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RAPID ASSESSMENT ON CONTINUATION OF BASIC WASH SERVICES DURING COVID-19 IN INDIA

FINAL REPORT

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ACKNOWLEDGEMENTS

COVID-19 wreaked havoc for the last 18 months around the world, with the first wave hitting India in early March 2020. Water, Sanitation and Hygiene (WASH) has never been more important than during the pandemic, which essentially is a key component for COVID-19 response on Infection Prevention and Control.

UNICEF and WaterAid India works closely with rural and urban communities on WASH advocacy, programming and delivery. Both the organizations provided support in COVID-19 response with a focus on WASH. However, data on WASH basic services was one of the key requirements to understand the overall status in the communities due to the pandemic. UNICEF India partnered with WaterAid to conduct this assessment to understand the continuation of WASH basic services in the rural communities of the country.

We would like to acknowledge the vision of Shri Arun Baroka, Joint Secretary, Ministry of Jal Shakti, in trusting UNICEF with carrying out this important agenda of evidence generation. We would like to thank Mr. Nicolas Osbert, Chief of WASH, UNICEF and Mr. V. K. Madhavan, Chief Executive of WaterAid, India, for providing the overall vision and sectoral leadership. We want to thank Ms. Chandra Ganapathy (Advisor – Programmes and Learning) WaterAid, and Mr. Sujoy Mojumdar (WASH Specialist, Sanitation Lead, UNICEF) for being the key technical advisor for this assessment. We want to acknowledge the valuable inputs from all output leads from UNICEF Delhi Section.

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Sincerely from

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ABBREVIATIONS

BPL	Below Poverty Line
OBC	Other Backward Class
ODF	Open Defecation Free
PRI	Panchayati Raj Institutions
SC	Scheduled Caste
SPSS	Statistical Package for Social Sciences
ST	Scheduled Tribe
ULB	Urban Local Body
WASH	Water, Sanitation and Hygiene

EXECUTIVE SUMMARY

COVID-19 has impacted countries across the globe in varying degrees. In India, the pandemic led to the government imposing a nationwide lockdown starting from 24 March 2020, during which almost all activities came to a standstill for the subsequent months. Even though activities have resumed in some capacity, India is still grappling with the virus and devising ways to soften the blow.

In the last few months, certain sections of the society, particularly health-care workers, have worked relentlessly to help tackle the pandemic. However, it became very clear early on that COVID-19 was not just a health crisis that could be conclusively dealt with by only health-care professionals, and so in the wake of this realization, WASH practices and services emerged as the primary forces to manage the pandemic.

To understand the on-ground situation of WASH practices and services in the country, UNICEF and WaterAid undertook a rapid assessment across 10 states and 30 districts of India.. The purpose of this assessment was to understand the impact of COVID-19 on basic WASH services, including access to drinking water, toilets and hygiene practices. The assessment was conducted between the months of December 2020 and February 2021.

The survey entailed quantitative data collection from a total of 9221 household-level respondents and 653 intermediate functionaries (frontline workers, elected representatives, teachers, etc.). Given the ongoing pandemic, all surveys were carried out telephonically with the target respondents.

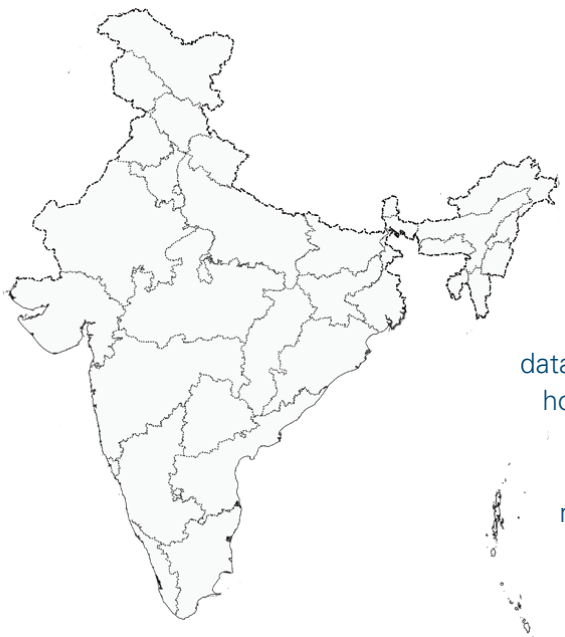
RAPID ASSESSMENT OF WASH PRACTICES AND SERVICES IN INDIA

10
States

30
Districts

9221
Household-level respondents

653
Intermediate functionaries



Dec 2020 – Feb 2021

The study entailed quantitative data collection from a total of 9221 household-level respondents and 653 intermediate functionaries (frontline workers, elected representatives, teachers, etc.). Given the ongoing pandemic all surveys were carried out telephonically with the target respondents.

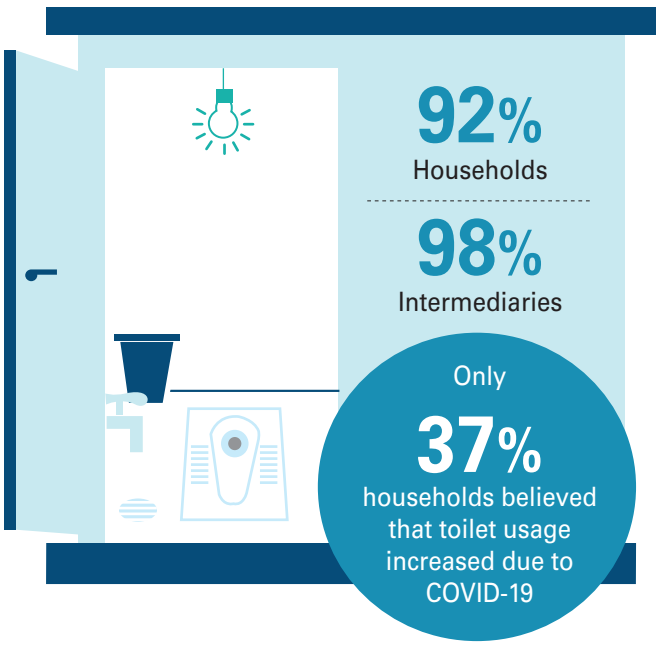
Key Findings

Sanitation Services

Around 92 per cent of household respondents and 98 per cent of intermediate functionaries reported as having a functional toilet at home, and only a few reported as having no or non-functional toilets. Nearly all household participants from Kerala have functional toilets at home, whereas the maximum number of household participants were from Bihar (18 per cent) and Uttar Pradesh (13 per cent) who reported having no toilets.

An interesting finding is that very few household-level respondents (37 per cent) were of the opinion that toilet usage had increased due to COVID-19, as a majority of them (56 per cent) believed that there was no change in toilet usage due to the pandemic. Safety and security was one of top reasons stated by household respondents (75 per cent) who reported an increase in toilet usage during the pandemic. Those who reported a decrease in toilet usage stated the lack of water as the major reason

AVAILABILITY OF FUNCTIONAL TOILET AT HOME



Environmental Services

About 41 per cent of household-level respondents and 38 per cent of intermediaries used recycling as a means of garbage disposal. This was followed by throwing the garbage in the open by 35 per cent of the respondents and giving it to the garbage collector (32 per cent) in the intermediate functionary sample.

Respondents who utilized the services of garbage collectors (14 per cent of the total sample) were asked if they were satisfied with their services, and 86 per cent responders replied in the affirmative. A majority of the people who were not satisfied with the services of the garbage collectors belonged to the state of Bihar (23 per cent).

Disposing of wastewater in the drains is a common practice across states. Overall, 52 per cent of respondents disposed of wastewater via drains. The maximum number of respondents were from Andhra Pradesh (76 per cent), Bihar (68 per cent) and Uttar Pradesh (68 per cent) who used drains to dump wastewater and the smallest number (10 per cent) in this case was reported from Kerala. Letting wastewater flow out into the open or disposing of it in soak pits are some of the other common means of wastewater disposal.

Animal faeces is the most common type of waste reported as being seen in the village premises by 51 per cent of the respondents, followed by plastic waste (47 per cent), garbage dumped in the open (37 per cent) and human faeces (30 per cent). The maximum number of respondents were from Odisha and Bihar who responded affirmatively about seeing human and animal faeces. This falls in line with the responses of a majority of the intermediate functionaries of both states who stated that their villages were not open defecation-free.

About 60 per cent respondents replied in the affirmative about cleaning and spraying of disinfectant being carried out in public water points, and 59 per cent said the same about the activities being performed in the community/ streets. However, 50 per cent respondents stated that no cleaning of community toilets was being carried out.

RECYCLING AS A MEANS OF GARBAGE DISPOSAL

41% Households

38% Intermediaries

14% Total respondents utilized the service of garbage collectors

52% Total respondents dispose of waste water via drains

ODF Sustainability

Nearly 67 per cent intermediary respondents knew about Open Defecation Free (ODF) sustainability and only a few had no knowledge about the same. Regarding the ODF sustainability plan, only 44 per cent Gram Panchayats have implemented it and a majority of these either belong to Kerala (88 per cent) or Chhattisgarh (75 per cent). Among the states which did not have an ODF sustainability plan, the maximum number of intermediaries were from West Bengal (94 per cent) and Bihar (69 per cent). The Village Sanitation Committee (53 per cent), frontline workers (49 per cent) and WASH Forums/other civil society organizations (47 per cent) are some of the common agents identified by the intermediaries as being engaged in implementing sanitation activities in their communities. About67 per cent intermediaries were of the view that awareness programmes for behaviour change were one of the most common activities being performed in the village.

About 80 per cent intermediaries were of the opinion that no disruption was faced in the maintenance of community facilities (toilet and water points) due to the pandemic. However, a substantial number of intermediaries (60 per cent) from Andhra Pradesh claimed to face disruption.

When asked about the key areas on which the intermediaries thought priority action was needed, 73 per cent of them were of the opinion that wastewater management and the installation of solid waste collection/disposal systems required immediate attention.

AMONG INTERMEDIARIES

67% knew about ODF sustainability

67% viewed awareness programmes for behaviour change as one of the most common activities being performed in village

73% believed that wastewater management & installation of solid waste management systems were urgent

80% believed that the pandemic did not disrupt maintenance of community facilities

Water Services

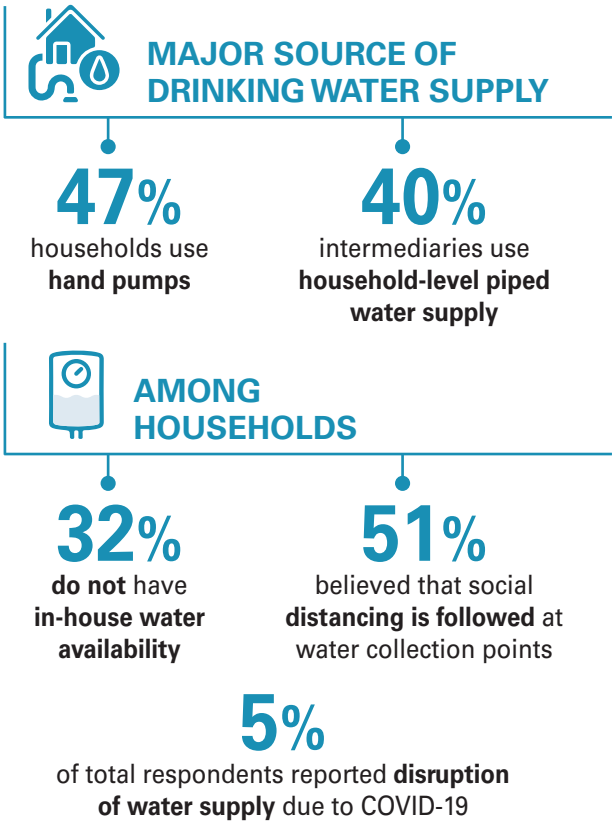
About 47 per cent household respondents use hand pumps as the major source of drinking water supply. Handpumps are the major source of water supply for a majority of the respondents in Bihar (92 per cent), Uttar Pradesh (82 per cent) and Odisha (63 per cent). In contrast to the household survey, a majority (40 per cent) of the respondents in the intermediary survey stated using household-level piped water supply in their homes as a major source of drinking water.

This shows a clear distinction between the household survey and the intermediary survey findings. Several factors like desirability bias, the ability to avail certain services because of greater awareness, etc. could be the reason behind more intermediaries stating household-level piped water as their major source of drinking water.

Of the household respondents who do not have in-house water availability (2925 respondents, i.e., 32 per cent), a majority of them (66 per cent) mentioned that they spent more than 15 minutes in total collecting water every day. Primarily, girls and women (86 per cent) were responsible for collecting water. Interestingly, out of all states, a majority (35 per cent) of the respondents from Karnataka stated that the men collected water for the household.

About 51 per cent households were of the opinion that social distancing was always taken care of at the water collection points. However, more than half of the respondents (53 per cent) from West Bengal reported that social distancing was never followed. Out of the respondents (both at household and intermediary levels) who do not have in-house water availability, a majority of them stated that water points used by them were always disinfected. West Bengal household respondents (60 per cent) and intermediaries (67 per cent) were of the opinion that water points were never disinfected.

Disruption in water supply due to COVID-19 was reported by 5 per cent of the total respondents. Half of the respondents from the Fatehpur (Uttar Pradesh) district have stated that water supply was disrupted due to the pandemic.



Hygiene Services and Supply

About 94 per cent households and 98 per cent intermediaries stated having the facility of handwashing at home. Buckets and soaps (67 per cent), followed by wash basins with taps (13 per cent), were listed as the top facilities. Handwashing after using the toilet was chosen as the most common handwashing practice by respondents of both target groups.

About 70 per cent household-level respondents denied having any handwashing facilities in the public places of their communities. A majority of the household-level respondents (77 per cent) and intermediaries (79 per cent) reported having access to sanitary absorbents or sanitary napkins, with significant exceptions notably

from stakeholder groups of Karnataka and Bihar, highlighting potential equity issues in regards to access and use of hygienic material.

Overall, 84 per cent households and 91 per cent intermediaries believe that the practice of handwashing has increased due to COVID-19. Households and intermediaries from Bihar reported the smallest percentage of increase among all the states.

Availability of **handwashing facility at home**

94% households	98% intermediaries

Handwashing after toilet use was reported as the **most common handwashing practice** among households & intermediaries

Access to **sanitary absorbents** or **sanitary napkins**

77% households	79% intermediaries

Handwashing practices have increased due to COVID-19 according to:

84% households	91% intermediaries

Operations, Management and Discrimination

About 46 per cent household respondents and 64 per cent intermediaries were aware about the Nigrani or Good Morning Committee formed under the Swachh Bharat programme in their respective villages. At the household level, respondents from Andhra Pradesh (92 per cent) have the highest awareness, whereas households in West Bengal (16 per cent) were least aware. Among the intermediaries, Uttar Pradesh had the highest number of aware households (90 per cent), whereas Bihar had the lowest number (29 per cent).

At the household level, 56 per cent respondents reported receiving WASH products/items, such as soaps, sanitizers and face masks from the Gram Panchayat, Urban Local Bodies (ULBs) or the village administration.

The incidents reported by the households and intermediate functionaries regarding discrimination or stigmatized incidents related to COVID-19 around WASH services in the Gram Panchayat or the community were highest in West Bengal (28 per cent household respondents and 56 per cent intermediaries), particularly in South 24 Parganas.

AWARENESS ABOUT NIGRANI OR GOOD MORNING COMMITTEE IN VILLAGES

46% households	64% intermediaries

64% households reported **receiving WASH products** from Gram Panchayats, ULBs or administration

WASH in Schools

91 per cent intermediaries reported that schools were being used as quarantine facilities. An attempt was made to understand if schools had a mechanism for daily cleaning of toilets with appropriate disinfectants. It was seen that, on an average, only one to two schools in each district of the sampled states have such a mechanism in place.

91% intermediaries reported that **schools** were used as **quarantine facilities**

only 1–2 **schools** in each district of the sampled states have a **mechanism for daily cleaning of toilets with appropriate disinfectant**

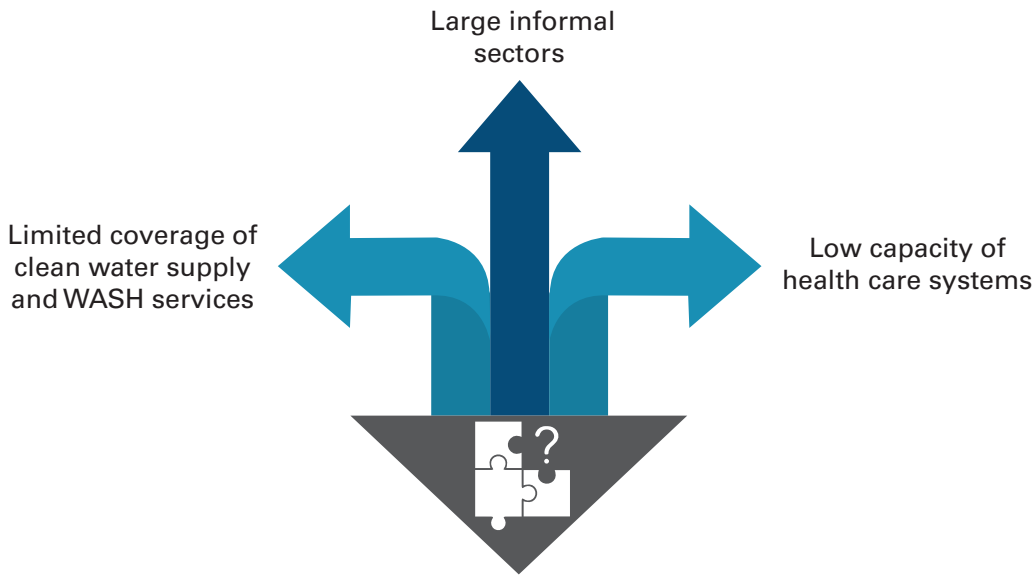
CHAPTER 1

INTRODUCTION

COVID-19 is threatening all countries in the world to differing lengths and in different ways. The United Nations Framework for the Immediate Socioeconomic Response to the COVID-19 crisis warns, "The COVID-19 pandemic is far more than a health crisis: it is affecting societies and economies at their core." The impact of the pandemic is huge in India since it has increased poverty and inequalities at a big scale, making the achievement of Sustainable Development Goals (SDGs) even more urgent.

