Statistical Bulletin on Households Using Improved Sanitation Facility in the Southern States of India

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COUNCIL FOR SOCIAL DEVELOPMENT

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INTRODUCTION

anitation is one of the important components to consider for a better and healthy life by improving the living conditions. This is not a phenomenon of native or local, regional, national but global with the conditional situations and attributes of distribution resource and usage. Improving services regarding sanitation facilities advocates by the international monitoring of drinking water and sanitation which have implications to shape countries needs through research, implementation and policy. The 2030 Agenda recognizes the centrality of water resources to sustainable development. Improved drinking water, sanitation and hygeine are vital to driving progress in other areas, including health, education and poverty reduction¹.

Telangana state showed highest increase in usage of improved sanitation facility from NFHS-4 to NFHS-5 with increase of 23.9% i.e., from 52.3% to 76.2%.

Improved status of sanitation in Telangana is evident since state formation by implementing programs with multi-pronged approach which is holistic in nature.

The definitional Sustainable of explanation Development Goal (SDG) target of 6.2 goes beyond sanitation and corelates with other associational aspects such as hygiene with improved water facility. Indicator 6.2.1a refers that the proportion of population using safely managed sanitation services indicator **6.2.1b** refers that proportion of population with a handwashing facility with soap and water available at home.

The study has considered and used the National Family Health Survey - 5(NFHS-5)² (2019-2021) definition for Population living in households that use an improved sanitation facility "Flush to piped sewer system, flush to septic tank, flush to pit latrine, flush to don't know where, ventilated improved pit (VIP)/biogas latrine, pit latrine with

slab, twin pit/composting toilet, which is not shared with any other household. This indicator does not denote access to toilet facility completely."

In this bulletin, we investigate the sanitation facility improved population living in households in the Southern States of India. We make use of the findings from the NFHS-53. The analysis used NFHS-4 to compare and assess the performance of districts in all the Southern States. For instance, proportion of population living in household using improved sanitation facility in India during NFHS-4 is 48.5% and 70.2% at NFHS-5 with increase of 21.7%. The analysis followed and confined to the proposed areas of indicators (6.2.1a) definitions. We examine the socio-religious, geographic, level of education, and economic context for improved sanitation facility of population living in households at India in general and Southern States in particular. The status and performance of 120 districts showed in the table below with its rank in the improved sanitation facility at Southern States of India.

The notable seminal programs for these achievements consist as ODF Plus (achieved 100% in ODF Plus villages in India under Swachh Survekshan Grameen Survey), Swatch Telangana (focused on all the cities and towns in order to make them open defecation free, sanitized, healthy, livable, ensuring and sustaining), Palle Pragathi Program (focused on cleanliness of villlages), and Mission Bhagiratha acclaimed by NITI Ayog for ranked second in providing clean water and sanitation).

The current bulletin of NFHS-5 (2019-21) with indicator 9 – improved sanitation facility showed for India and other Southern States and NFHS-4 refer to 2015-16.

S. No.	Name of the States Adilabad, Bhadradri Kothagudem, Hyderabad, Jagtial, Jangaon, Jayashankar Bhupalpally, Jogulamba Gadwal, Kamareddy, Karimnagar, Khammam, Kumuram Bheem Asifabad, Mahabubabad, Mahabubnagar, Mancherial, Medak, Medchal-Malkajgiri, Nagarkurnool, Nalgonda, Nirmal, Nizamabad, Peddapalli, Rajanna Sircilla, Rangareddy, Sangareddy, Siddipet, Suryapet, Vikarabad, Wanaparthy, Warangal Rural, Warangal Urban, Yadadri Bhuvanagiri.		Number of Districts	
1			31	
2	Andhra Pradesh	Ananthapuramu, Chittoor, East Godavari, Guntur, Krishna, Kurnool, Prakasam, Srikakulam, Sri Potti Sriramulu Nellore, Visakhapatnam, Vizianagaram, West Godavari, YSR Kadapa (Kadapa)	13	
3	Karnataka	Yadgir, Raichur, Bidar, Koppal, Kalaburagi (Gulbarga), Dakshina Kannada, Uttara Kannada (Karwar), Udupi, Belagavi (Belgaum), Chikkaballapura, Ballari (Bellary), Vijayapura (Bijapur), Kolar, Bagalkot, Haveri, Tumakuru (Tumkur), Shivamogga (Shimoga), Chamarajanagar, Gadag, Bengaluru Rural, Chikkamagaluru (Chikmagalur), Dharwad, Kodagu, Hassan, Mysuru (Mysore), Ramanagara, Chitradurga, Davangere, Mandya, Bengaluru	30	
4	Kerala	Wayanad, Kasaragod, Kozhikode, Kannur, Palakkad, Idukki, Malappuram, Ernakulam, Kottayam, Alappuzha, Thrissur, Kollam, Pathanamthitta, Thiruvananthapuram	14	
5	Tamil Nadu	Ariyalur, Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Kanniyakumari, Karur, Krishnagiri, Madurai, Nagapattinam, Namakkal, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivagangai (Sivaganga), Thanjavur, The Nilgiris, Theni, Thiruvallur, Thiruvarur, Thoothukudi, Tiruchirappalli, Thirunelveli, Tiruppur, Tiruvannamalai, Vellore, Viluppuram, Virudhunagar	32	
	personal distribution of the second s	Total	120	

