract -4, hired dwelling unit without written contract -5; others -9, no dwelling -6.*
- item 11: area type of dwelling unit: notified slum 1, non-notified slum 2, squatter settlement 3, other areas -9.
- item 14: sources of finance:

own source (including own labour)	01
institutional agencies	
government	02
bank	03
insurance	04
provident fund (advance/loan)	05
financial corporation/institution	06
other institutional agencies	07

non-institutional agencies
self help group
money lender
friends and relatives
other non-institutional agencies

- item 15.1: schemes for drinking water: National Rural Drinking Water Programme (NRDWP) -1, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) -2, Smart Cities Mission -3, other scheme -9, not known -5.
- item 15.2: schemes for sanitation: Swachh Bharat Mission (SBM) -1, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) - 2, Smart Cities Mission - 3, other scheme - 9, not known - 5.
- item 15.3: schemes for housing: Pradhan Mantri Awaas Yojana (PMAY) -1, other scheme 9, not known 5.
- *item 15.4:* schemes for electrification: Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) -1, other scheme -9, not known 5.

*item 15.5:* schemes for LPG connection: Pradhan Mantri Ujjwala Yojana (PMUY) - 1, other scheme - 9, not known - 5.

*item 16.1-16.3: distance:* not required to travel - 1; travelled a distance of: *less than 1 k.m. - 2, 1 to 5 k.m. - 3, 5 to 10 k.m. - 4, 10 to 15 k.m. - 5, 15 to 30 k.m. - 6, 30 k.m. or more - 7.* 

		iving facilities: drinking water, bathroom, sa						code/ent	
srl. no.	item								
(1)	(2) king water								
<b>A.</b> UI III	-	anne of drinking water							
1.	principal source of drinking water (bottled water - 01, piped water into dwelling - 02, piped water to yard/plot - 03, piped water from neighbour - 04, public tap/standpipe - 05, tube well - 06, hand pump - 07, well: protected - 08, unprotected - 09; tanker-truck: public - 10, private - 11; spring: protected - 12, unprotected - 13; rainwater collection -14, surface water: tank/pond - 15, other surface water (river, dam, stream, canal, lake, etc.) - 16; others (cart with small tank or drum, etc) - 19)								
2.		whether availability of drinking water from the principal source is sufficient throughout the year? (yes - 1, no - 2)							
	for 2 in i	tem 2, during which calendar months of the	Jan	Feb	Mar	Apr	May	Jun	
3.	year avail	ability of drinking water was not sufficient?							
5.	`	l'against the applicable month(s) and rest of s to be left blank)	Jul	Aug	Sep	Oct	Nov	Dec	
4.	(exclusive communit private so	he principal source of drinking water use of household - 1, common use of household y use: public source restricted to particular con urce restricted to particular community - 6, pri- o the principal source of drinking water	mmunity ·	$\cdot$ 4, public s	ource un	restricted ·			
5.		velling - 1, outside dwelling but within the pret k.m 4, 0.5 to 1.0 k.m 5, 1.0 to 1.5 k.m 6,	, 1.5 k.m.			ess than 0.	2 k.m3,		
6.		who fetches drinking water from principal sou (male members of the household of age: <i>bela</i> female members of the household of age: <i>be</i> <i>hired labour - 5, others - 9</i> )	ow 18 yea						
7.	for 3 to 7 in item 5	time taken for a single trip to reach the princip and back to household (in minutes) [no decima		of drinking	water, ob	otain water			
8.	]	waiting time at the principal source of drinking [no decimal point]	g water in	a single tri	p (in min	utes)			
9.		number of trips required in a day for fetching	drinking v	vater from p	principal s	source			
10.	for 02 to 1	<b>14 in item 1</b> , is there stagnant water around the	source of	drinking w	ater? (ye	s - 1, no	2)		
11.		ntary source of drinking water acture same as item 1: principal source of dri	inking wa	ter )					
12.	(treated: e	Treatment of drinking water by the household lectric purifier - 1, boiling - 2, chemically treat lorine tablets - 4, non-electric purifier - 5, filter							
13.	(non-meta	f the main container in which drinking water is 1: <i>earthen - 1, plastic - 2, other non-metal - 3;</i> <i>other metal - 8; no storage - 9</i> )		on - 4, copp	er - 5, sta	inless stee	el - 6,		

continued to next page

Schedule 1.2:7

[5] particulars of living facilities: drinking water, bathroom, sanitation, etc.