Since the outbreak of the novel Coronavirus pandemic in early 2020, good hygiene practices have emerged as the first line of defence against the virus. The crucial role played by water, sanitation and hygiene (WASH) services in ensuring a safe and healthy population has never been more imperative. As we continue to grapple with the virus, the responsibility to ensure equal and easy access to WASH provisions as well as to build resilient infrastructure becomes urgent. Investing in water and sanitation systems today is the single most resource-effective strategy to increase pandemic resilience for the future.

In India, the path to recovery faces challenges that are unique to developing economies. Among these challenges are – limited coverage of clean water supply and sanitation services, lower capacity of health care systems and large informal sectors. To understand the on-the-ground situation of WASH practices and services in the country, WaterAid along with UNICEF has proposed to undertake a rapid assessment in 10 States and 30 districts of India. This assessment aims to understand the impact of COVID-19 on basic WASH services, which includes access to drinking water, access to toilets and hygiene practices. The assessment will bring in insights related to access to health facilities, operation and maintenance and opinion of intermediate functionaries such as frontline workers, elected representatives, teachers and others; and in terms of the functionality of the services provided. The insights and findings from the survey will be used to appraise key stakeholders (examples include local governments, district administration and departments responsible for WASH and others as appropriate) at varied levels.



CHALLENGES TO THE PATH TO COVID-19 RECOVERY IN INDIA

CHAPTER 2

OBJECTIVES OF THE ASSESSMENT

The main aim of this assessment is to understand the on-the-ground situation of WASH practices and services in India and understand the impact of COVID-19 on basic WASH services. It attempts to gauge the following aspects of WASH practices and services.

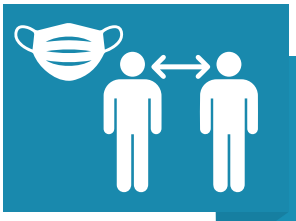
ASPECTS OF WASH PRACTICES AND SERVICES STUDIED IN THE RAPID ASSESSMENT

Water availability in adequate quantity with focus on the household level, water quality from user perception and potential sanitary risks **01**

Challenges associated with the collection and storage of water **02**

Access to toilets, usage of toilets, access to other sanitary services like waste disposal, sanitary conditions of the village and the impact of COVID-19 on these facilities and services **03**

Prevalent hygiene practices such as handwashing and disposal of child faeces and the impact of COVID-19 on hygiene practices **04**



Aspects of COVID-specific protocols and requirements (such as physical distancing, wearing of masks, disinfection of public facilities, improved protection to sanitation and other frontline workers) in terms of access, availability, etc. **05**

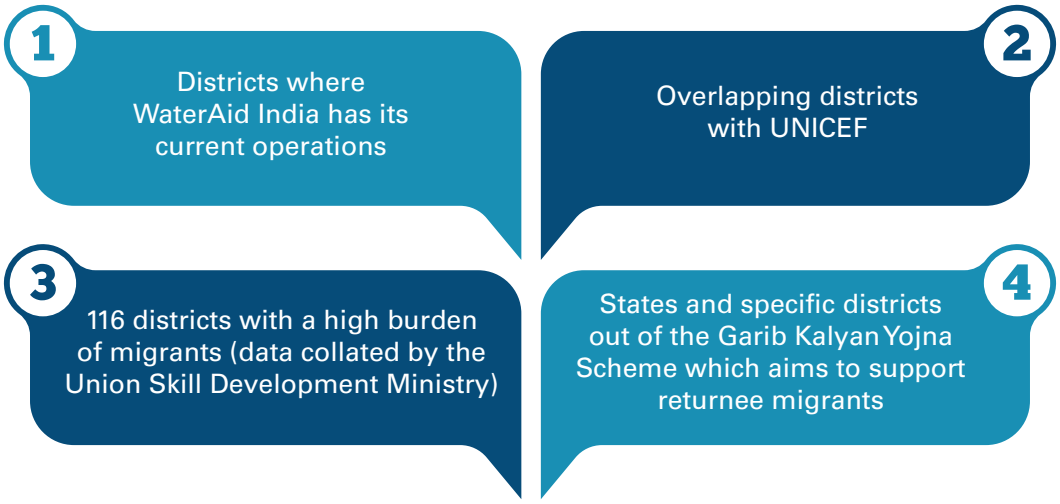
CHAPTER 3

METHODOLOGY

3.1. Sampling

The rapid assessment was undertaken during the period of December 2020 to February 2021. Purposive sampling of districts was performed, where WaterAid India, UNICEF and its partner agencies have a presence across the country at the community level.

The 10 states and 30 districts selected primarily include eight of the high migrant-burden districts (Unnao, Fatehpur in Uttar Pradesh; Bhadrak in Odisha; Khandwa, Dhar, Dindori in Madhya Pradesh; Gaya, Madhubani in Bihar) out of the total 116 districts as per the list released by the Pradhan Mantri Garib Kalyan Yojana (PMGKY). A few other districts are included to gain pan-India insights to the best possible extent. Table 1 depicts the selected states and districts.



KEY CONSIDERATIONS IN SHORTLISTING THE LOCATIONS

Table 1: Selected States and Districts for Survey

State	Districts
Andhra Pradesh	Chittoor
Bihar	Gaya • Madhubani
Chhattisgarh	Durg • Kabirdham • Kanker
Karnataka	Bangalore Rural • Gulbarga • Raichur
Kerala	Palakkad
Madhya Pradesh	Bhopal • Dewas • Dindori • Dhar • Khandwa • Indore • Sehore
Maharashtra	Wardha • Yavatmal
Odisha	Bhadrak • Deogarh • Nuapada • Balasore
Uttar Pradesh	Bhadohi • Chitrakoot • Fatehpur • Lucknow • Unnao
West Bengal	Darjeeling • South 24 Parganas

3.2. Data Collection

The survey was conducted telephonically due to the ongoing pandemic. This meant that the selection of respondents was limited to households who had phones and were willing to participate in the survey. Phone numbers of participants at the household and intermediary levels (government representatives, community leaders, teachers, sanitation workers and frontline workers) were collected by the WaterAid and UNICEF team from areas where they were present and working. Some of the phone numbers were also from the existing databases of the two organizations. Partner organizations working with WaterAid and UNICEF at the community level helped to prepare a district-wise list of respondents. For each location, two lists of respondents (main and buffer) were prepared to ensure that the sample size was met even after refusals and the unavailability of respondents.

Respective questionnaires were translated into six different languages (Hindi, Malayalam, Oriya, Kannada, Telugu and Marathi) to ensure ease in data collection. Pilot-testing of the questionnaires was performed to calculate the time taken in administering the survey as well as to examine the usefulness of the questions. WaterAid staff performed the pilot-testing of both the questionnaires at the regional level (two forms were filled in four states) to check the flow and appropriateness of the questions and the kind of responses to the questions. Volunteers identified by WaterAid India at the district level were given training on the questionnaires and the interview process. Training of volunteers was performed virtually wherein the questionnaires were discussed in detail. For 2–3 states, one nodal person from the WaterAid programme team was responsible for overseeing the work of the volunteers.

Primary information from households and intermediaries was collected after taking prior appointments and using the shared list. Informed consent and willingness to participate in the survey was very crucial and therefore, respondents were contacted in advance. After a brief introduction and explanation of the purpose for calling, a suitable time slot was fixed for the survey. Sample back checks were also performed for quality assurance. Live data-tracking was done and regular feedback to the data collection team was given to reduce unnecessary delays and gaps.

3.3. Limitations of the Assessment Leading to Plausible Impact on its Findings

As this assessment was conducted remotely (telephonically), contact with all respondents was established based on the contact details already available with the WaterAid and UNICEF teams. This probably had some impact on the data gathered as it limited the ability to ensure that all households in the locality had an equal chance of being selected for the survey.

Additionally, in some of the responses from the intermediaries, there was a possibility of desirability bias, which may primarily stem from them being position-holders, leading to the urge to present their home region in a good light.

The data collection for this assessment was undertaken between the first and second wave of COVID-19 in India. As a result, the findings may not reflect the challenges faced in the space of WASH during COVID-19 peak times.

3.4. Tool

The assessment administered two quantitative tools (household level and intermediate functionary level) for the relevant stakeholders. The survey tools are in Annexure I and II.

3.5. Data Cleaning and Analysis

A total of 9221 household representatives and 653 intermediate functionaries participated in the assessment. A total of 206 cases in the household survey and 25 cases in the intermediaries' survey were dropped due to consent issues and missing data. Hence, a total of 9015 (4579 male and 4436 female) and 628 (331 male and 297 female) responses at the household and intermediary levels respectively were utilized in the analysis.

The analysis was performed using the Statistical Package for Social Sciences (SPSS) Version 25.0. Stratified analysis was conducted based on states and districts covered during the study. Standard count and mean and percentage metrics were used to compute the variance among the variables in the data sets (household and intermediate functionaries).

The overall samples of the household and intermediate functionaries utilized for analysis at the state and district levels are shown in Tables 2 and 3.

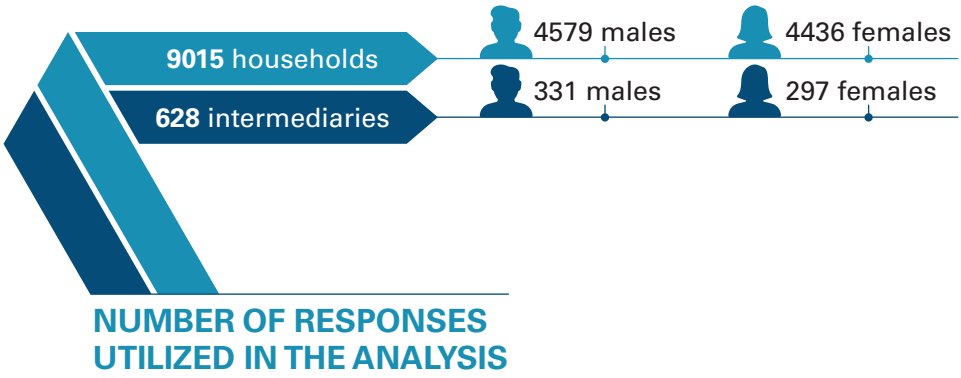


Table 2: Overall Sample Size of Household and Intermediaries (State Level)

State	Household	Intermediaries
Andhra Pradesh	299	20
Bihar	600	42
Chhattisgarh	898	60
Karnataka	900	79
Kerala	300	25
Madhya Pradesh	2104	142
Maharashtra	600	41
Odisha	1203	76
Uttar Pradesh	1500	107
West Bengal	611	36
Total	**9015**	**628**

Table 3: Overall Sample Size of Household and Intermediaries (District Level)

State	Districts	Household	Intermediaries
Andhra Pradesh	Chittoor	299	20
Bihar	Gaya	300	20
	Madhubani	300	22
Chhattisgarh	Durg	300	20
	Kabirdham	299	20
	Kanker	299	20
Karnataka	Bangalore Rural	300	35
	Gulbarga	300	20
	Raichur	300	24
Kerala	Palakkad	300	25
Madhya Pradesh	Bhopal	301	20
	Dewas	300	20
	Dhar	300	20
	Dindori	300	20
	Indore	300	20
	Khandwa	300	20
	Sehore	303	22
Maharashtra	Wardha	301	21
	Yavatmal	299	20
Odisha	Balasore	302	18
	Bhadrak	301	20
	Deogarh	300	20
	Nuapada	300	18
Uttar Pradesh	Bhadohi	301	22
	Chitrakoot	300	20
	Fatehpur	300	24
	Lucknow	300	20
	Unnao	300	21
West Bengal	Darjeeling	300	17
	South 24 Parganas	311	19
Total		**9015**	**628**

CHAPTER 4

LITERATURE REVIEW

4.1. WASH Scenario in India and the Prevalence of COVID-19 in the Sampled States

India is the second most populous country in the world, with a rapidly increasing population that directly impacts the level of stress on WASH services. Water and sanitation, besides having a direct impact on public health, are also linked to food security, climate change and many other developmental challenges, thus becoming the key to sustainable ecosystems. It has been reported that close to 2,00,000 people die every year in India due to inadequate access to water, sanitation and hygiene facilities[1]. Strengthening the WASH infrastructure has been one of the focus areas of the Government of India (GOI) and in light of that, several schemes (both at the national as well as the regional level) have been launched. However, with the onset of COVID-19, these efforts have been disrupted, putting at risk the ability to achieve these desired goals.

Poor sanitation as well as open defecation seriously impacts the environment, public health and the economy. The impact of lack of sanitation services on India's GDP has been estimated at 5.2 per cent, which is equivalent to 106.7 billion US dollars, the highest across the globe[2]. In 2014, India had the highest number of people (597 million) practising open defecation (OD)[3]. The government launched the Swachh Bharat Mission the same year to eliminate the practice. Even though at the end of 2020, government reports declared most villages to be ODF, contradictory data sets have been published in other national-level surveys. For instance, the National Sample Survey of 2018–2019 reported that nearly 30 per cent of rural Indian households do not have access to toilets[4]. Similarly, the rural areas in the focus states covered in the National Family Health Survey 4 (NFHS-4) also reported OD behaviour at 70.2 per cent[5]. While sanitation has remained a consistent priority for years, the current government has made the provision of piped drinking water supply a clear focus area with the establishment of the Ministry of Jal Shakti. This comes against the backdrop of less than 50 per cent of India's population having access to safely-managed drinking water that is free of contamination, with sources located within household premises[6]. India is still the country with the largest population living without clean water, but it is also near the top of the list for most people reached: more than 300 million since 2000 or nearly equivalent to the population of the United States, as per the 2018 report by WaterAid[7]. While merely having access to piped water supply doesn't translate into access to safe drinking water, it is the first step towards reducing the economic burden of inadequate water supply on low-income households across the country.

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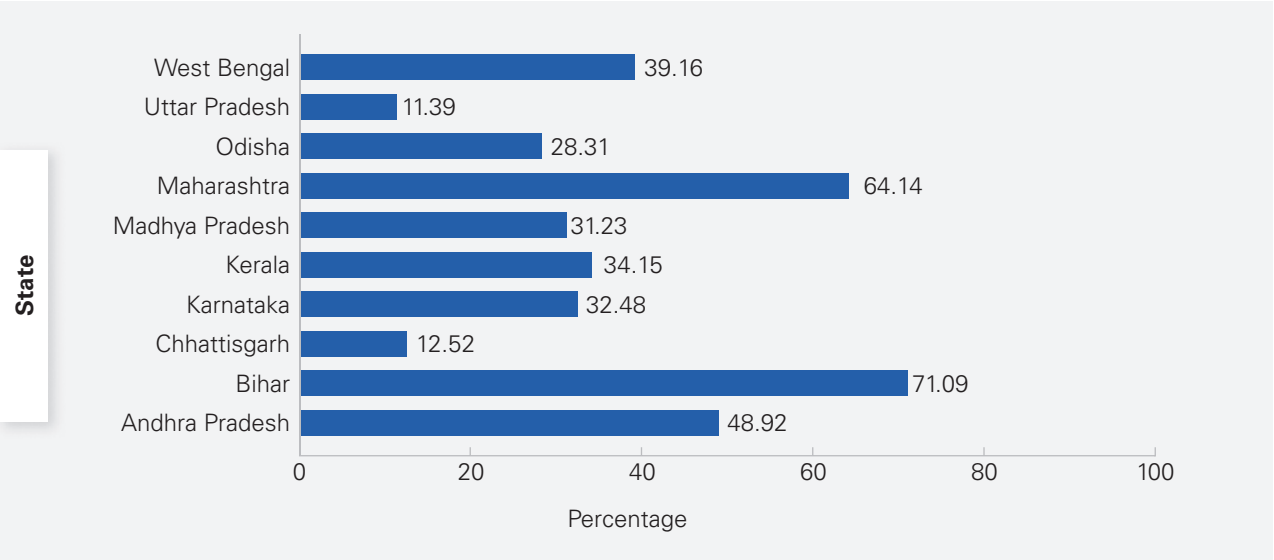
6 UNICEF, WASH sanitation and hygiene Strengthening sustainable WASH programming. Retrieved May 2, 2021 from https://www.unicef.org/india/what-we-do/water-sanitation-hygiene#:%7E:text=Less%20than%2050%20per%20cent,present%20in%201.96%20million%20dwellings

7 https://www.livemint.com/Politics/WoHowGWquof0lr7KPDV7GO/India-has-worlds-highest-inhabitants-without-safe-water-re.html; https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/The%20Water%20Gap%20State%20of%20Water%20report%20lr%20pages.pdf

Figure 1: Households with Tap Water Connections in Sampled States



The onset of COVID-19 brought to the forefront the need for a good WASH infrastructure, combined with easy accessibility of WASH services and facilities. One of the most crucial protective measures against the novel Coronavirus was the frequent washing of hands with soap. The combination of soap and water accompanied by the thorough rubbing of hands kills the virus within seconds – the consensus appears to be that 20 seconds is the minimum amount of time needed. However, for a large proportion of India's population, this is easier said than done.