⁴The Bulletin has considered new names of the districts especially for Kerala, Karnataka and Tamil Nadu in effect of change in the names of districts. All the new names have taken from the updated districts list from the respective government websites. Telangana state has followed the newly formed district list which were reorganized after formation of the state.

E

L

Performance of Telangana State

• 86.2%

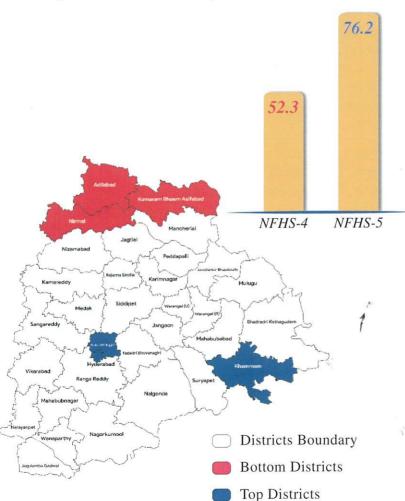
Medchal-Malkajgiri has the highest population living in households that used an improved sanitation facility

• 76.2%

Telangana in 2019-2021.

• 50.8%

Adilabad has the lowest population living in households that used an improved sanitation facility.



Performance of the District in Telangana

District Po	ercent
Medchal-Malkajgiri	86.2
Khammam	84.5
Hyderabad	84.4
Jangoan	84.3
Siddipet	84.1
Yadadri Bhuvanagiri	81.9
Warangal Urban	81.2
Ranga Reddy	81.1
Karimnagar	78.8
Medak	78.2
Mancherial	78.1
Suryapet	77.9
Peddapalli	77.8
Rajanna Sircilla	77.4
Jagtial	76.5
Nalgonda	76.4
Wanaparthy	75.9
Bhadradri Kothagudam	75.3
Warangal Rural	74.3
Jogulamba Gadwal	73.7
Mahabubnagar	73.7
Nagarkarnool	73.2
Nizamabad	72.5
Mahabubabad	68.6
Kamareddy	68.2
Sangareddy	68.0
Vikarabad	66.7
Jayasankar Bhupalpally	65.6
Nirmal	63.6
Komaram Bheem Asifabad	54.0
Adilabad	50.8

Performance of Andhra Pradesh State

• 85.4%

Y.S.R Kadapa has the highest population living in households that used an improved sanitation facility.

• 77.3%

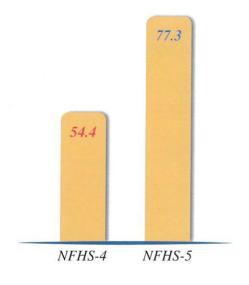
Andhra Pradesh in 2019-2021.

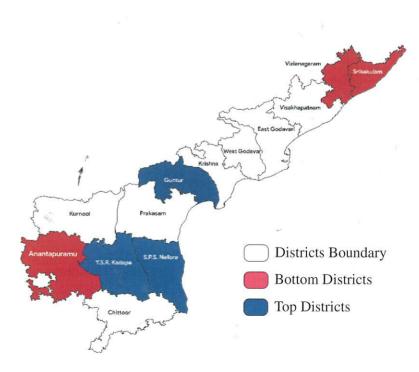
• 61.7%

Vizianagaram has the lowest population living in households that used an improved sanitation facility.