srl. no.				item	code/ei	ntry
(1)		-		(2)	(3)	
14.			•	ing water is stored in the main container? - 1, 1 day or more but less than 3 days - 2, 3 days or more -3)		
15.	for	whether	drinkir	ig water stored in the main container is covered? (yes - 1, no - 2)		
16.	- 1 to 8 in item 13	(throug	h tap - I	rater is taken out from the main container? , vessel with handle dipped in to take out water - 2, handle dipped in to take out water - 3, poured out - 4)		
B. wate	r for all househo	old activit	ties			
17.				nousehold activities excluding drinking (viz., cooking, washing, bathing, em 1: principal source of drinking water)		
18.				cient water throughout the year for all household activities (viz., drinking, // (yes - 1, no - 2)		
19.				r item 1, 11 or 17, frequency of supply of water once in three days - 3, once in a week - 4, others - 9)		
20.	for 02 and 03 i	n either i	tem 1,	<b>11 or 17</b> , whether water is metered ? ( <i>yes - 1, no - 2</i> )		
21.	amount paid (p per month for p of water/ to the agency, organ	ourchase delivery isation,	21.1	whether any amount is usually paid in a month? (yes: information on full amount of payment is available -1, information on some amount of payment is available - 2, no information on amount paid is separately available - 3; not required to pay - 4)		
	office etc. for water charges 21.2 for 1 and 2 in item 21.1, average amount paid per month (Rs.)					
C. bath	room					
22.		f househo	ld - 1, c	om ommon use of households in the building - 2, public/community community use with payment - 4, others - 9, no bathroom - 5)		
23.				of bathroom used by the household <i>(used: attached to the dwelling unit but within the household premises - 2, others - 9; not used - 3)</i>		
24.	distance from the bathing place (within dwelling - 1, outside dwelling but within the premises - 2, outside premises: less than 0.2 k.m 3, 0.2 to 0.5 k.m 4, 0.5 to 1.0 k.m 5, 1.0 k.m. to 1.5 k.m 6, 1.5 k.m. or more - 7)					
D. latri	ne					
25.		f househo	ld - 1, c	ommon use of households in the building - 2, public/community lic/community latrine with payment - 4, others - 9, no latrine - 5)		
26.	(used: flush/pou elsewhere (open	r-flush to 1 <i>drain, oj</i>	: piped pen pit,	e of latrine used by the household sewer system - 01, septic tank - 02, twin leach pit - 03, single pit - 04, open field, etc) - 05; ventilated improved pit latrine - 06, pit latrine with open pit - 08, composting latrine - 10, others - 19; not used - 11)		

continued to next page

[5] part	iculars of living fa	acilities: drinking water, bathroom, sanitation, etc.						
srl. no.		item	code/entry					
(1)	(2)							
27.	whether bathroom	whether bathroom and latrine both are within the household premises? (yes - 1, no - 2)						
28.		and 02 to 04, 06, 07 and 10 in item 26, whether excreta from septic tank/pit/composting been emptied? (yes- 1, no - 2, not known - 3)						
29.		who emptied the excreta last time?						
		(panchayet/municipality /corporation - 1, private agency - 2, hired labour engaged by the household - 3, member(s) of the household - 4, others - 9, not known - 5)						
30.		place of disposal of excreta last time						
	for 1 in item 28	(treatment plant - 1, buried in covered twin leach pit/single pit - 2, uncovered pit/open land/pond/river etc 3, other places - 9, not known - 4)						
31.		amount paid (payable) for emptying the excreta last time (Rs.)						
32.	-	how frequently excreta is emptied?						
		(once or more in a year - 1, once in 2 years - 2, once in 5 years - 3, once in 10 years - 4, others - 9, not known - 5)						
33.	disposal of faeces	for children of age below 3 years						
		rine -1, put/rinsed into latrine - 2, put/rinsed into drain or ditch - 3, thrown into garbage - n open area -5, buried - 6, others - 9, not applicable -7)						
34.	for 01 to 08, 10, 1	19 in item 26, availability of water in or around the latrine used						
		e with soap/detergent - 1, water is available with ash/mud/sand etc 2, lable - 3; not available - 4)						
E. pract	tice of hand washi	ing	<u> </u>					
35.	whether househol	d members regularly wash their hands before meal?						
	(yes: with water a	and soap/detergent - 1, with water and ash/mud/sand etc 2, with water only - 3; no - 4)						
36.	whether househol	d members regularly wash their hands after defecation?						
	(yes: with water a	and soap/detergent - 1, with water and ash/mud/sand etc 2, with water only - 3; no - 4)						