As per existing and publicly available data, only 50 per cent of rural Indians and 80 per cent of urban Indians use soap and water to wash their hands - according to the NFHS 2015–16. Water scarcity is a daily reality for a majority of Indians. Around 800 million people in the country face high to extreme water stress and as much as 70 per cent of surface water resources are contaminated, according to a 2019 NITI Aayog report. As per the MIS[8] of the Ministry of Jal Shakti, as of 2020, 72 per cent rural households do not have access to piped water supply. Figure 1 gives an overview of tap water connections in the sampled states[9].

About 43 per cent of households in rural India access water through hand pumps in common areas and 42 per cent of households in urban India access water through public taps, tube-wells, hand pumps and other common areas[10].

The problem in India is not just the lack of infrastructure. More than half of India's districts, a World Bank report says, are threatened by groundwater depletion or contamination. The affected areas, mostly in rural India, depend on water tankers supplied by Water Utilities to deliver a maximum of 20 to 25 litres of water per person per day – enough for COVID-19 handwashing, but only if the villagers do not use the water for anything else.

Sanitation and solid liquid waste management (SLWM) is another area of concern during the pandemic. There are chances of increase in OD practices and poor SLWM, which creates an overall burden on the WASH service continuity. With the advent of SBM-G Phase 2, sustainability of toilet usage is one of the key criteria under ODF+ guidelines.

[8] https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx
[9] https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx
[10] National Sample Survey (NSS) 76th round report, URL: http://mospi.nic.in/sites/default/files/NSS7612dws/Report_584_final.pdf

Figure 2: Cumulative Count[11] of Cured/Discharged/Migrated COVID-19 Cases in Sampled States

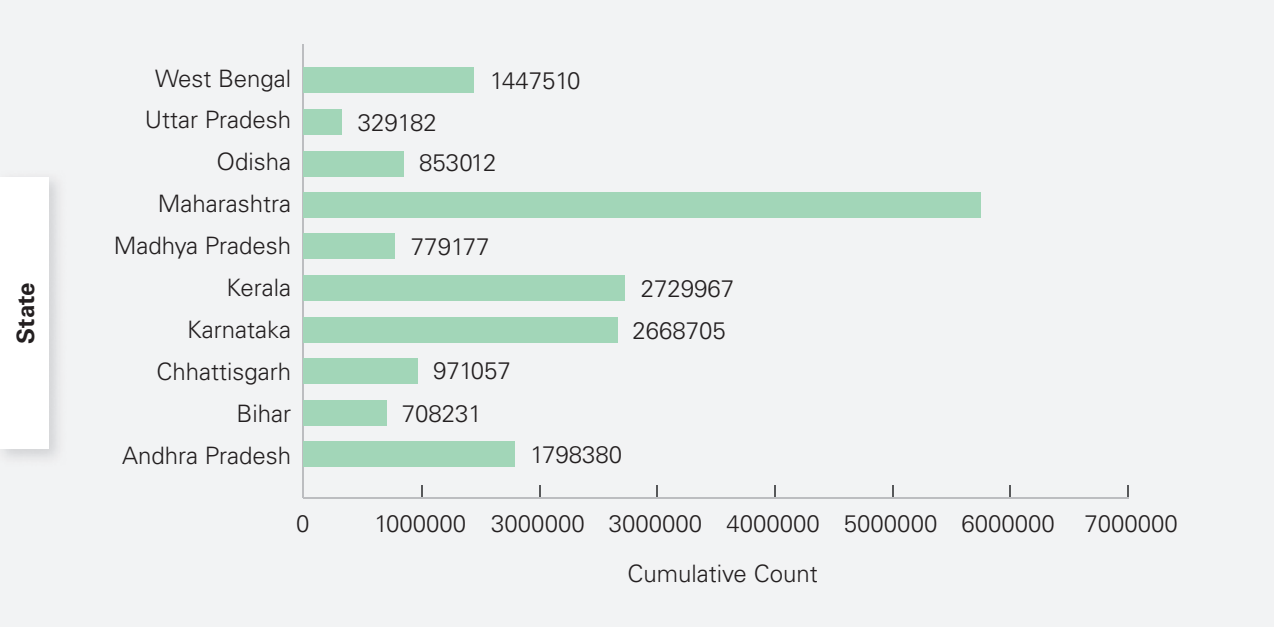
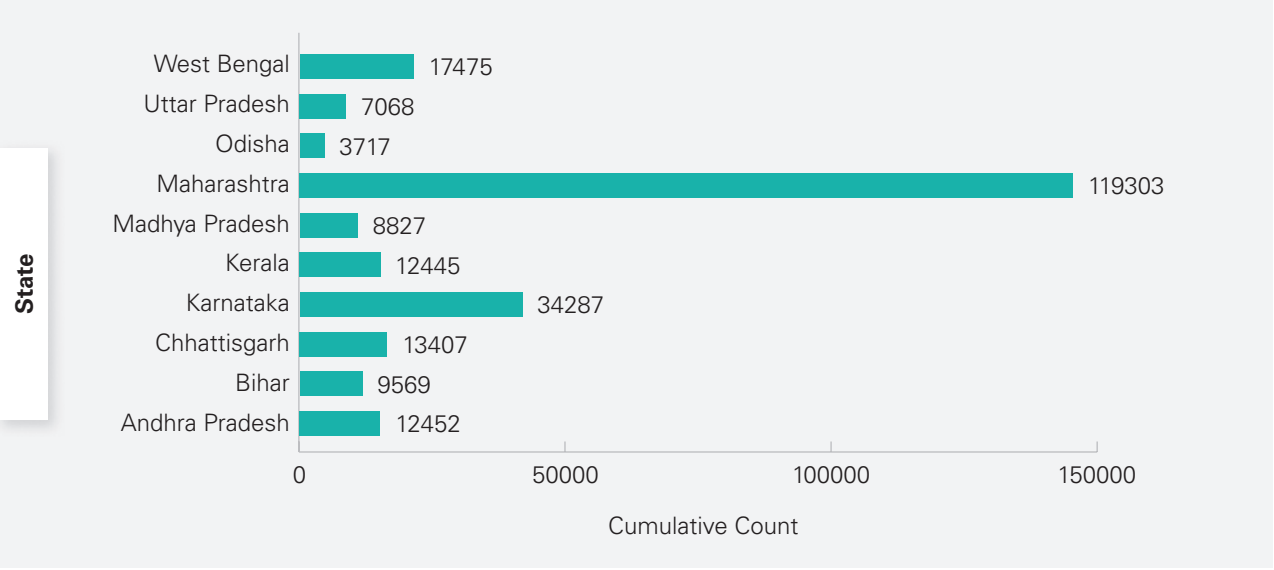


Figure 3: Cumulative Count[12] of Death due to COVID-19 across Sampled States



In the early months after governments worldwide declared the COVID-19 crisis, the focus was on providing emergency water and sanitation services to enable handwashing and disinfection. In India, mobile water kiosks with soap supply were deployed in unserved urban and rural areas. Now, a dual focus is required to ensure the continuity of service delivery in a safe manner.

Figures 2 and 3 show the spread of COVID-19 in the sampled states, in terms of people affected and cured as well as the death count, respectively.

[11] https://www.mohfw.gov.in/ (retrieved on 24 June 2021)
[12] https://www.mohfw.gov.in/ (retrieved on 24 June 2021)

CHAPTER 5

STUDY FINDINGS

5.1. Overall Descriptive Statistics of the Survey

5.1.1. Sociodemographic Characteristics

Household Level

Table A in Appendix III elaborates the sociodemographic characteristics of the household-level respondents. 51 per cent of the respondents in the household survey were male and 49 per cent were female *(see Figure 4)*. In the sampled states, the highest number (67 per cent) of female respondents were from Odisha and the highest number (62 per cent) of male respondents were from Uttar Pradesh.

A majority of the participants were aged 26–45 years (63 per cent); followed by 19 per cent aged 46–60 years, 15 per cent aged 18–25 years, and a mere 3 per cent aged above 60 years *(see Figure 5a)*. Overall, 42 per cent respondents self-reported that they belonged to the Other Backward Classes (OBCs), followed by the Scheduled Castes (SCs) (25 per cent) and the General category (18 per cent) *(see Figure 5b)*.

Figure 4: State-wise Male–Female Ratio (Household)

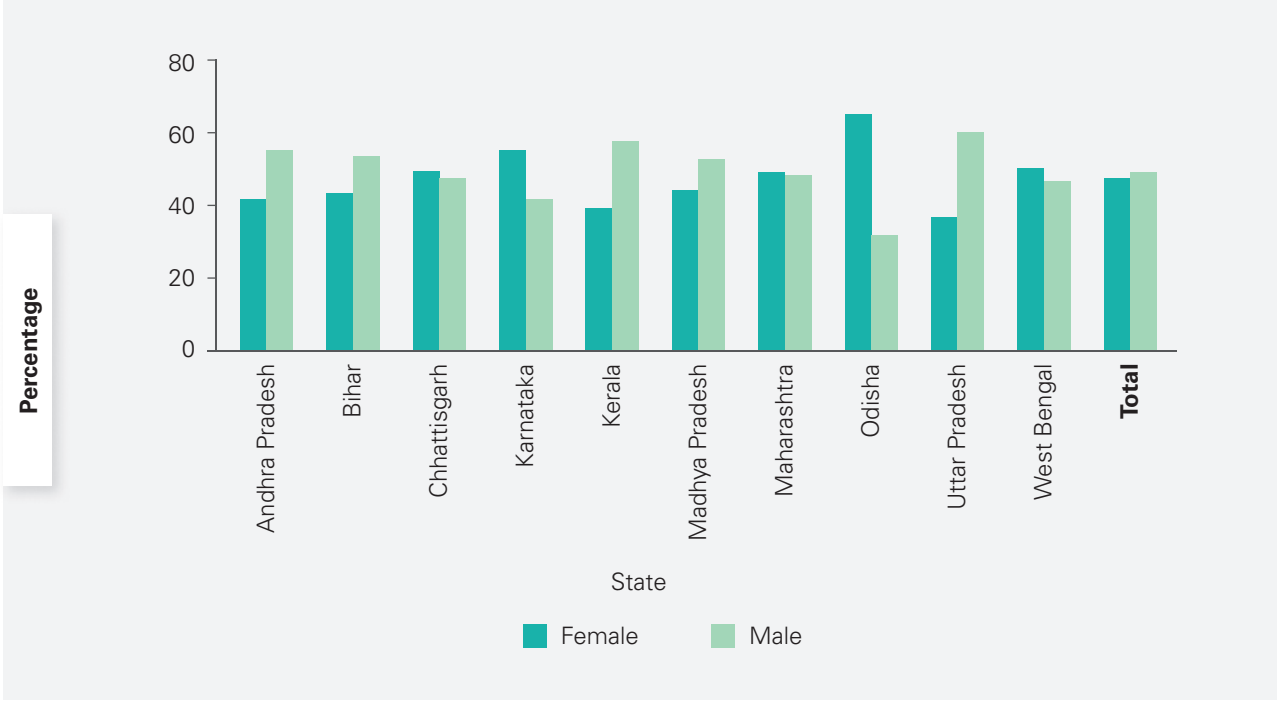


Figure 5a: Age Group (Household)

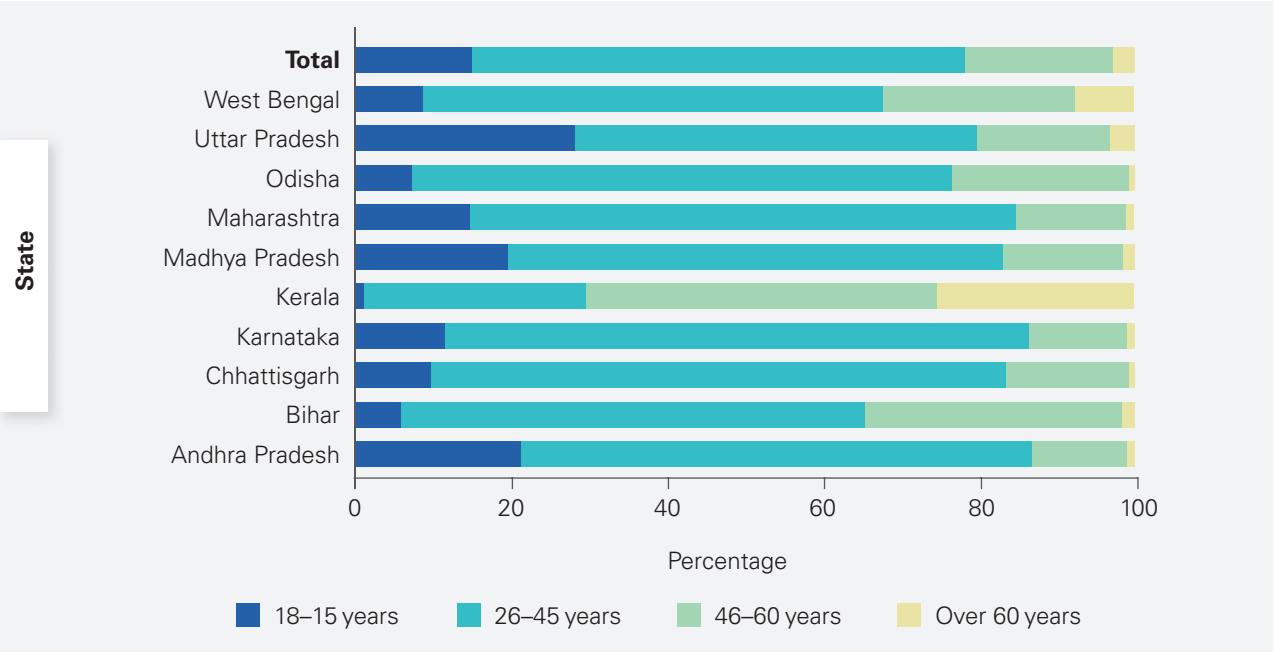
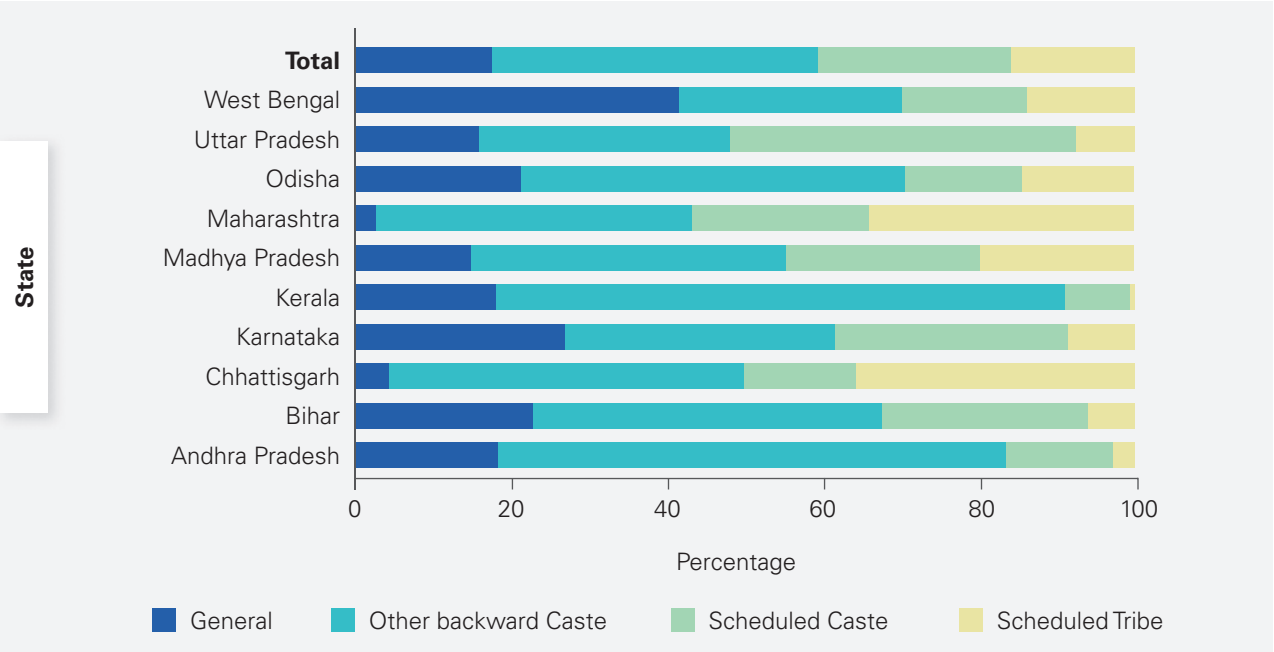


Figure 5b: Caste (Household)



In the household survey sample, 56 per cent of the respondents stated that they had a Below Poverty Line[13] (BPL) ration card (this is in line with the percentage (60 per cent) of the population living BPL at the national level[14]), 7 per cent used the Antyodaya ration card, whereas 12 per cent

[13] As per the Cambridge dictionary, Poverty line is defined as "the official level of income that is needed to achieve a basic living standard with enough money for things such as food, clothing, and a place to live"

[14] https://www.business-standard.com/article/economy-policy/coronavirus-impact-over-100-million-indians-could-fall-below-poverty-line-120041700906_1.html

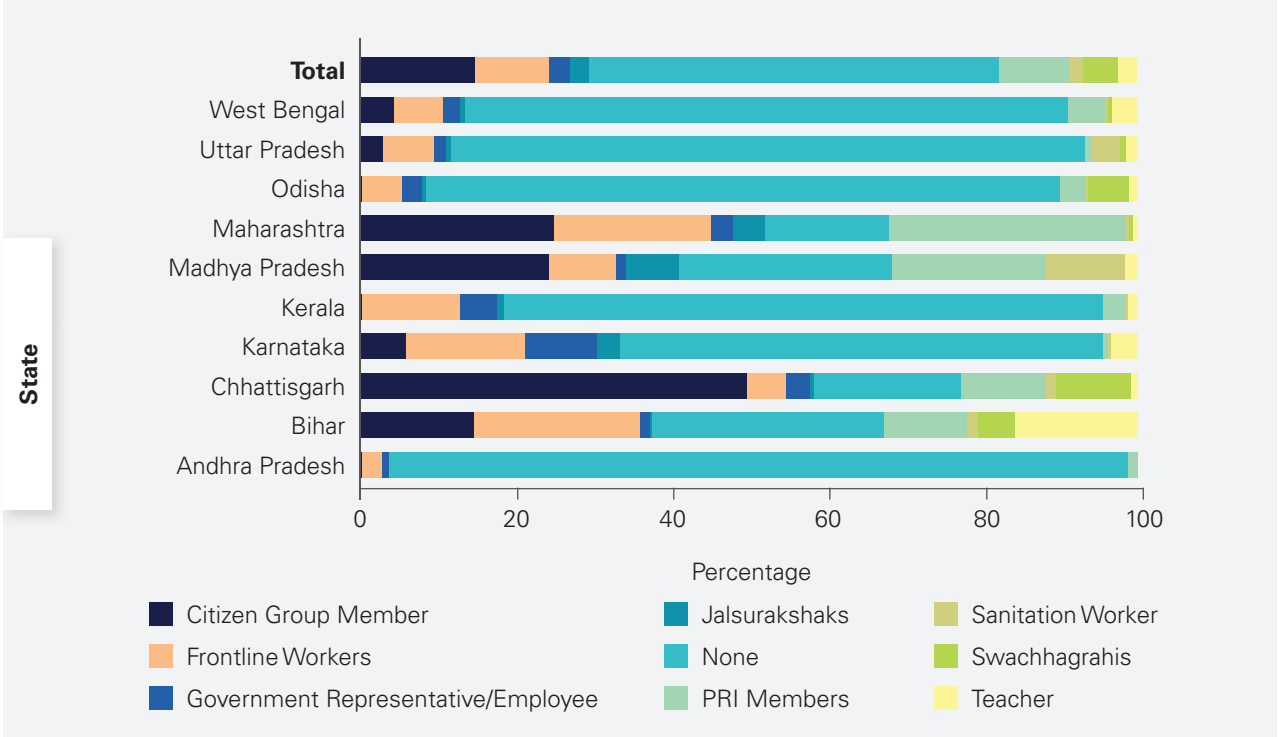
do not have any ration card. Additionally, 25 per cent of the participants reported that they were above the poverty line.