Performance of the District in Andhra Pradesh

	District	Percent
A	Y.S.R Kadapa	85.4
N	Guntur	83.4
D	Nellore	81.8
H R	West Godavari	80.8
A	Krishna	79.1
	Prakasam	78.4
P	Visakhapatnam	77.8
R A D	East Godavari	77.7
	Chitoor	74.6
E	Kurnool	73.5
S	Srikakulam	71.6
H	Ananthapuramu	71.3
	Vizianagaram	61.7





K

A

R

Performance of Karnataka State

• 97.1%

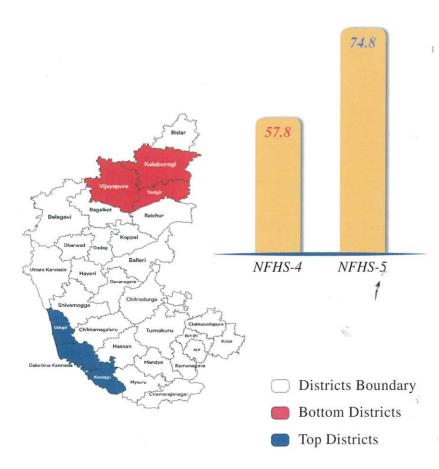
Dakshina Kannada has the highest population living in households that used an improved sanitation facility.

• 74.8%

Karnataka in 2019-2021.

• 36.5%

Kalaburagi has the lowest population living in households that used an improved sanitation facility.



Performance of the District in Karnataka

District	Percent
Dakshina Kannada	97.1
Udupi	94.5
Kodagu	93.9
Chikkamagaluru	92.3
Bengaluru	90.4
Ramanagara	89.6
Uttara Kannada	89.6
Kolar	89.2
Bengaluru Rural	88.8
Hassan	87.9
Mandya	86.7
Mysuru	86.4
Tumakuru	86.1
Shivamogga	85.4
Chikkaballapura	84.9
Davanagere	83.3
Dharwad	79.3
Chamarajnagar	75.2
Haveri	68.9
Belagavi	67.7
Ballari	64.1
Chitradurga	63.1
Koppal	58.8
Bidar	56.5
Gadag	55.2
Raichur	53.0
Bagalkot	51.3
Vijayapura	44.8
Yadgir	37.4
Kalaburagi	36.5

Performance of Kerala State

• 99.9%

Malappuram has the highest population living in households that used an improved sanitation facility.

• 98.7%

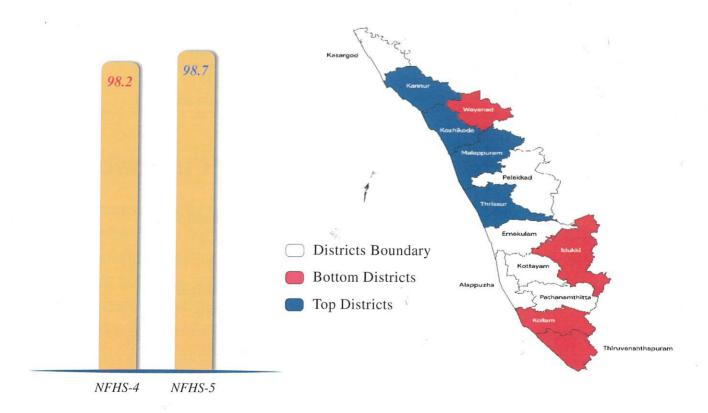
Kerala in 2019-2021.

• 95.4%

Thiruvananthapuram has the lowest population living in households that used an improved sanitation facility.

Performance of the District in Kerala

K	District	Percent
E	Malappuram	99.9
R	Kozhikode	99.6
Ā	Kannur	99.5
L	Thrissur	99.5
A	Ernakulam	99.3
	Alappuzha	99.2
	Palakkad	99.0
	Kasaragod	98.9
	Pathanamthitta	98.9
	Kottayam	98.6
	Wayanad	97.6
	Idukki	97.5
	Kollam	97.5
	Thiruvananthapuram	95.4



M

A

D

Performance of Tamil Nadu State

• 96.2%

Kanniyakumari has the highest population living in households that used an improved sanitation facility.