	1							
srl. no.	i	code / entry						
(1)		(3)						
A. hou	sing characteristics							
1.	plinth level of the house (in feet and in w	hole numbers)						
	(record '0', if there is no plinth)							
2.	number of floor (s) in the house							
3.	use of house (residential only - 1, residential-cum-com							
	for 1 or 2 in item 10 of block 4, period s							
4.	(less than 1 year - 01, 1 to 2 years - 02, 2							
4.	4 to 5 years - 05, 5 to 10 years - 06, 10 to	o 20 years - 07, 20 to 40 years - 08,						
	40 to 60 years - 10, 60 years or more - 1	1, not known - 12)		1				
5.			Y	Y	Y	Y		
5.	for 01 to 05 in item 4	year of start						
6.		year of completion						
7.	condition of structure (good - 1, satisfactory - 2, bad - 3)							
8.	whether the household has electricity for domestic use? (yes - 1, no - 2)							
0	for 1 in item 8, type of electric wiring							
9.	(conduit wiring - 1, fixed to the walls - 2,							
10.	drainage system of the household							
		n pucca -3, open katcha -4, no drainage -5)						
B. mic	ro environment							
	system of disposal of household waste w	ater						
11.	(safe re-use after treatment -1, disposed							
11.	system - 2, open low land areas/streets - disposed off with or without treatment to							
	place of disposal of household garbage							
12.	(disposed to: bio-gas plant or manure pin spot(s) - 2, community dumping spot (va							
12.	than community dumping spot (va							
	not known - 5)							
	agency made arrangement for collection							
13.	(panchayet/municipality/corporation - 1,							
	others - 9, not known - 3; no arrangeme							
	for 3 and 4 in item 12, how frequently garbage is cleared?							
14.	(daily - 1, not daily but at least once in a week - 2, not even once in a week - 3, not known - 4)							
	whether experienced any flood during las	st 5 years?						
15.	(yes: from excessive rain during monsoo	-						