The highest number of respondents having BPL cards (95 per cent) were from Andhra Pradesh. Around 34 per cent respondents from Bihar reported having no ration card, the highest number among the sampled states. The highest number (46 per cent) of Antyodaya ration card holders were from West Bengal and the lowest number were from Andhra Pradesh, with no respondent being an Antyodaya card holder. As for the respondents who were above the poverty line, the highest number was reported from Kerala (69 per cent) and the lowest from Andhra Pradesh (1 per cent).

Respondents were also asked about the number of family members under the age of 6 years. About 21 per cent reported having one male child, and 17 per cent reported having one female child in the family. 35 per cent respondents reported having one male family member over 60 years and 36 per cent reported having one female family member over 60 years. Additionally, 5 per cent respondents stated having one male family member with a disability as against 3 per cent who reported the presence of one female family member with a disability.

The respondents were asked if they held any public office *(see Figure 6)* to which 53 per cent replied in the negative. 15 per cent respondents stated that they were citizen group members, 10 per cent were frontline workers and 9 per cent were PRI workers.

Figure 6: Positions Held by the Household Respondents



Intermediaries Level

Table B in Appendix III highlights the sociodemographic characteristics of intermediate functionaries. Of the intermediate functionaries interviewed, 53 per cent respondents were male, and 47 per cent were female *(see Figure 7)*. Andhra Pradesh reported the highest percentage (75 per cent) of male participation, whereas Kerala reported the maximum percentage (80 per cent) of female participation. Similar to the household sample, 66 per cent of the respondents from the intermediate functionary surveys were aged 26–45 years, followed by 29 per cent aged 46–60 years. About 3 per cent intermediaries were aged 18–25 and a mere 2 per cent were aged above 60 *(see Figure 8a)*.

Figure 7: Male–Female Ratio (Intermediaries)

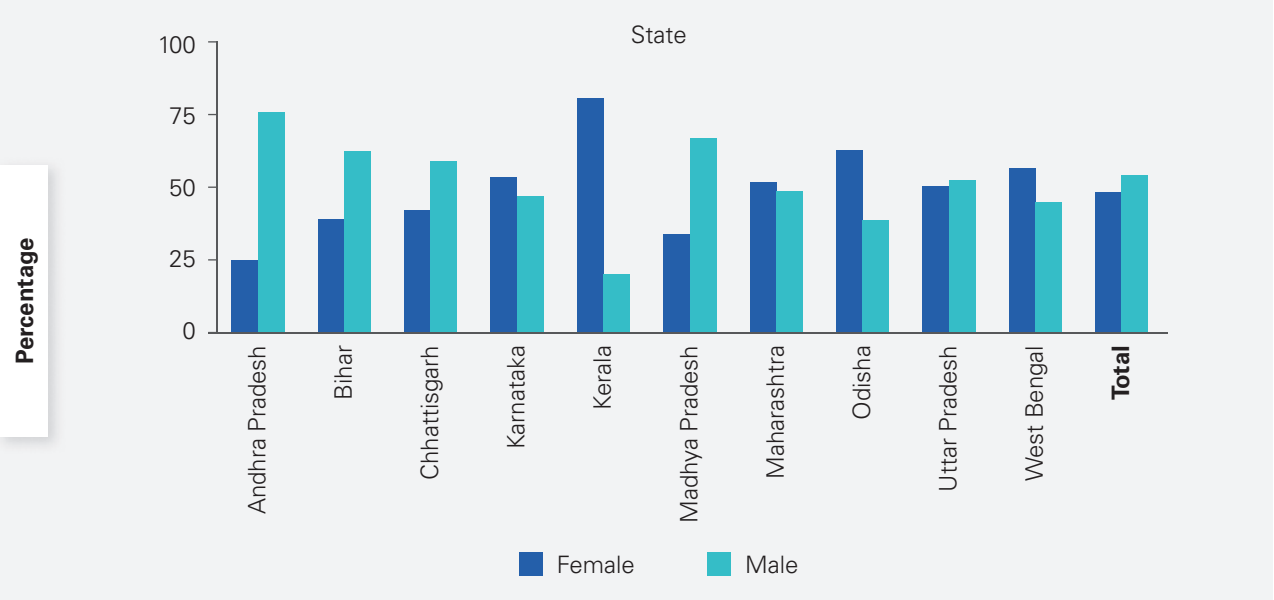


Figure 8a: Age Group (Intermediaries)

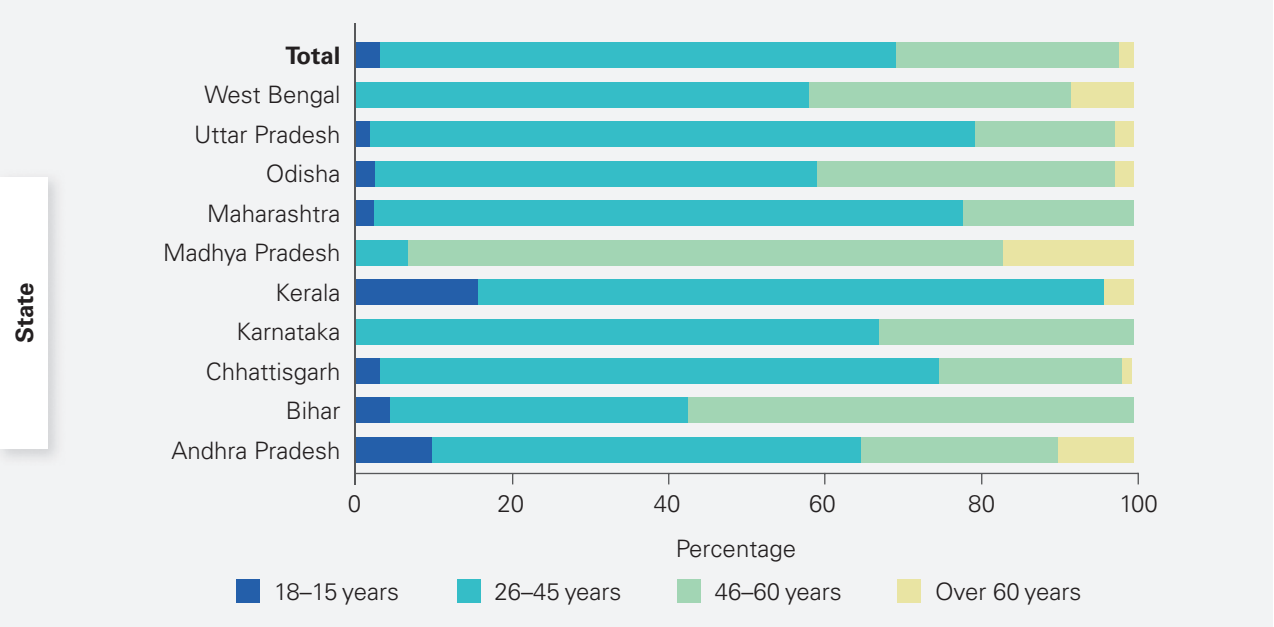


Figure 8b: Caste (Intermediaries)

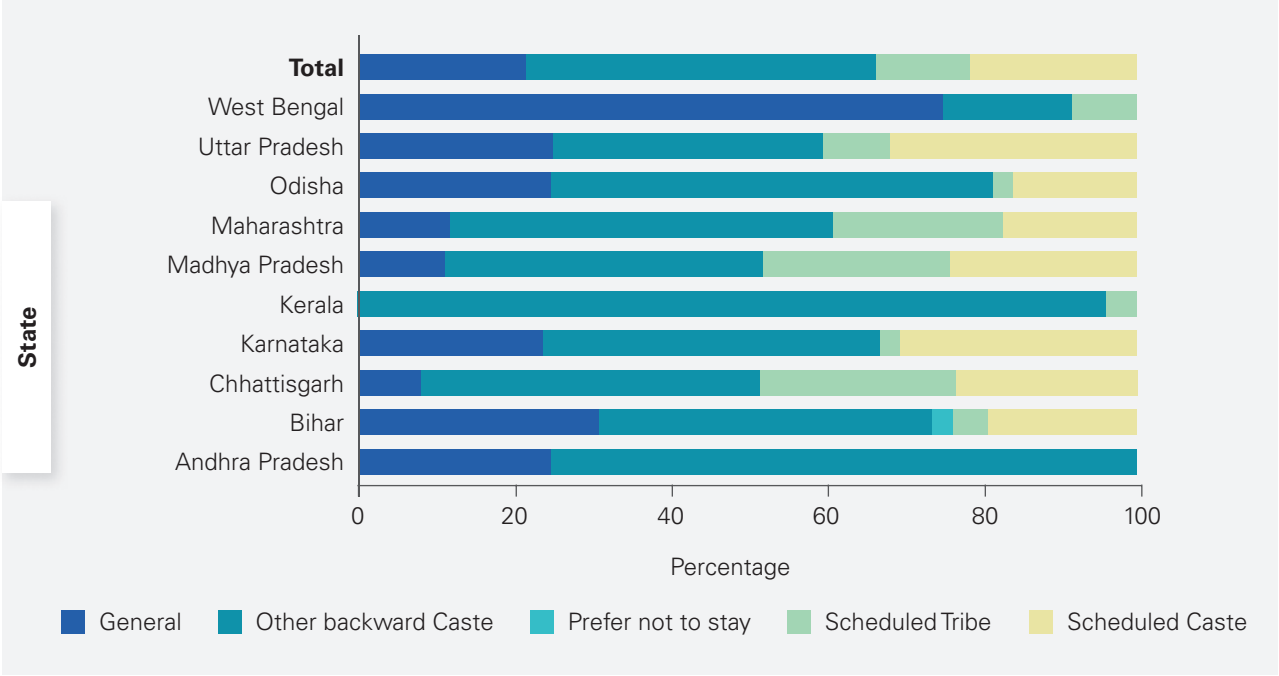


Figure 9: Positions Held by the Intermediate Functionaries

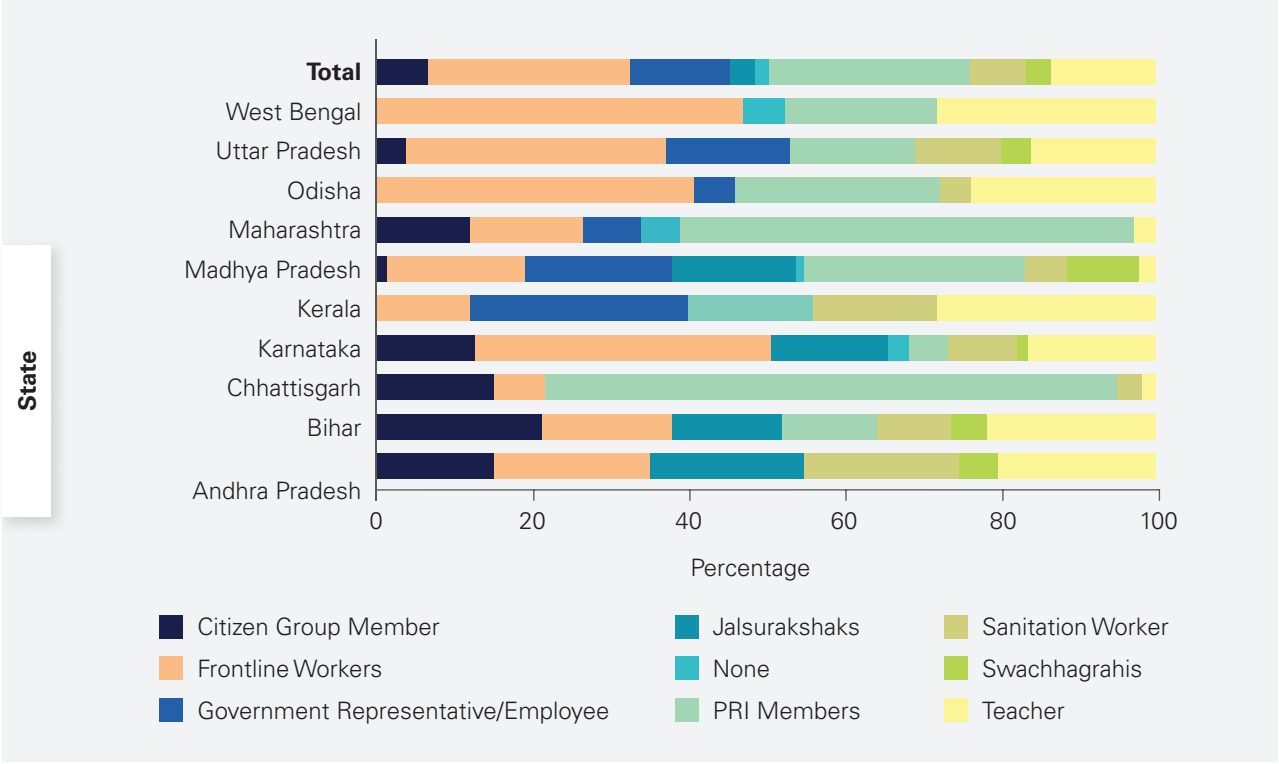
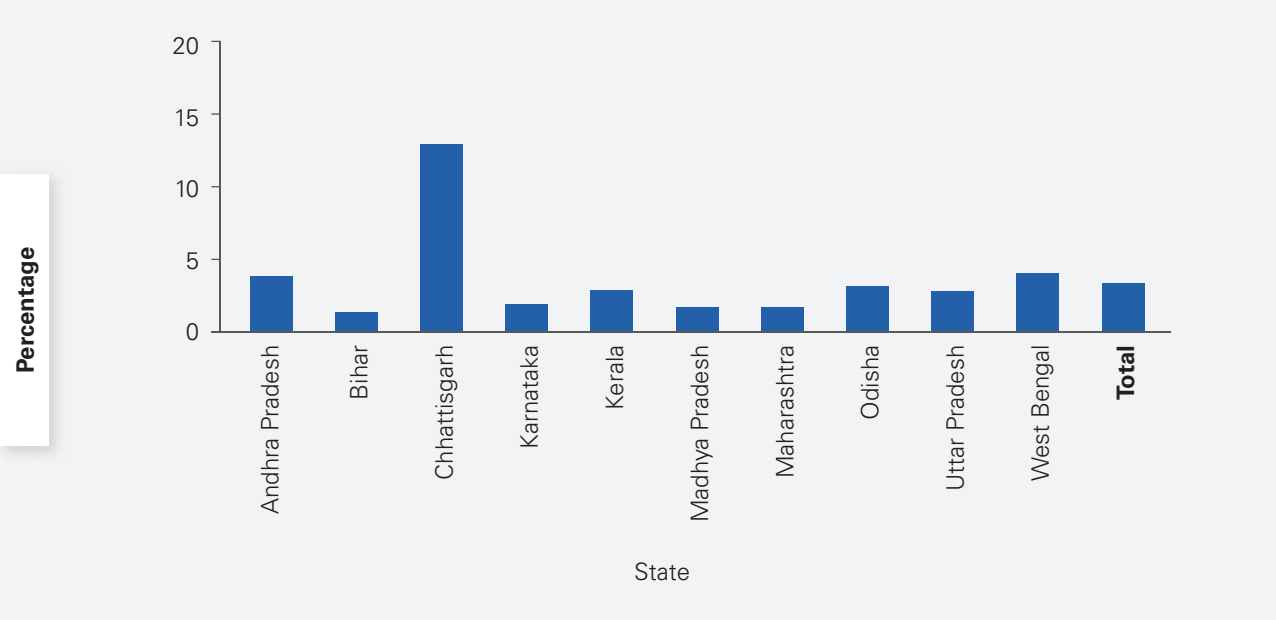


Figure 10: Family Members Being Affected by COVID-19 in the Last Six Months (Household)



About 45 per cent of the sampled respondents' (intermediate functionaries) stated that they belonged to the OBC category, the highest number of which were residing in Kerala (96 per cent). Nearly 22 per cent of the population belonged to the General category, 21 per cent to SCs, and 12 per cent to Scheduled Tribes (STs) *(see Figure 8b)*. Of the sampled intermediate functionaries, 163 (~26 per cent) were frontline workers and 166 (~26 per cent) were Panchayati Raj Institution (PRI) members. Within the states, the maximum number (73 per cent) of PRI workers were from Chhattisgarh *(see Figure 9)*.