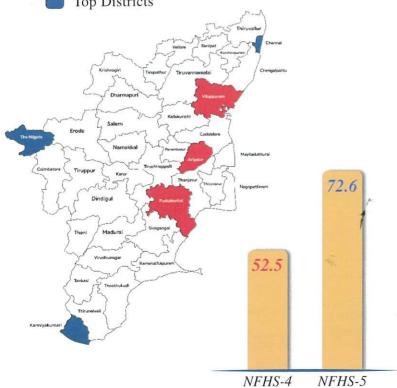
• 72.6%

Tamil Nadu in 2019-2021.

• 53.8%

Viluppuram has the lowest population living in households that used an improved sanitation facility.

- Districts Boundary
- **Bottom Districts**
- Top Districts

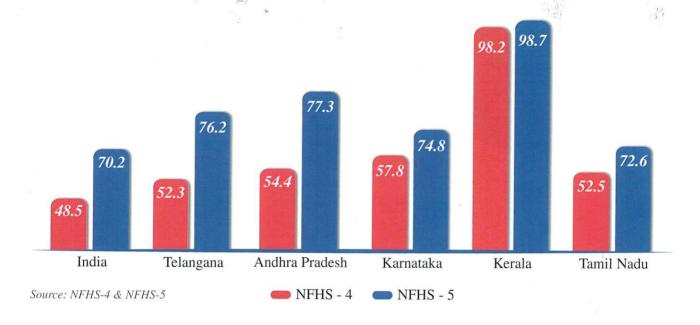


Performance of the District in Tamil Nadu

District	Percent
Kanniyakumari	96.2
Chennai	90.4
The Nilgiris	83.6
Madurai	80.1
Thirunelveli	79.8
Thanjavur	79.6
Thoothukudi	79.4
Ramanathapuram	78.6
Coimbatore	78.5
Vellore	76.2
Kancheepuram	75.9
Krishnagiri	75.9
Tiruppur	75.9
Thiruvallur	75.6
Namakkal	75.2
Sivagangai	74.4
Theni	74.4
Dharmapuri	72.4
Thiruvarur	71.0
Nagapattinam	69.6
Erode	67.6
Thiruchirapalli	67.1
Salem	64.5
Karur	63.6
Thiruvannamalai	61.7
Cuddalore	61.3
Dindigul	61.0
Virudhunagar	59.8
Perambalur	57.4
Pudukottai	55.2
Ariyalur	54.6
Viluppuram	53.8

Usage of improved sanitation (households) in Southern States of India (NFHS-4 and NFHS-5)

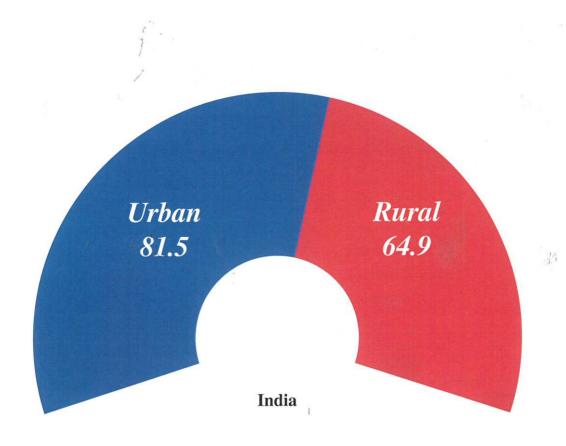
Comparative analysis of improved sanitation facility (population living in households) in Southern States of India from NFHS-4 to NFHS-5 reveals interesting facts. Especially, the increasing trend in all the Southern States which are more than national average. Among the Southern States, Telangana has the significant jump 23.9% from NFHS-4 (52.3%) to NFHS-5 (76.2%) especially after formation of Telangana state where Kerala shows highest prevalence in NFHS-4 (98.2%) and NFHS-5 (98.7%). However, the jump is 0.5% only. Similar trend can be observed in Andhra Pradesh (22.9%), Tamil Nadu (20.1%), Karnataka (17%), and Kerala (0.5%) respectively.