rl. no		item				
(1)		(2)				
16.	approach road / lane / (direct opening to: mo motorable road / lane constructed path with street light - 4; no dir					
17.	whether the househol premises? (yes - 1, n					
18.	whether human faece (yes - 1, no - 2)					
19.	animal shed and poultry farm	19.1	existence of animal shed/poultry farm (attached to the house - 1, detached from the house - 2, no animal shed/poultry farm - 3)			
		19.2	<b>for 1 or 2 in item 19.1</b> , disposal of animal/poultry excreta ( <i>to biogas plant - 1, manure pit -2, used as fuel - 3, others - 9, not known - 4</i> )			
C. pro	blem of flies and mos	quitoes				
	11111111	d faced	problem of flies/mosquitoes during last 365 days?			
20.	(yes: <i>severe - 1, mode</i>		2; no - 3)			
20. 21.	(yes: severe - 1, mode whether any effort wa	erate - 2 as made	<i>P; no - 3</i> ) by the Local Bodies/State Government during last f flies/mosquitoes? ( <i>yes - 1, no - 2, not known - 3</i> )			
	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro for 1 or 2 in item 20,	erate - 2 as made oblem o	by the Local Bodies/State Government during last			
21. 22.	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro <b>for 1 or 2 in item 20</b> , 365 days to tackle pro	erate - 2 as made oblem o , whethe oblem o	by the Local Bodies/State Government during last f flies/mosquitoes? ( <i>yes - 1, no - 2, not known - 3</i> ) er any effort was made by the household during last			
21. 22.	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro <b>for 1 or 2 in item 20</b> , 365 days to tackle pro	erate - 2 as made oblem o , whethe oblem o	by the Local Bodies/State Government during last f flies/mosquitoes? ( <i>yes - 1, no - 2, not known - 3</i> ) er any effort was made by the household during last f flies/mosquitoes? ( <i>yes - 1, no - 2</i> )			
21. 22.	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro for 1 or 2 in item 20, 365 days to tackle pro cific types of illness of	erate - 2 as made oblem o , whethe oblem o f <b>the ho</b>	by the Local Bodies/State Government during last f flies/mosquitoes? ( <i>yes - 1, no - 2, not known - 3</i> ) er any effort was made by the household during last f flies/mosquitoes? ( <i>yes - 1, no - 2</i> ) usehold members during last 365 days stomach problems like diarrhea/dysentery/cholera			
21. 22.	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro for 1 or 2 in item 20, 365 days to tackle pro cific types of illness of whether any of the household member(s) suffered from the types of illness specified in items 23.1 to 23.5	erate - 2 as made oblem o , whethe oblem o f <b>the ho</b> 23.1	by the Local Bodies/State Government during last f flies/mosquitoes? ( <i>yes - 1, no - 2, not known - 3</i> ) er any effort was made by the household during last f flies/mosquitoes? ( <i>yes - 1, no - 2</i> ) usehold members during last 365 days stomach problems like diarrhea/dysentery/cholera ( <i>yes - 1, no - 2</i> ) malaria/dengue/chikungunya/encephalitis			
21. 22. <b>D. spe</b>	(yes: severe - 1, mode whether any effort wa 365 days to tackle pro for 1 or 2 in item 20, 365 days to tackle pro cific types of illness of whether any of the household member(s) suffered from the types of illness specified in	erate - 2 as made oblem o , whether oblem o f <b>the ho</b> 23.1 23.2	by the Local Bodies/State Government during last f flies/mosquitoes? ( $yes - 1$ , $no - 2$ , $not known - 3$ ) er any effort was made by the household during last f flies/mosquitoes? ( $yes - 1$ , $no - 2$ ) usehold members during last 365 days stomach problems like diarrhea/dysentery/cholera ( $yes - 1$ , $no - 2$ ) malaria/dengue/chikungunya/encephalitis ( $yes - 1$ , $no - 2$ )			

Note: for items relating to 'house', information will be collected for the whole 'structure' in which the dwelling unit is located.

srl.	item							
$\frac{\text{no.}}{(1)}$	(2)							
1.	type of the dwelling (independent house - 1, flat - 2, others - 9)							
2.		living rooms						
3.	number of rooms in the dwelling	other rooms						
4.		living rooms						
5.	floor area of the dwelling [in square feet and	other rooms						
6.		covered veranda						
7.	in whole numbers]	uncovered veranda						
8.		total (sum of items 4 to 7)						
9.	ventilation of the dwelling unit (good - 1, satisfactory - 2, bad - 3)							
10.	total number of married couples in the household							
11.	for entry > 0 in item 10, number of married couples having separate room							
12.	kitchen type (separate kitchen: with water tap - 1, without water tap - 2; no separate kitchen - 3)							
13.	type of fuel used by household for cooking (firewood, chips & crop residue - 01, LPG - 02, other natural gas - 03, dung cake - 04, kerosene - 05, coke / coal - 06, gobar gas - 07, other biogas - 08, charcoal - 09, electricity (incl. generated by solar or wind power generators) - 10, solar cooker - 11, others - 19, no cooking arrangement - 12)							
14.	floor type (mud - 1, bamboo / log - 2, wood / plank - 3, brick / stone / lime stone - 4, cement -5, mosaic / tiles - 6, others - 9)							
15.	wall type   (grass/ straw/ leaves/ reeds/ bamboo, etc 1, mud (with / without bamboo) / unburnt   brick - 2, canvas / cloth - 3, other katcha - 4, timber - 5, burnt brick /stone/ lime stone - 6,   iron or other metal sheet - 7, cement / RBC / RCC - 8, other pucca - 9)							
16.	roof type (grass/ straw/ leaves/ reeds/ bamboo etc 1, mud / unburnt brick - 2, canvas / cloth - 3, other katcha - 4, tiles / slate - 5, burnt brick / stone / lime stone - 6, iron / zinc / other metal sheet /asbestos sheet - 7, cement / RBC / RCC - 8, other pucca - 9)							
17.	if hired monthly rent (Rs.) (i.e., for 3, 4 or 5 in item 10 of block 4) (payable approach)							