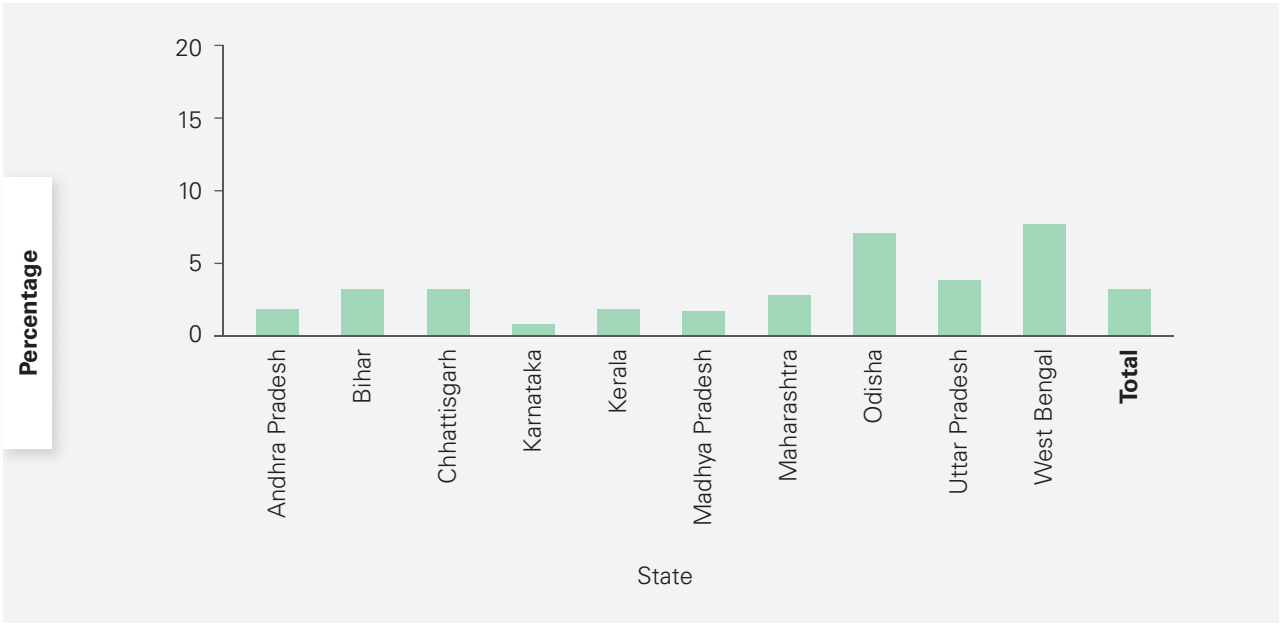
5.1.2. Family Members Being Affected by COVID-19 and Mobility during COVID-19

Household Level

Overall, 3 per cent respondents reported their family being affected by COVID-19 in the last six months. Respondents from Chhattisgarh reported the highest number among the sampled states at 13 per cent *(see Figure 10)*.

On the question of mobility during COVID-19 *(see Figure 11)*, only 3 per cent respondents reported family members returning home from out of station, and a majority of them (8 per cent) belonged to West Bengal. Of the 297 respondents who reported family members returning from outside, 72 per cent reported the return of one male member and 19 per cent of one female member, 9 per cent reported the return of 2 male members and ~5 per cent reported the return of 2 female members.

Figure 11: Family Members Returning from Outside (Household)



5.2. Sanitation Services during COVID-19

5.2.1. Sanitation Services

Availability of Functional Toilet

Overall, 92 per cent households stated having a functional toilet at home, whereas only 6 per cent and 2 per cent reported having no or non-functional toilets respectively *(see Figure 12)*. Nearly all participants from Kerala have functional toilets at home. Of those participants who stated having no toilet at home, the maximum number of participants were from Bihar (18 per cent) followed by Uttar Pradesh (13 per cent). In Uttar Pradesh, the districts reporting the highest number in terms of having 'no toilet at home' were Unnao (33 per cent) and Bhadohi (23 per cent), whereas just a single respondent from Fatehpur stated having no toilet at home. In Bihar, 21 per cent and 14 per cent respondents from Madhubani and Gaya districts respectively stated having no toilet at home. About 18 per cent participants from West Bengal (highest among the sampled states) reported having a non-functional toilet at home.

Of 743 household respondents who had either no or non-functional toilets, 75 per cent went for OD and 21 per cent used their neighbour's toilet. Only 4 per cent participants used the community toilets for defecation purposes. The highest percentage of the usage of community toilets had been reported from Maharashtra (15 per cent).

About 98 per cent intermediate functionaries stated having functional toilets and only ~1 per cent reported having no toilets at home *(see Figure 13)*. The remaining 1 per cent intermediaries reported having a non-functional toilet. All intermediaries belonging to Bihar, Chhattisgarh, Kerala, Madhya Pradesh, Maharashtra and West Bengal had a functional toilet at home. It is interesting to note that 20 per cent intermediaries from Andhra Pradesh reported having no toilet at home, which is the highest number among the sampled states. It is worth noticing that of the intermediate functionaries who had either no toilet or a non-functional toilet, 93 per cent went for OD and 7 per cent used community toilets.

Figure 12: Functional Toilet in the House (Household)

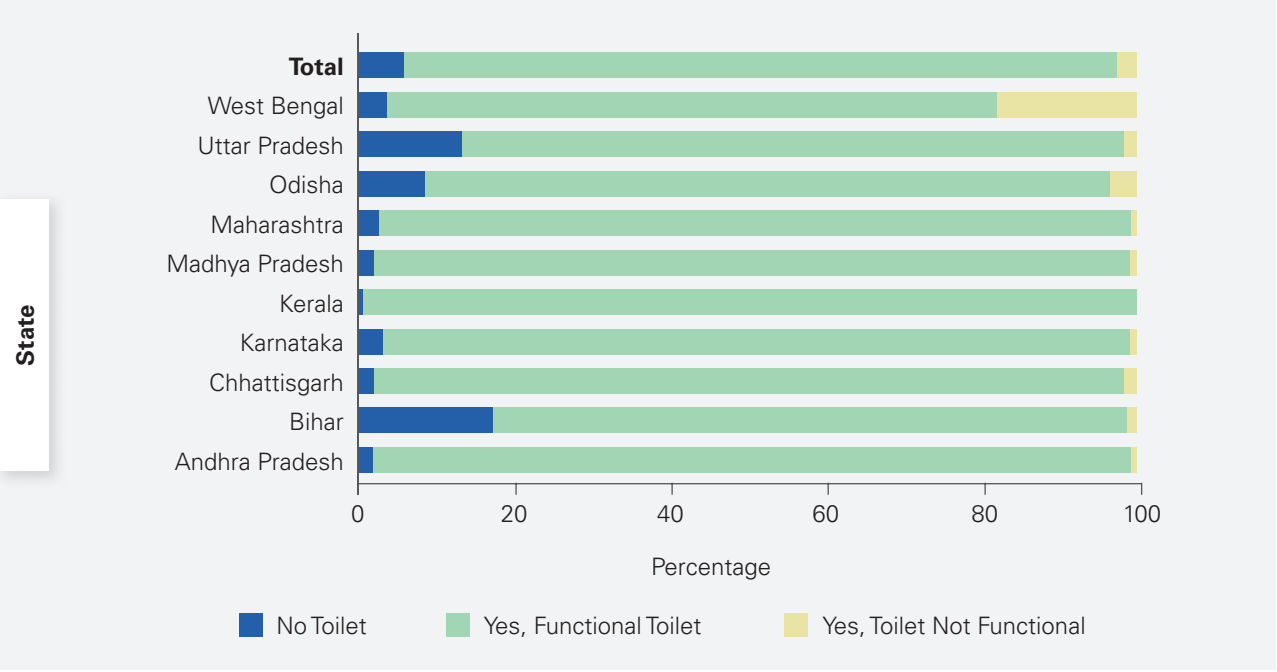
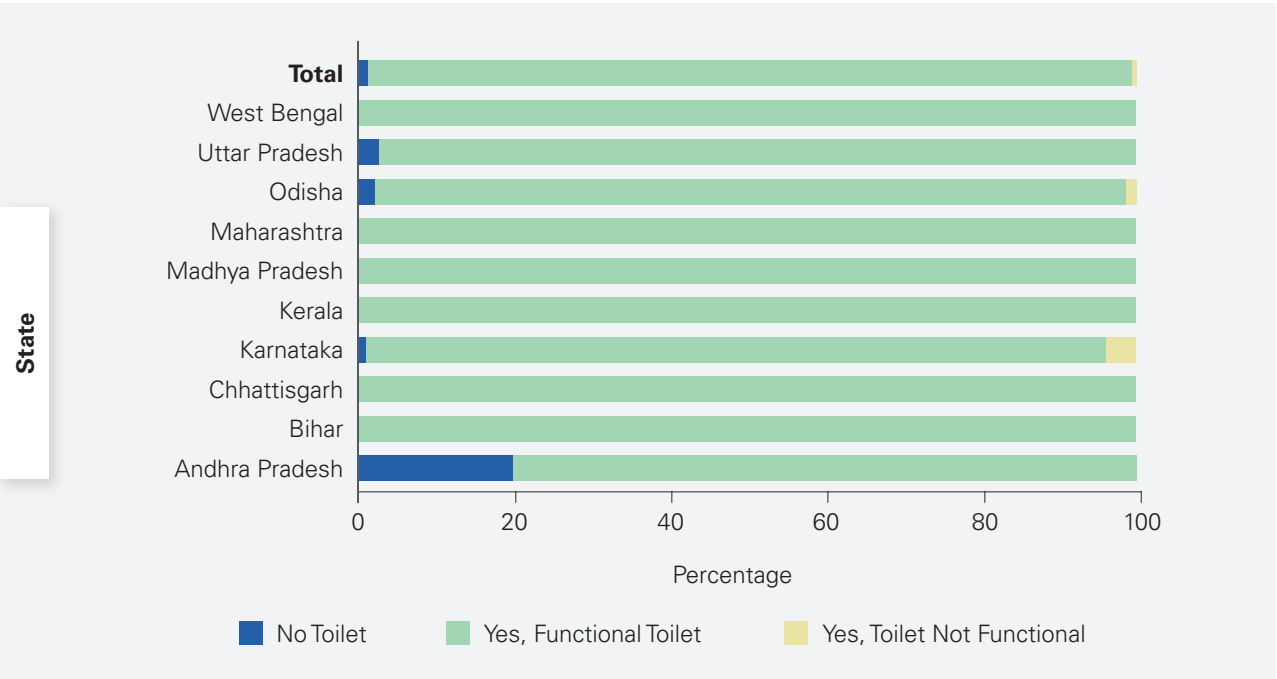


Figure 13: Functional Toilet in the House (Intermediaries)



As per the data, more than 90 per cent respondents from both household and intermediary surveys had functional toilets at home. Within the states, the highest number of household respondents from Bihar reported having no toilet at home, as opposed to all the intermediaries who reported the availability of toilets at the household level.

Usage of Toilet by Family Members

Of the total respondents (8272) having a functional toilet at home, 8031 (97 per cent) stated that all members in the household used the toilet and only 162 (2 per cent) responded that only some members used the toilet at home *(see Figure 14)*. About 100 per cent household members from Kerala and Madhya Pradesh used the toilets at home. As far as household toilets being used by 'only some members' is concerned, the highest numbers are reported by respondents from Karnataka (8 per cent), Chhattisgarh (3 per cent) and Odisha (3 per cent). Figure 15 gives an account of toilet usage by family members

Figure 14: Usage of Toilet by Household Members (Household)

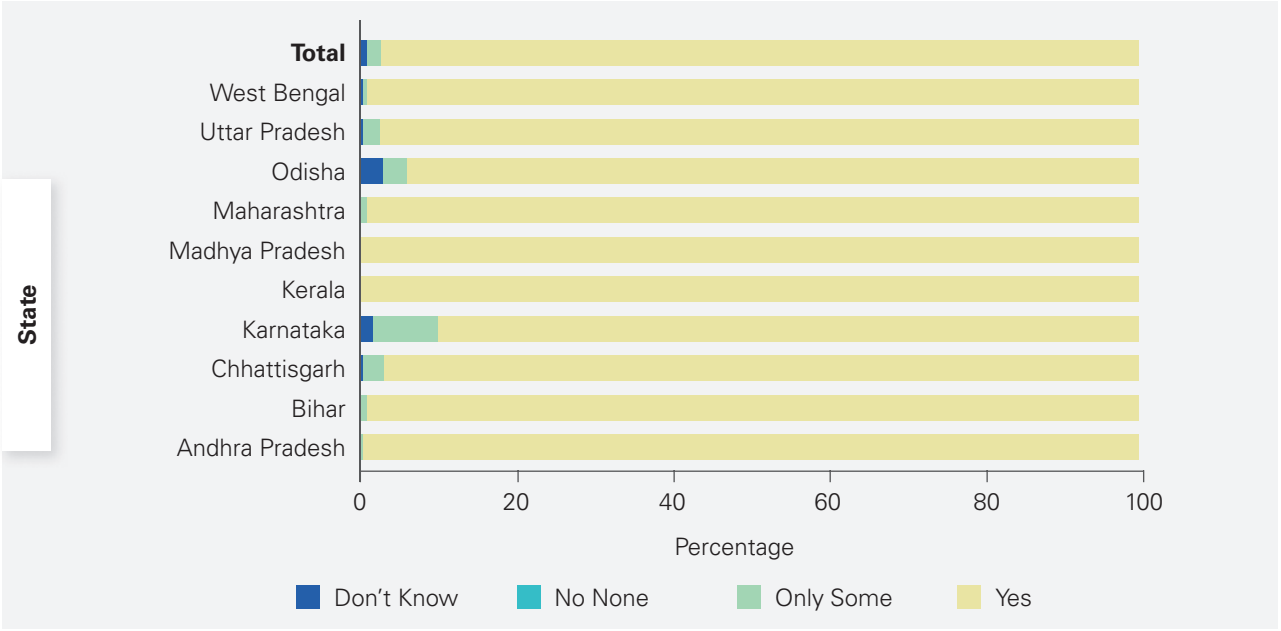
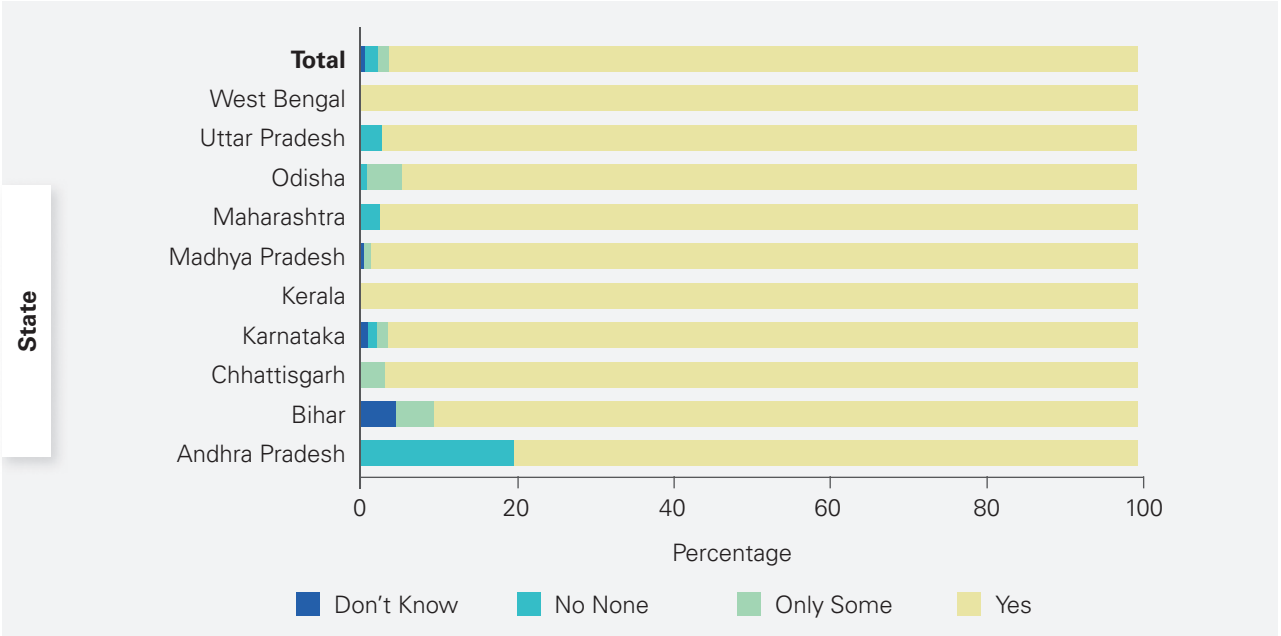


Figure 15: Usage of Toilet by Household Members (Intermediaries)



of intermediate functionaries. The current findings suggest that 96 per cent of their family members use toilets available at home. The state wherein the maximum number (20 per cent) of respondents who reported family members not using home toilets were from Andhra Pradesh.