Residential Phenomenon

Improved sanitation facility is largely an urban phenomenon which showed not only in India but across Southern States and all are higher than the national average in urban setting. Significant feature in providing and improve sanitation facilities in Southern States can be observed in rural areas which have been achieved adequate results. Kerala (98.5%) is highest among all the Southern States but the state of Telangana's performance is notable which is second highest (72.2%) and highest increase from NFHS-4 to NFHS-5 with proactive policy measures since it is a young state and its development orientation towards prioritized areas of improvement. This trend closely followed by Andhra Pradesh (72.2%), Karnataka (68.4%), and Tamil Nadu (63.3%).

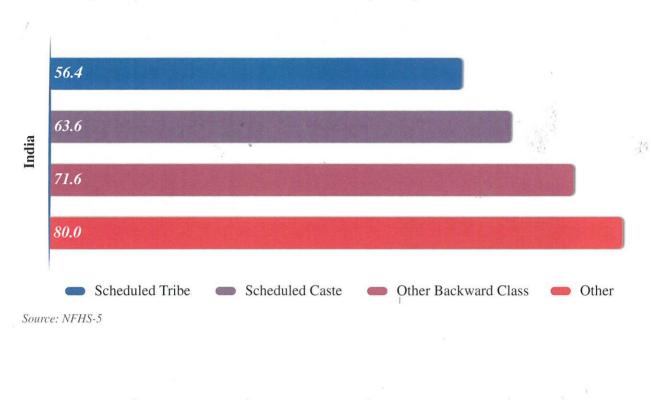
Rural-Urban proportion





Socio-Religious Proportion

Social category wise status of improved sanitation facilities for the population living in households indicates high levels of improvement in Kerala with all the social categories. Among other states in South India in regards to access by social categories, Telangana shows increase more than the national average in all the social categories following as second highest at Scheduled Caste (72.0%) and Other Backward Classes (78.5%), and among the Other category is Tamil Nadu (89.7%) and Karnataka in Scheduled Tribe (66.9%).

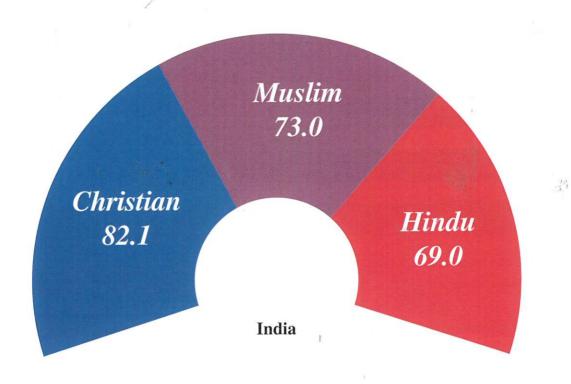


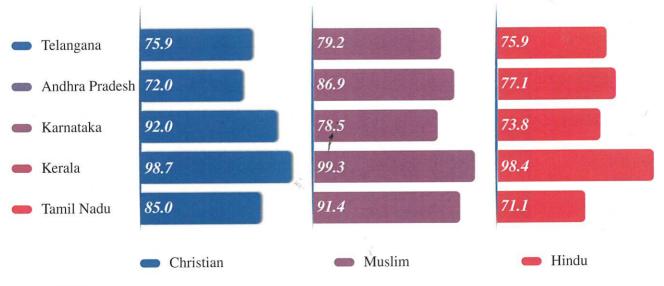


Socio-Religious Proportion

Religion-wise data explains the status of religious groups in accessing the improved sanitation facilities at households denote that Kerala is high among Muslims (99.3%) in Southern States. This is followed by Tamil Nadus Telangana, Andhra Pradesh and Karnataka which are showing higher than the national average.