srl. no.		item					
(1)	(2)						
<b>A.</b> fo	or all househo	lds	<u> </u>				
1.	duration of sta	ay of the household in the present area <sup>*</sup>					
		ear - 01, 1 to 2 years - 02, 2 to 5 years - 03, 5 to 10 years - 04, s - 05, 20 to 40 years - 06, 40 to 60 years - 07, 60 years or more - 08, 0)					
2.		where the household was residing before coming to the present area?					
		(in slum/squatter settlement of the same town - 1, in other areas of the same town - 2, in slum/squatter settlement of other town - 3, in other areas of other town - 4, village - 5)					
3.	for 01 in item 1	type of structure of the accommodation availed of immediately before coming to the present area ( <i>pucca - 1, semi -pucca - 2, katcha - 3, no dwelling - 4</i> )					
4.		reason for movement to the present area (free / low rent - 1, independent accommodation - 2, accommodation in better locality - 3, employment related reasons: proximity to place of work - 4, other employment related reasons - 5; others - 9)					
5.	number of me	mbers who moved into the household during the last 365 days					
6.	number of me	mbers who moved out of the household during the last 365 days					
		living in slums/squatter settlements (for urban only) rea type code 1, 2 or 3 in item 11, block 4)	<u> </u>				
7.	status in the p ( <i>possesses: ra</i>	d of the household possess any of the documents pertaining to the residence present slum/squatter settlement? <i>ation card - 1, voter ID card - 2, passport - 3,</i> <i>ation of codes 1 to 3 - 4, other - 9; none - 5</i> )					
8.	whether the h	ousehold received any benefit as a dweller of present slum/squatter settlement?					
	(received allo	tment of land / tenement - 1, received other benefits - 9; received no benefit - 2)					
9.		household tried to move out of the present slum/squatter (yes - 1, no - 2)					
10.	<b>if 1 in item 9</b> (better accomothers - 9)	, main reason modation - 1, proximity to place of work - 2, social / religious factors - 3,					

[2] par	rticulars of field operation	S										
srl. no.	item			Field Investigator (FI)/ Junior Statistical Officer (JSO)				Field Officer (FO)/ Senior Statistical Officer (SSO)				
(1)	(2)				(3)	/			(4	4)		
	i) name (block letters)											
1 (a)	ii) code											
	iii) signature			1								
	i) name (block letters)											
1 (b)	ii) code											
	iii) signature											
2.	date(s) of :		DD	N	MM	YY	D	D	M	Λ	Ŷ	Υ
	(i) survey/ inspection											
	(ii) receipt											
	(iii) scrutiny											
	(iv) despatch											
3.	number of additional sheet(s) attached											
4.	total time taken to canvass the schedule by the team of investigators (FI/JSO) (in minutes) [no decimal point]											
5.	number of investigators (FI/JSO) in the team who canvassed the schedule											
6.	whether remarks have been entered by FI/JSO/ supervisory officer	(i) in block 9/ block 10										
	(yes - 1, no - 2)	(ii) elsewhere in the schedule										

[9] remarks by investigator(s) (FI/JSO)						

[10] comments by supervisory officer(s)