Respondents having children below 5 years were asked about the method they used to dispose of their child's faeces, for which 28 per cent opted for the usage of home toilets. A few respondents stated that they disposed it 'in garbage' or 'outside in an open drain'.

Reasons for Not Using Household Toilet

The 166 respondents from the household survey who reported 'no' or 'some' family members using toilets in the household were asked to elaborate the main reasons for the same *(see Figure 16)*. About 63 per cent stated that some people did not use household toilets as they are either elderly or infants, or people with disabilities. Insufficient water availability inside/next to the toilet to flush/clean the toilet (29 per cent), dirty toilet (6 per cent) and overflow of pit (2 per cent) were some of the other key issues reported for non-usage of toilets by family members of respondents. Within the states, the maximum number (75 per cent) of respondents were from Chhattisgarh (highest from the Kabirdham district) who reported having insufficient water supply for the purpose of flushing and cleaning toilets as the main reason behind not using toilets regularly in the household. About 19 per cent and 8 per cent respondents from Odisha and Chhattisgarh respectively reported "dirty toilets and no one cleans it" as one of the major problems for toilet non-usage by family members.

Figure 16: Reasons for Not Using The Toilet Regularly by Household Members (Household)

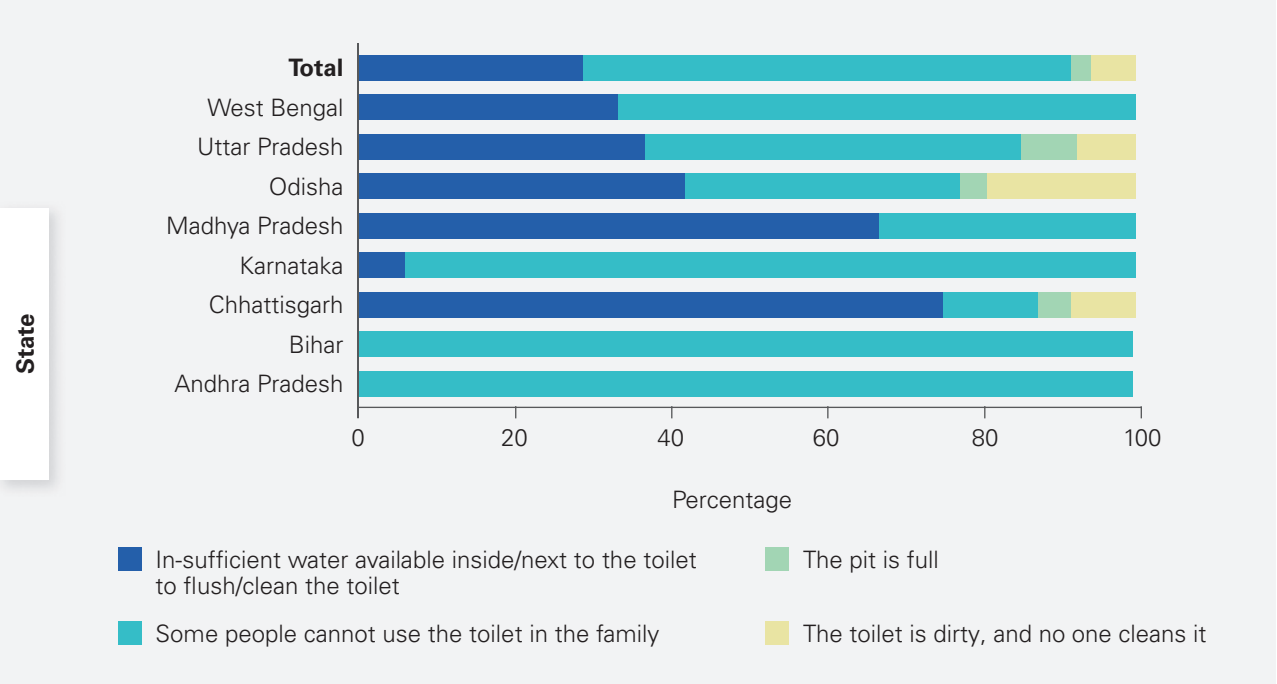
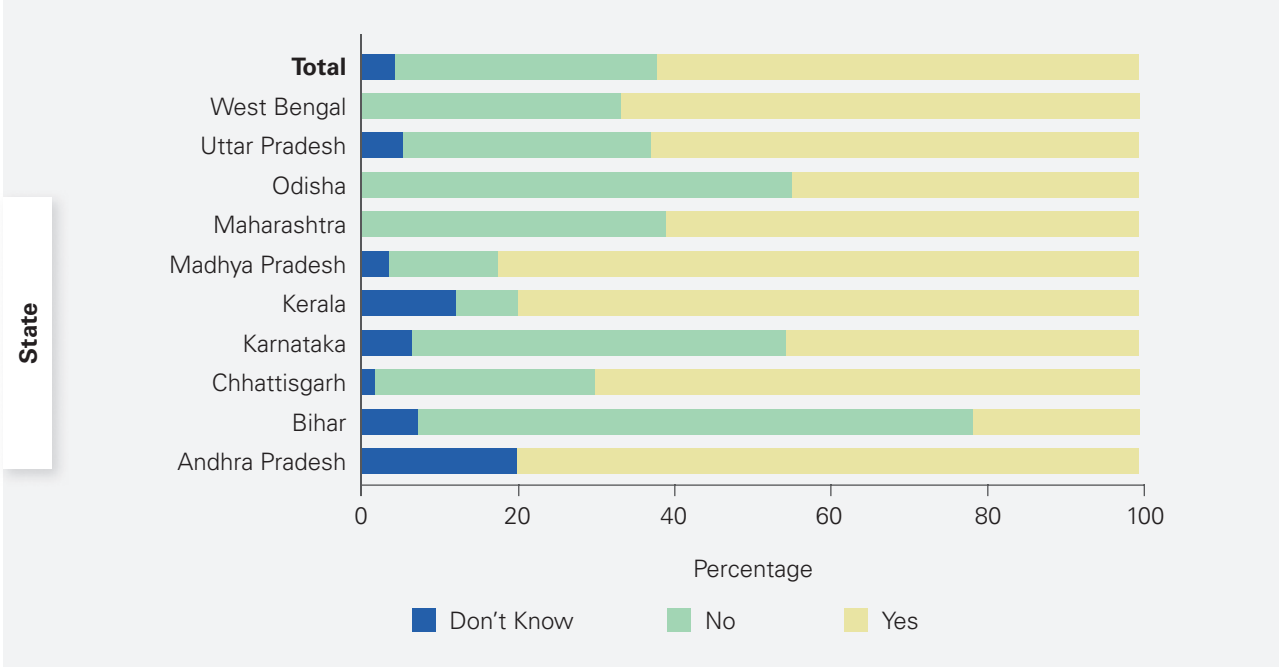


Figure 17: ODF Status (Intermediaries)



Status of Open Defecation

Overall, 390 (62 per cent) intermediaries reported that their Gram Panchayats are ODF, 211 (34 per cent) reported that they is not ODF and 27 (4 per cent) respondents replied with 'I don't know' *(see Figure 17)*. The highest number of intermediaries claiming ODF status for their Gram Panchayats were from Madhya Pradesh (82 per cent) followed by Andhra Pradesh (80 per cent) and Kerala (80 per cent). A majority of the intermediaries from Bihar (71 per cent) reported that their Gram Panchayats have not yet achieved ODF status. This finding is in line with the data reported in the 2019 report of Oxford Policy Management[17], which states that Bihar has the highest rate of OD in the country, with 70 per cent of people in rural Bihar defecating in the open.

Households in the Community without Toilet

All respondents in the household sample were asked about left-out households in the community without toilets. Overall, 4718 (52 per cent) of 9015 participants reported that no household in the community was without a toilet. 3059 (34 per cent) participants responded in the affirmative regarding the presence households without toilets in their community. Within the states *(see Figure 18)*, a majority of the respondents from Kerala (90 per cent) and Maharashtra (81 per cent) stated that no household in the community was without a toilet. Across the sampled states, it was found that most participants belonging to Uttar Pradesh were of the opinion that there were still households without toilets in the community. Attempts to understand which districts of Uttar Pradesh showcased the highest number of respondents replying in the affirmative about households without toilets in the community *(see Figure 19)* revealed that the districts of Unnao (94 per cent), Bhadohi (92 per cent), Fatehpur (91 per cent), followed by Chitrakoot (58 per cent) reported the highest number of such cases.

[15] Oxford Policy Management. (2019). Sustaining toilet use: next steps for sanitation policy in Bihar. https://www.opml.co.uk/blog/sustaining-toilet-use-next-steps-for-sanitation-policy-in-bihar

Figure 18: Left-out Households without Toilets in the Community at the State Level (Household)

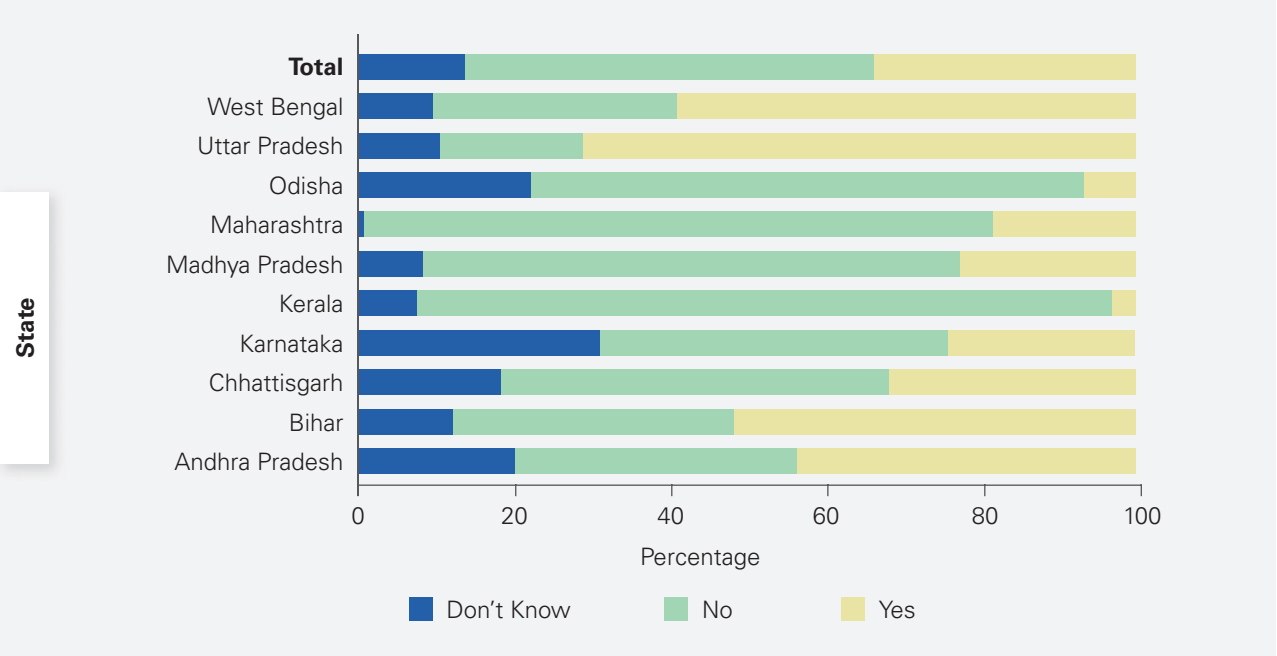
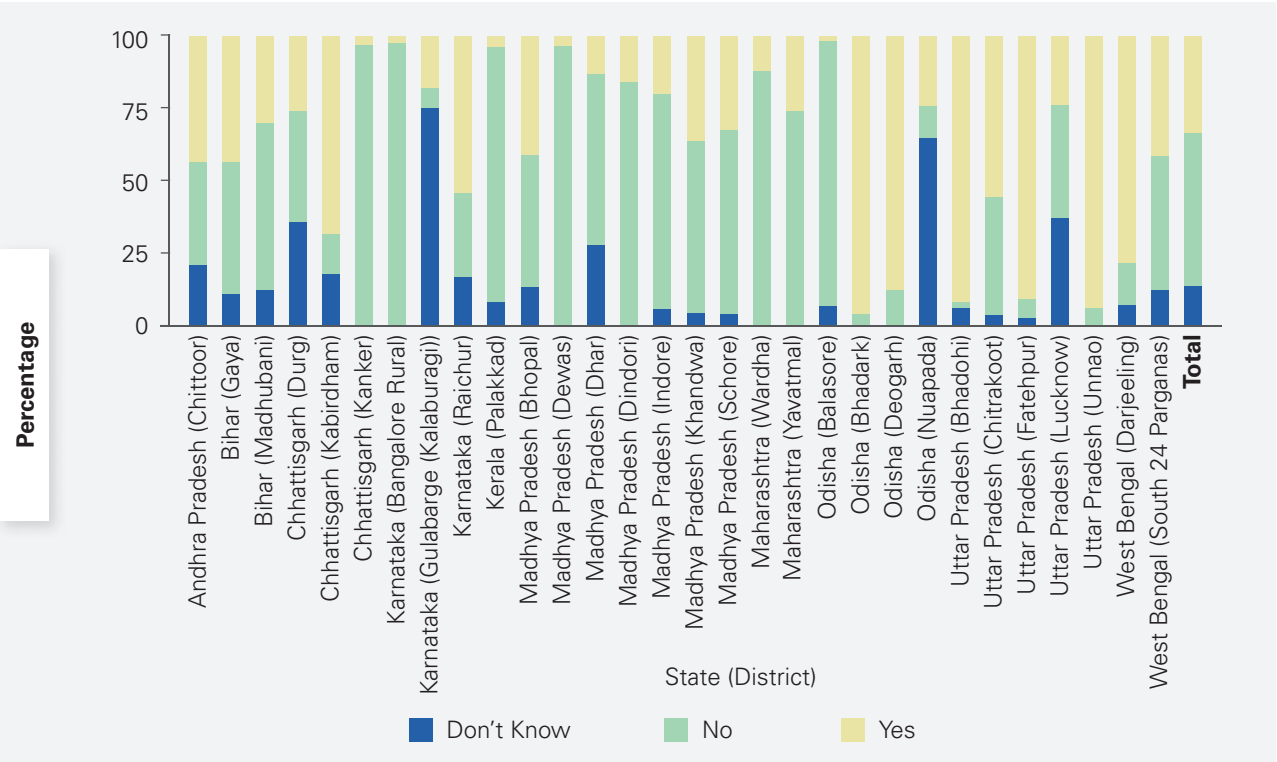


Figure 19: Left-out Households without Toilets in the Community at the District Level (Household)



Interestingly, it was seen that the highest number of respondents (38 per cent) belonging to the SC stated that there were left-out households without toilets in their communities *(see Table 4)*.

Table 4: Left-out Households without Toilets in the Community vis-a-vis Resondents' Caste

		Caste									
		General		Other backward caste		Scheduled caste		Scheduled tribe		Total	
		n	(%)	n	(%)	n	(%)	n	(%)	N	(%)
Are there any left-out households without toilets in the community?	No	902	(56)	2048	(55)	988	(44)	780	(55)	4718	(52)
	Yes	532	(33)	1193	(32)	860	(38)	474	(34)	3059	(34)
	Don't know	186	(11)	507	(14)	389	(17)	156	(11)	1238	(14)

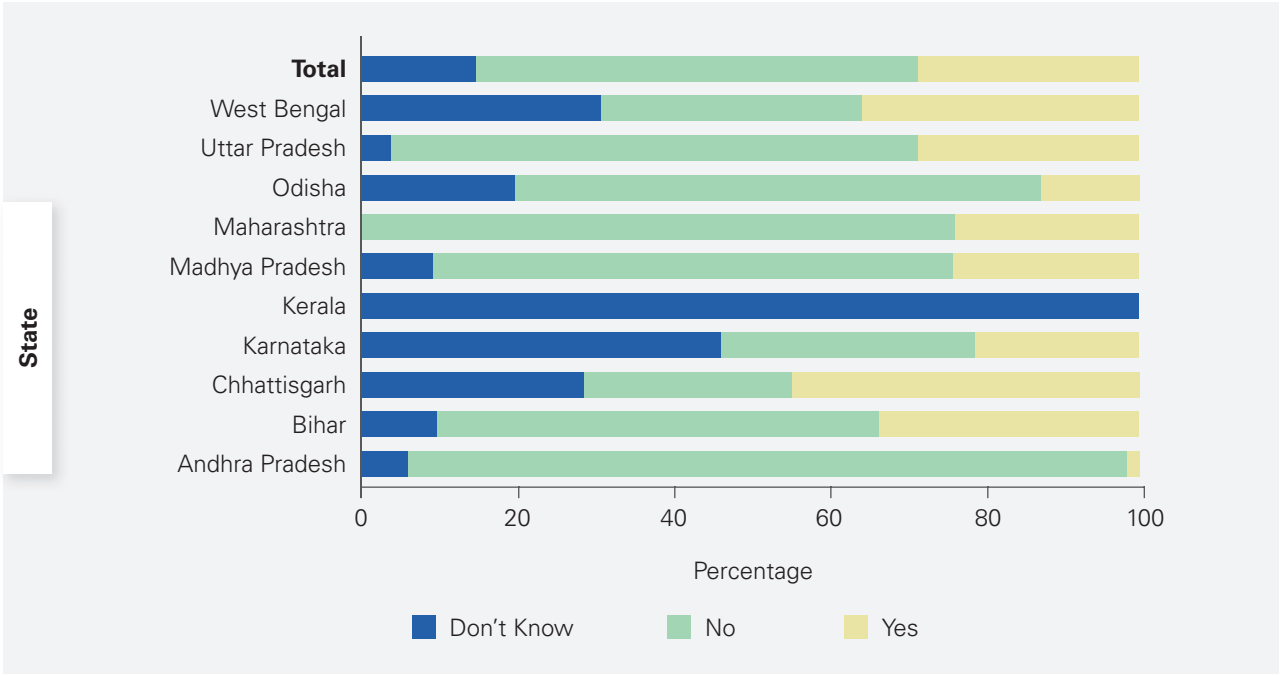
Recommencement of Toilet Construction Activities

About 3059 (34 per cent) out of 9015 respondents responded in the affirmative that some households in the community were still without toilets. They were asked about the status of the recommencement of toilet construction activities in these households *(see Figure 20)*. About 57 per cent of the participants mentioned that toilet construction activities had not resumed in their community and only 28 per cent reported that it had.