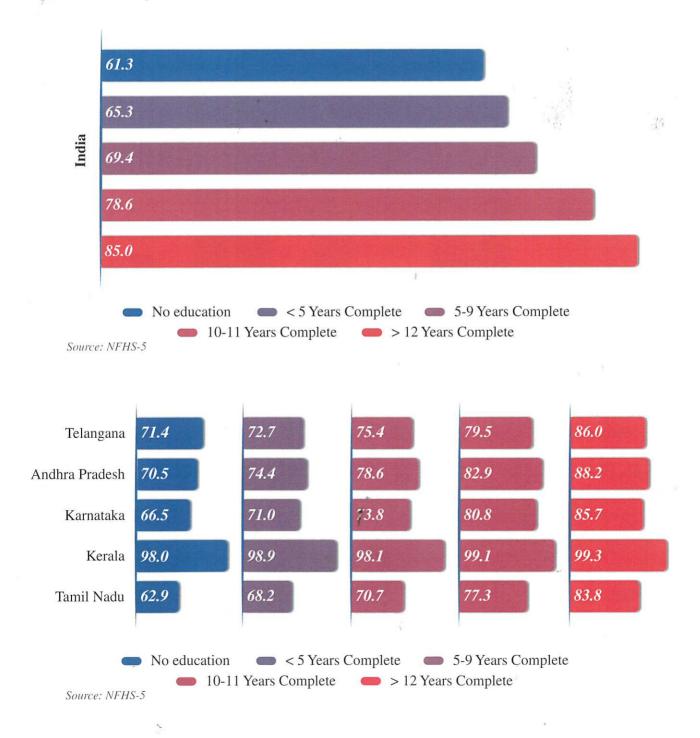
Water Street





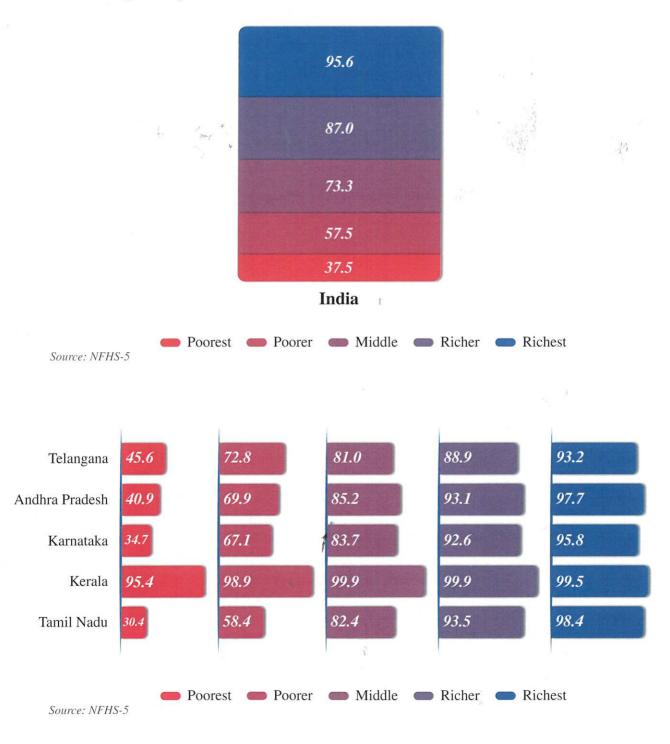
Education Level

Level of education at usage of households living with improved sanitation facility shows high in Kerala and other Southern States also relatively doing well. Performance of all the states shows higher than the national average except Tamil Nadu with 10-11 years complete and 12 or more years complete level of education. Significant feature of education level towards using improved sanitation facility among all the Southern States is increasing trend from No education to <5 years complete, 5-9 years complete, 10-11 years complete, and 12 or more years complete. This explains that as improvement in education reflects in better usage of sanitation facilities.



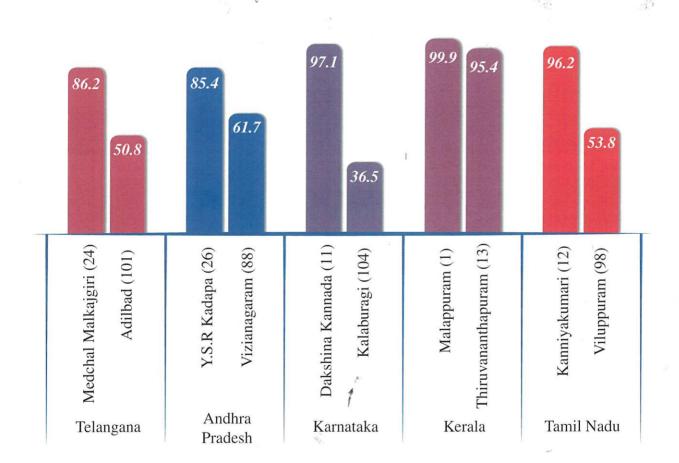
Wealth Quintile

Wealth index categorization shows interesting facts in usage of improved sanitation facilities at households. All the states in Southern India shows increase more than the national average except at poorest in Tamil Nadu (30.4%) and Karnataka (34.7%). Though Kerala achieved highest among all the income groups, the other states in South India show consistent improvement from poorest to poorer, middle, richer, and richest. This trend shows that the higher in income level leads to better usage of improved sanitation facilities.