A majority of the respondents from Andhra Pradesh (92 per cent) and Maharashtra (76 per cent) stated that toilet construction had still not started in their communities. States from where the highest number of respondents stated that the recommencement of toilet construction activities had begun were Chhattisgarh (45 per cent) followed by West Bengal (36 per cent), Bihar (33 per cent) and Uttar Pradesh (28 per cent).

Within the districts, 100 per cent and 92 per cent participants from the Deogarh (Odisha) and Fatehpur (Uttar Pradesh) districts responded that

Figure 20: Recommencement of Toilet Construction (Household)



toilet construction activities had resumed in their communities. The highest number of respondents from the Bhadohi (97 per cent) and Chitrakoot (97 per cent) districts of Uttar Pradesh stated that toilet construction activities had not commenced in their communities.

Impact of COVID-19 on Toilet Usage

Another interesting finding is that only 37 per cent participants were of the opinion that toilet usage had increased due to COVID-19 and a majority (56 per cent) of the participants believed that there was no change in toilet usage due to the pandemic. Only 15 participants (Uttar Pradesh (5), Madhya Pradesh (4), 2 each from Maharashtra and Odisha, and 1 each from Bihar and Chhattisgarh) in the overall household sample believed that toilet usage has decreased in the pandemic. 56 per cent and 53 per cent respondents from Kerala and Chhattisgarh respectively stated that there had been an improvement in toilet usage as a result of the pandemic *(see Figure 21)*, whereas respondents from Andhra Pradesh (85 per cent) and Maharashtra (79 per cent) saw no change in toilet usage. Out of the various districts, the highest improvement is seen in the Dewas (100 per cent) district of Madhya Pradesh followed by the Fatehpur (88 per cent) district of Uttar Pradesh *(see Figure 22)*.

Figures 23 and 24 elaborate the reasons behind the increase and decrease in toilet usage during the pandemic in the sampled states. Out of 3376 (37 per cent) respondents who believed that toilet usage had improved, 75 per cent highlighted safety and security reasons as one of top causes for the same. Overall, 52 per cent cited personal choice and 22 per cent responded that the fear of infection from neighbours and community toilets had led to this increase in toilet usage. Figure 25 gives a district-wise response to the reason behind the increase. The trend in Figure 25 shows that almost every district from the sampled states believed that personal choice and safety were the two main reasons for increase in toilet usage.

Figure 21: Change in Toilet Usage due to COVID-19 at the State Level (Household)

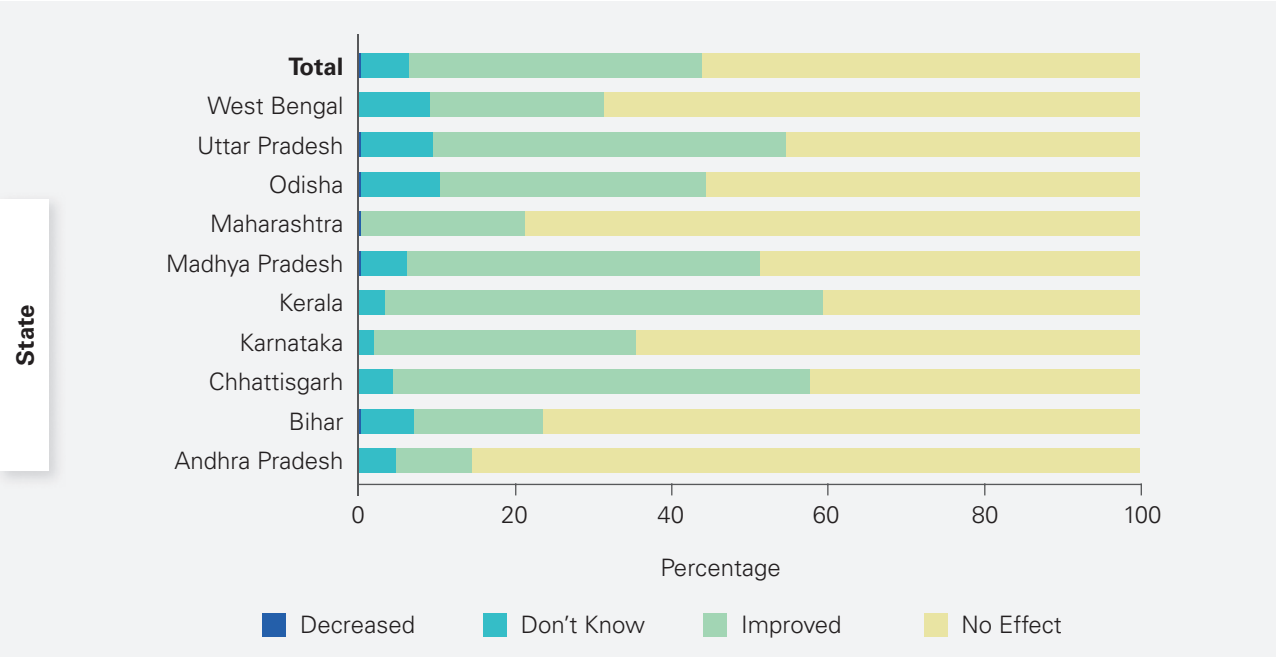


Figure 22: Change in Toilet Usage due to COVID-19 at the District Level (Household)

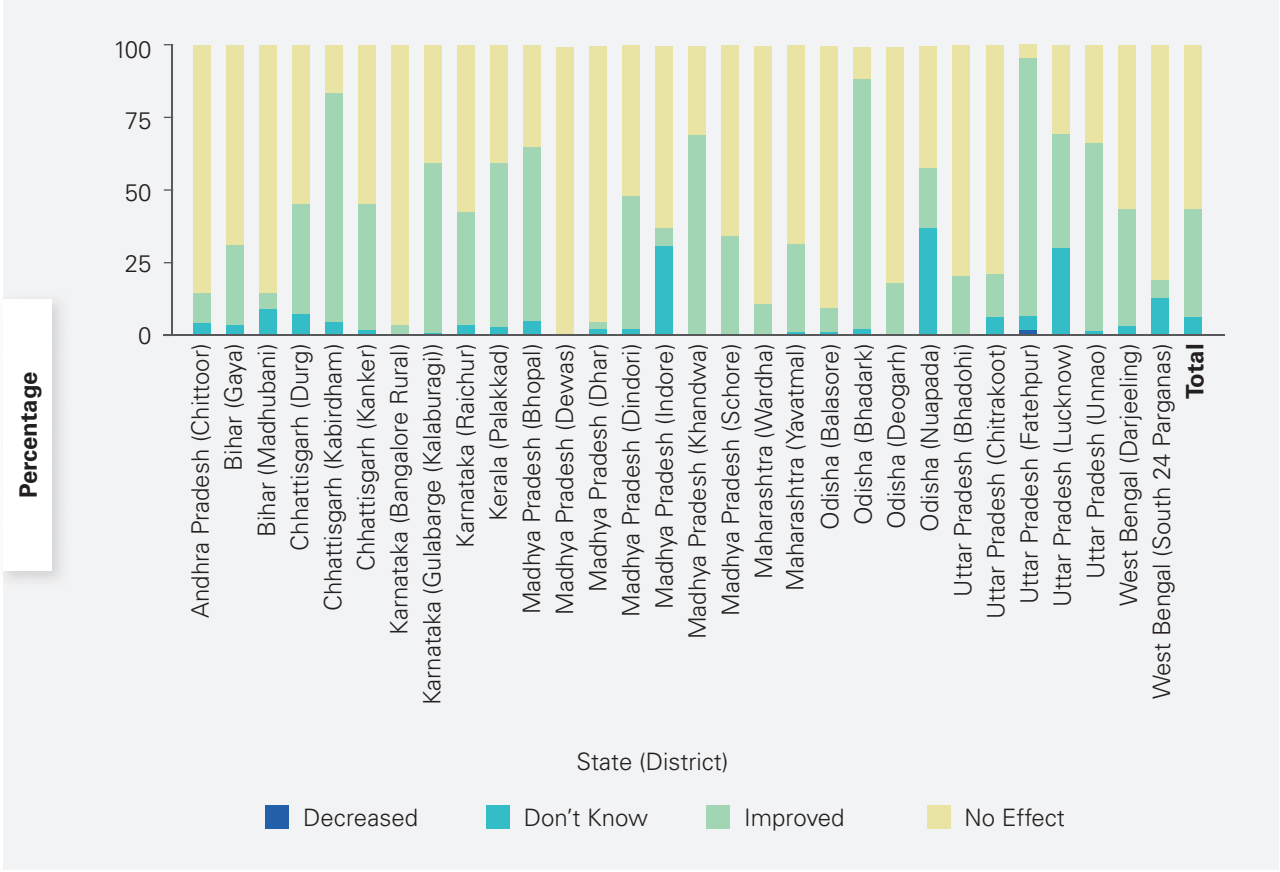


Figure 23: Reasons behind Increased Toilet Usage at the State Level (Household)

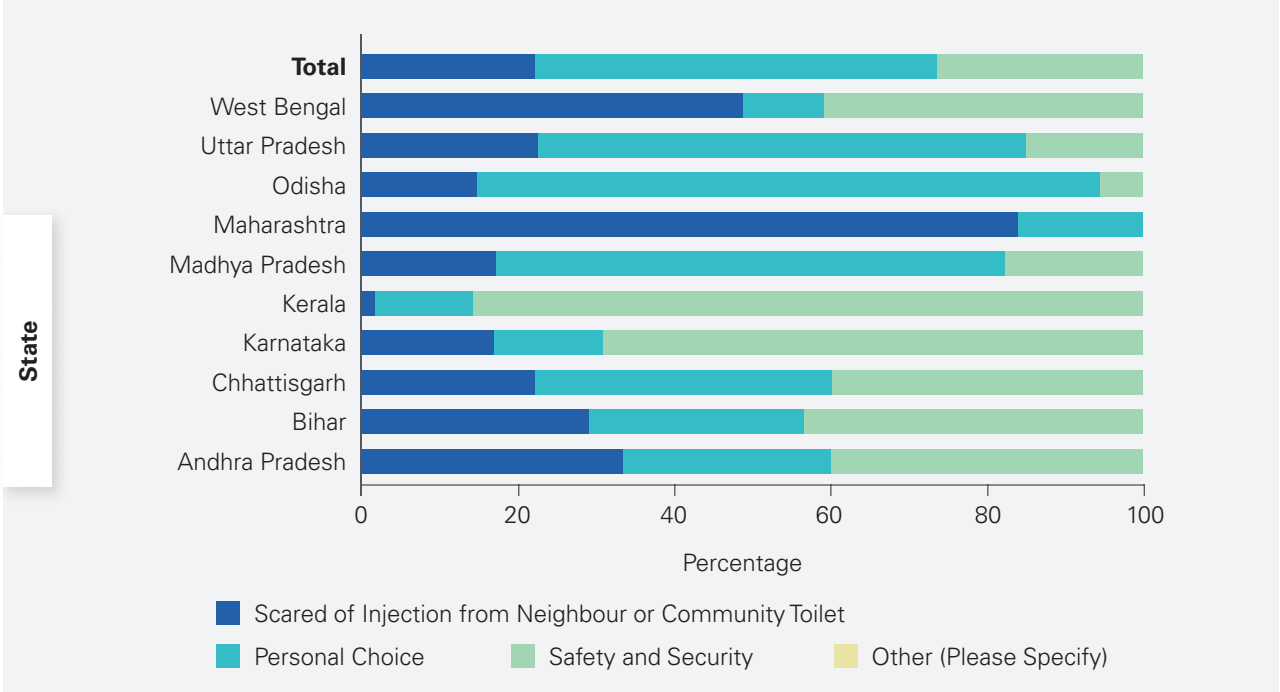


Figure 24: Reasons behind Decreased Toilet Usage at the State Level (Household)

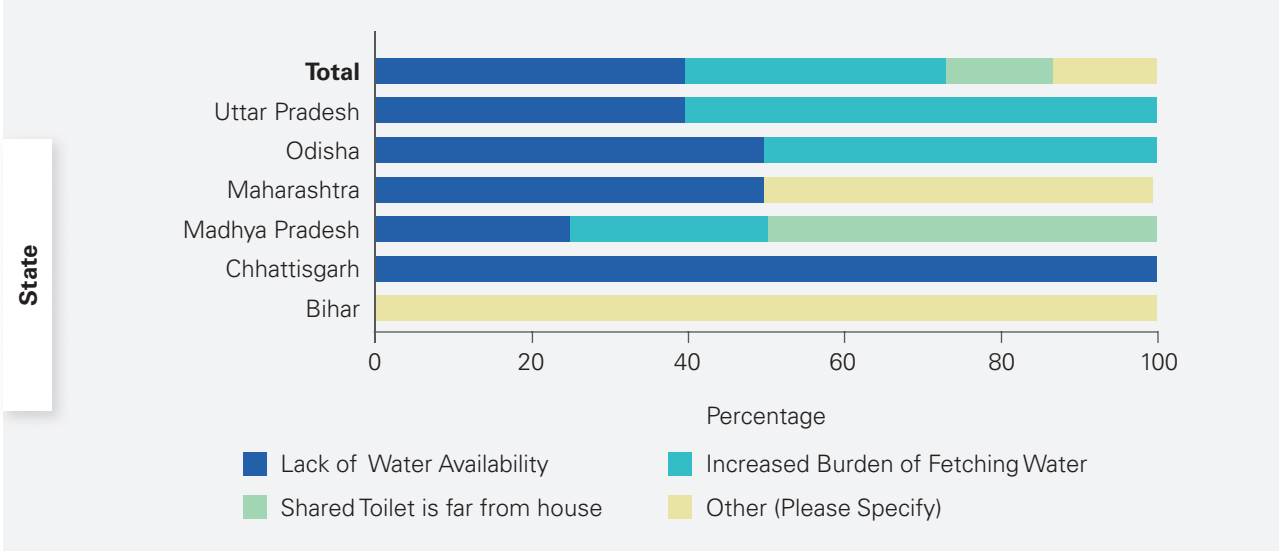
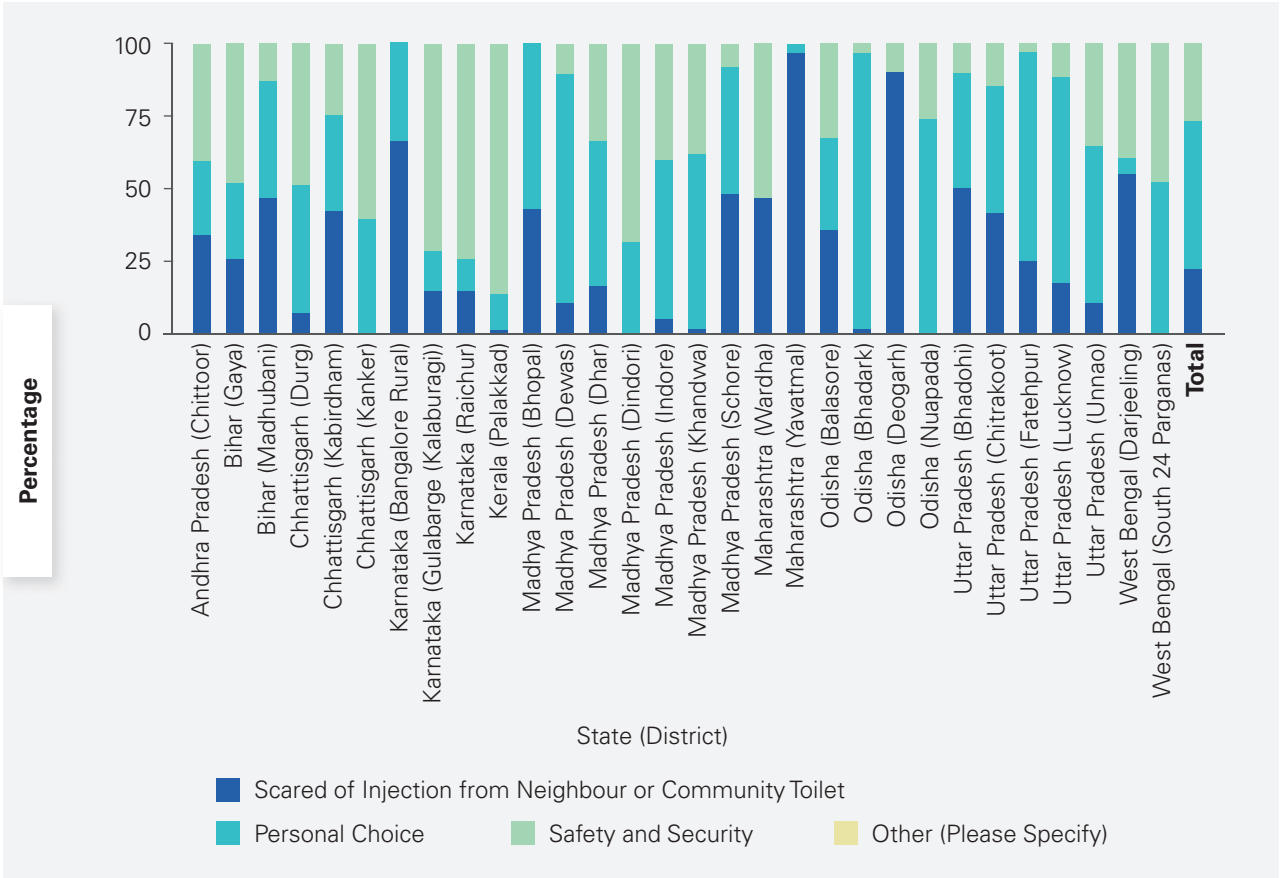


Figure 25: Reasons behind Increased Toilet Usage at the District Level (Household)



The participants who were of the opinion that toilet usage had decreased in the pandemic were asked for their reasons behind it. About 40 per cent stated lack of water as the major reason for this decrease. Additionally, 33 per cent and 13 per cent selected 'an increased burden of fetching

water' and 'shared toilet is far from the house' respectively as the reasons behind this decrease. Respondents from Chhattisgarh who were of the opinion that toilet usage had decreased stated lack of water availability as the foremost reason behind it.