Proportion in Districts - South India Level

The ranking of districts denote that the performance of districts⁵ in usage of improved sanitation facility at household. Almost all the districts of Southern States are fairly doing well with little variation in the rank value. The highest performance of districts form each Southern States, Kerala (Malappuram – 99.9%), Karnataka (Dakshina Kannada – 97.1%), Tamil Nadu (Kanyakumari – 96.2%), Telangana (Medchal-Malkajgiri – 86.2%), and Andhra Pradesh (YSR Kadapa – 85.4%). Lowest performing districts shows considerable variations in the value of ranks across Southern States comprises Kerala (Thiruvananthapuram – 95.4%), Andhra Pradesh (Vizianagaram – 61.7%), Tamil Nadu (Viluppuram – 53.8%), Telangana (Adilabad – 50.8%), and Karnataka (Kalaburagi – 36.5%). Evidence from the district's performance shows notable increase in the improved sanitation facility for the proportion of population living in household.



⁵Higher the value of rank denotes the high performance and lowest value of ranks are low performance districts.

S.No	States Name	Districts Name	Population living in households that use an improved sanitation facility	Rank
1	Kerala	Malappuram	99.9	1
2	Kerala	Kozhikode	99.6	2
3	Kerala	Kannur	99.5	3
4	Kerala	Thrissur	99.5	3
5	Kerala	Ernakulam	99.3	4
6	Kerala	Alappuzha	99.2	5
7	Kerala 6 m	Palakkad	99.0	6
8	Kerala	Kasargod	98.9	7
9	Kerala	Pathanamthitta	98.9	7
10	Kerala	Kottayam	98.6	8
11	Kerala	Wayanad	97.6	9
12	Kerala	Idukki	97.5	10
13	Kerala	Kollam	97.5	10
14	Karnataka	Dakshina Kannada	97.1	11
15	Tamil Nadu	Kanniyakumari	96.2	12
16	Kerala	Thiruvananthapuram	95.4	13
17	Karnataka	Udupi	94.5	14
18	Karnataka	Kodagu	93.9	15
19	Karnataka	Chikkamagaluru	92.3	16
20	Tamil Nadu	Chennai	90.4	17
21	Karnataka	Bengaluru Urban	90.4	17
22	Karnataka	Ramanagara	89.6	18
23	Karnataka	Uttara Kannada	89.6	18
24	Karnataka	Kolar	89.2	19
25	Karnataka	Bengaluru Rural	88.8	20
26	Karnataka	Hassan	87.9	21
27	Karnataka	Mandya	86.7	22
28	Karnataka	Mysore	86.4	23
29	Telangana	Medchal-Malkajgiri	86.2	24
30	Karnataka	Tumakuru	86.1	25

Wat Tale

S.No	States Name	Districts Name	Population living in households that use an improved sanitation facility	Rank
31	Andhra Pradesh	Y.S.R Kadapa	85.4	26
32	Karnataka	Shivamogga	85.4	26
33	Karnataka	Chikkaballapura	84.9	27
34	Telangana	Khammam	84.5	28
35	Telangana	Hyderabad	84.4	29
36	Telangana	Jangoan	84.3	30
37	Telangana	Siddipet	84.1	31
38	Tamil Nadu	The Nilgiris	83.6	32
39	Andhra Pradesh	Guntur	83.4	33
40	Karnataka	Davanagere	83.3	34
41	Telangana	Yadadri Bhuvanagiri	81.9	35
42	Andhra Pradesh	Nellore	81.8	36
43	Telangana	Warangal Urban	81.2	37
44	Telangana	Ranga Reddy	81.1	38
45	Andhra Pradesh	West Godavari	80.8	39
46	Tamil Nadu	Madurai	80.1	40
47	Tamil Nadu	Thirunelveli	79.8	41
48	Tamil Nadu	Thanjavur	79.6	42
49	Tamil Nadu	Thoothukudi	79.4	43
50	Karnataka	Dharwad	79.3	44
51	Andhra Pradesh	Krishna	79.1	45
52	Telangana	Karimnagar	78.8	46
53	Tamil Nadu	Ramanathapuram 1	78.6	47
54	Tamil Nadu	Coimbatore	78.5	48
55	Andhra Pradesh	Prakasam	78.4	49
56	Telangana	Medak	78.2	50
57	Telangana	Mancherial	78.1	51
58	Telangana	Suryapet	77.9	52
59	Andhra Pradesh	Visakhapatnam	77.8	53
60	Telangana	Peddapalli	77.8	53

S.No	States Name	Districts Name	Population living in households that use an improved sanitation facility	Rank
61	Andhra Pradesh	East Godavari	77.7	54
62	Telangana	Rajanna Sircilla	77.4	55
63	Telangana	Jagtial	76.5	56
64	Telangana	Nalgonda	76.4	57
65	Tamil Nadu	Vellore	76.2	58
66	Telangana	Wanaparthy	75.9	59
67	Tamil Nadu	Kancheepuram	75.9	59
68	Tamil Nadu	Krishnagiri	75.9	59
69	Tamil Nadu	Tiruppur	75.9	59
70	Tamil Nadu	Thiruvallur	75.6	60
71	Telangana	Bhadradri Kothagudam	75.3	61
72	Karnataka	Chamarajnagar	75.2	62
73	Tamil Nadu	Namakkal	75.2	62
74	Andhra Pradesh	Chitoor	74.6	63
75	Tamil Nadu	Sivagangai	74.4	64
76	Tamil Nadu	Theni	74.4	64
77	Telangana	Warangal Rural	74.3	65
78	Telangana	Jogulamba Gadwal	73.7	66
79	Telangana	Mahabubnagar	73.7	66
80	Andhra Pradesh	Kurnool	73.5	67
81	Telangana	Nagarkurnool	73.2	68
82	Telangana	Nizamabad	72.5	69
83	Tamil Nadu	Dharmapuri 1	72.4	70
84	Andhra Pradesh	Srikakulam	71.6	71
85	Andhra Pradesh	Ananthapuramu	71.3	72
86	Tamil Nadu	Thiruvarur	71.0	73
87	Tamil Nadu	Nagapattinam	69.6	74
88	Karnataka	Haveri	68.9	75
89	Telangana	Mahabubabad	68.6	76
90	Telangana	Kamareddy	68.2	77

S.No	States Name	Districts Name	Population living in households that use an improved sanitation facility	Rank
91	Telangana	Sangareddy	68.0	78
92	Karnataka	Belagavi	67.7	79
93	Tamil Nadu	Erode	67.6	80
94	Tamil Nadu	Thiruchirapalli	67.1	81
95	Telangana	Vikarabad	66.7	82
96	Telangana	Jayasankar Bhupalpally	65.6	83
97	Tamil Nadu	Salem	64.5	84
98	Karnataka	Ballari	64.1	85
99	Telangana	Nirmal	63.6	86
100	Tamil Nadu	Karur	63.6	86
101	Karnataka	Chitradurga	63.1	87
102	Andhra Pradesh	Vizianagaram	61.7	88
103	Tamil Nadu	Thiruvannamalai	61.7	88
104	Tamil Nadu	Cudallore	61.3	89
105	Tamil Nadu	Dindigul	61.0	90
106	Tamil Nadu	Virudhunagar	59.8	91
107	Karnataka	Koppal	58.8	92
108	Tamil Nadu	Perambalur	57.4	93
109	Karnataka	Bidar	56.5	94
110	Karnataka	Gadag	55.2	95
111	Tamil Nadu	Pudukottai	55.2	95
112	Tamil Nadu	Ariyalur	54.6	96
113	Telangana	Komaram Bheem Asifabad	54.0	97
114	Tamil Nadu	Viluppuram	53.8	98
115	Karnataka	Raichur	53.0	99
116	Karnataka	Bagalkot	51.3	100
117	Telangana	Adilabad	50.8	101
118	Karnataka	Vijayapura	44.8	102
119	Karnataka	Yadgir	37.4	103
120	Karnataka	Kalaburagi	36.5	104

Source: NFHS-5

Wall State

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