5.2.2. Environmental Services

Garbage Disposal

Respondents from the household survey were asked about the place of disposal of garbage/ solid waste and the level of satisfaction related to the services and the system of waste collection. About 3681 (41 per cent) out of 9015 respondents managed the garbage/solid waste as household compost and performed recycling. About 35 per cent participants threw the garbage in the open, 14 per cent gave the garbage to the garbage collector and only 10 per cent stated using other measures such as the burning of waste, giving it to community garbage collection vans, using it in biogas and using wet waste as animal feed. Figures 26 and Figure 27 elaborate the different ways of garbage disposal within the state and district levels for the household sample. Among the sampled states, a majority of the population in Madhya Pradesh (62 per cent) recycled the garbage at home in the form of compost and most of these respondents were from the Dindori (97 per cent) and Khandwa (97 per cent) districts. In Andhra Pradesh, 57 per cent participants disposed of the garbage by giving it to the garbage collector, which is the highest number reported among all the states in question. At the district level, the maximum number of respondents who disposed of the garbage by giving it to garbage collectors were from Chittoor, Andhra Pradesh (57 per cent) and Fatehpur, Uttar Pradesh (51 per cent). About 84 per cent respondents from Bihar stated that they disposed of the garbage by throwing it in the open. The Madhubani (86 per cent) and Gaya (81 per cent) districts of Bihar reported the highest number in this case.

Figure 26: Methods of Garbage Disposal (Household)

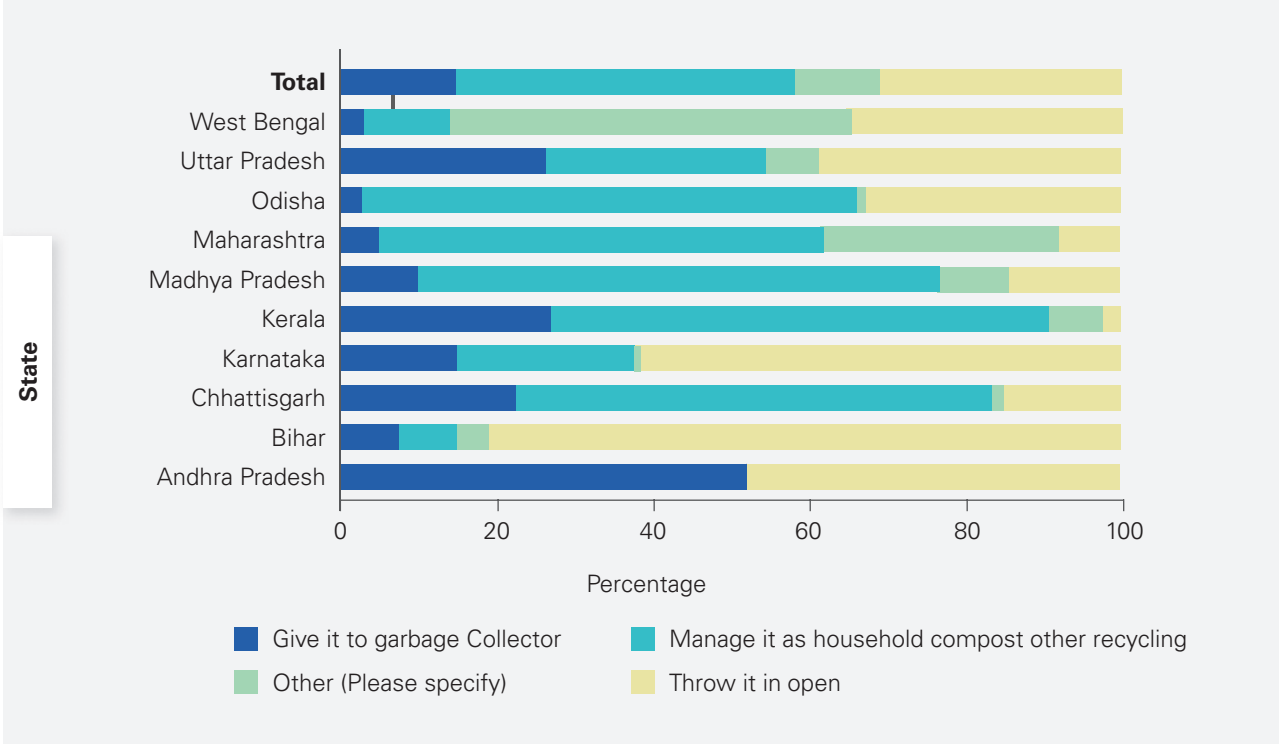
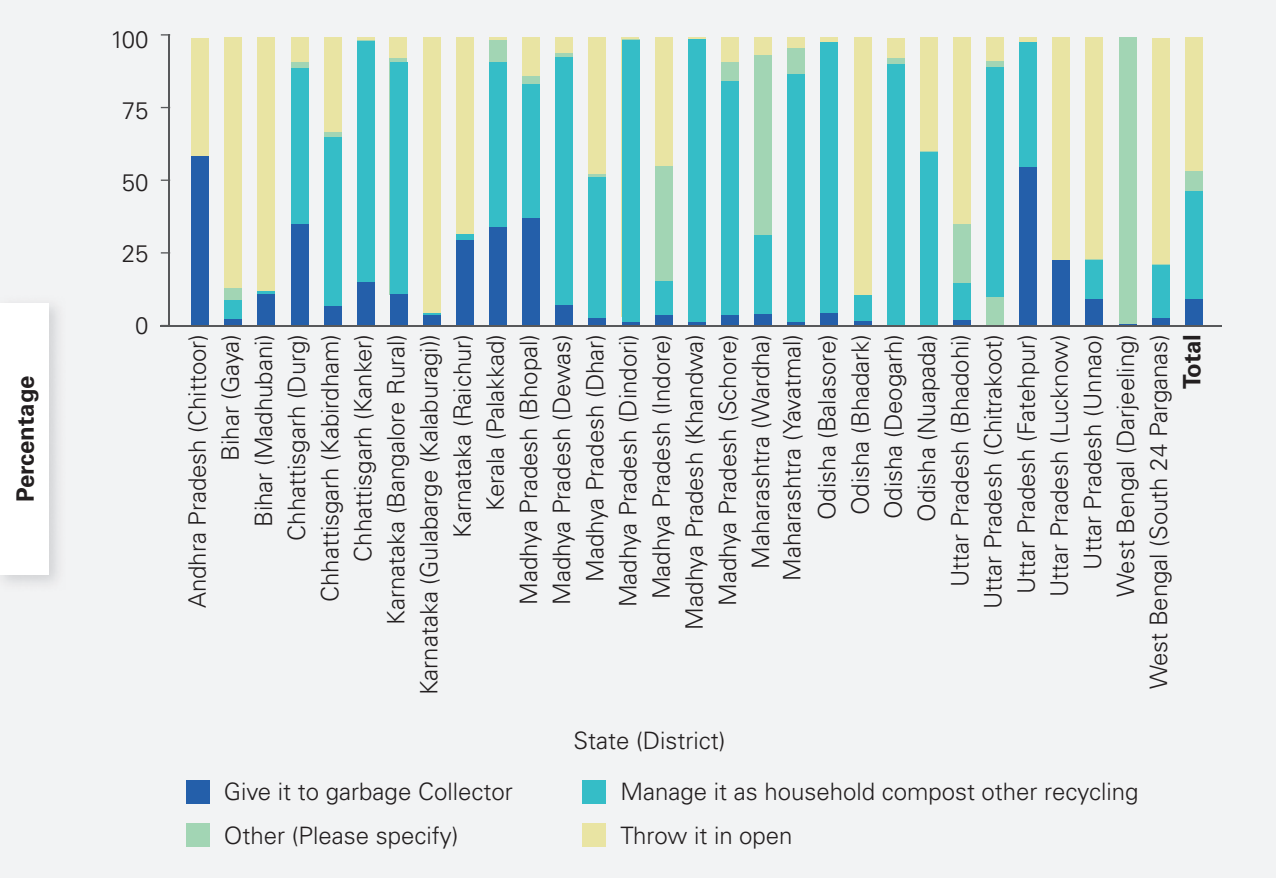


Figure 27: Methods of Garbage Disposal at the District Level (Household)



In the intermediary sample, 38 per cent of the respondents recycled the garbage, 32 per cent gave it to the garbage collector and 22 per cent threw the garbage in the open *(see Figure 28)*. The number of participants recycling the garbage was found to be almost similar in both the intermediary and household samples. Most intermediaries recycling their garbage (71 per cent) were from Odisha. The option of giving garbage to garbage collectors was chosen by the maximum number of respondents from Andhra Pradesh in both the household and intermediary surveys. Similarly, throwing the garbage in the open was reported the most by intermediaries from Bihar at 50 per cent. The current findings in intermediary samples related to the throwing of garbage in the open were found to be in line with the household samples, where the maximum number of respondents who threw the garbage in the open were from Bihar. Figure 29 gives an account of household garbage collection scenarios for intermediaries at the district level.

Similarly, 1261 (14 per cent) households who utilized the service of garbage collectors were asked if they were satisfied with the garbage collection services. About 86 per cent of these respondents were satisfied with the services, 13 per cent were dissatisfied and 1 per cent selected other reasons as an option *(see Figure 30)*. A majority of the respondents who were dissatisfied with the garbage collection services belonged to the state of Bihar (23 per cent). At the district level, the maximum number of respondents who were dissatisfied with the garbage collection services belonged to the districts of Lucknow (Uttar Pradesh), Madhubani (Bihar) and Dewas (Madhya Pradesh) *(see Figure 31)*.

Figure 28: Methods of Garbage Disposal (Intermediaries)

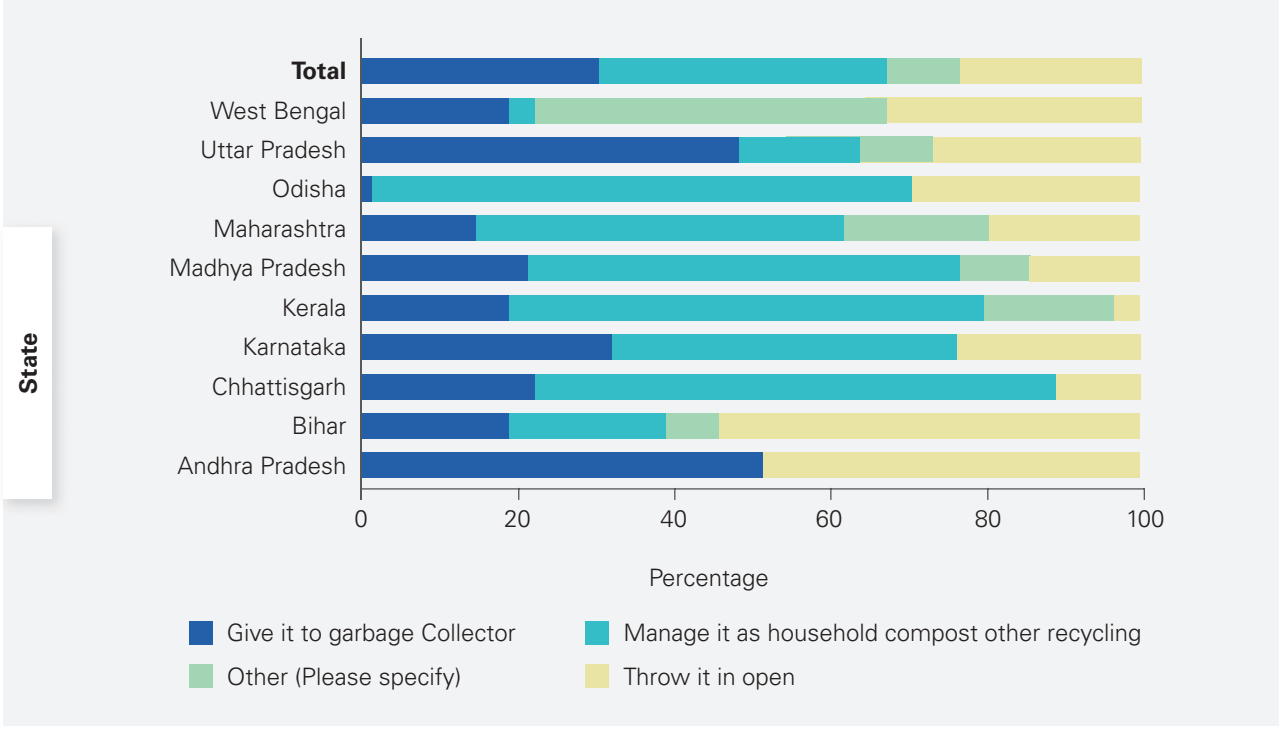


Figure 29: Methods of Garbage Disposal at the District Level (Intermediaries)

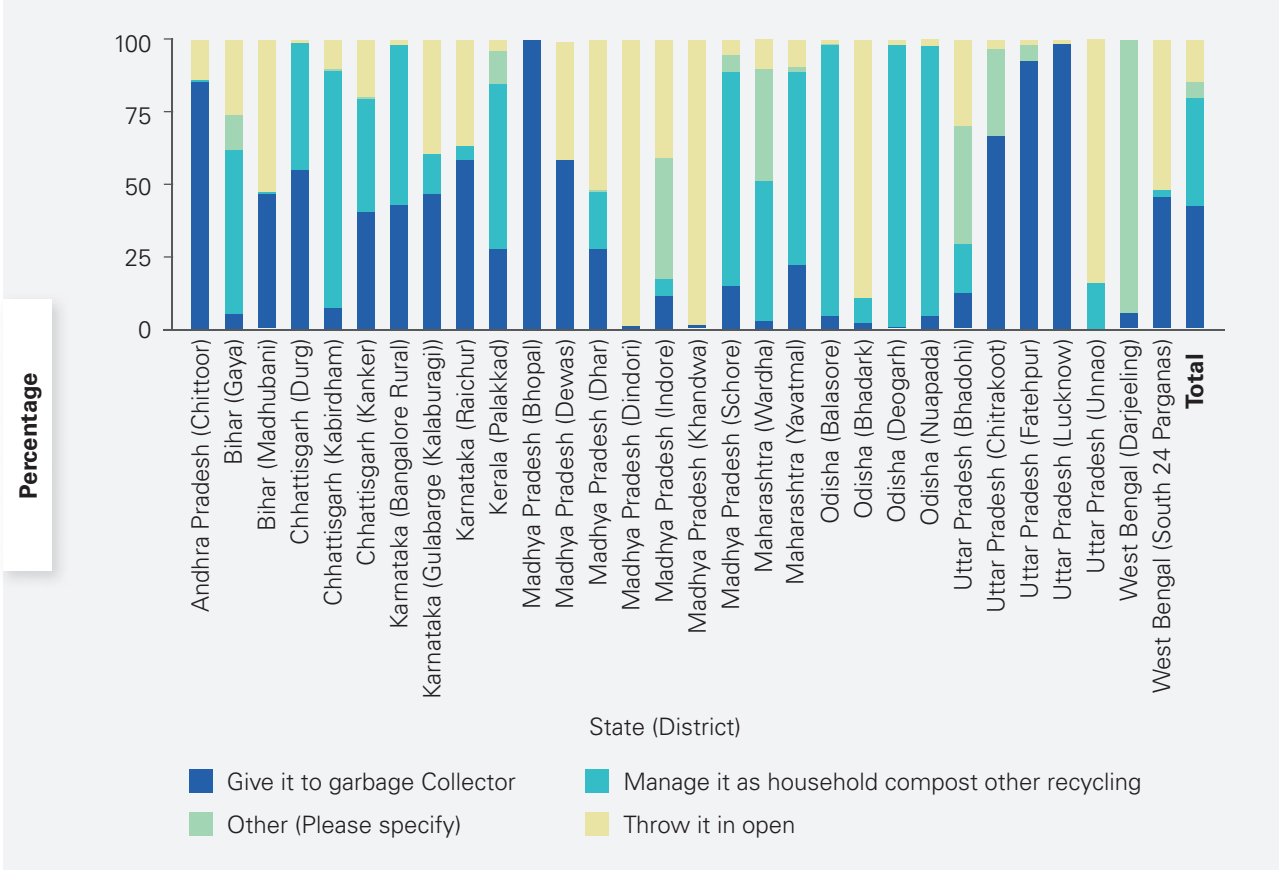


Figure 30: Satisfaction with the Services and System of Waste Collection (Household)

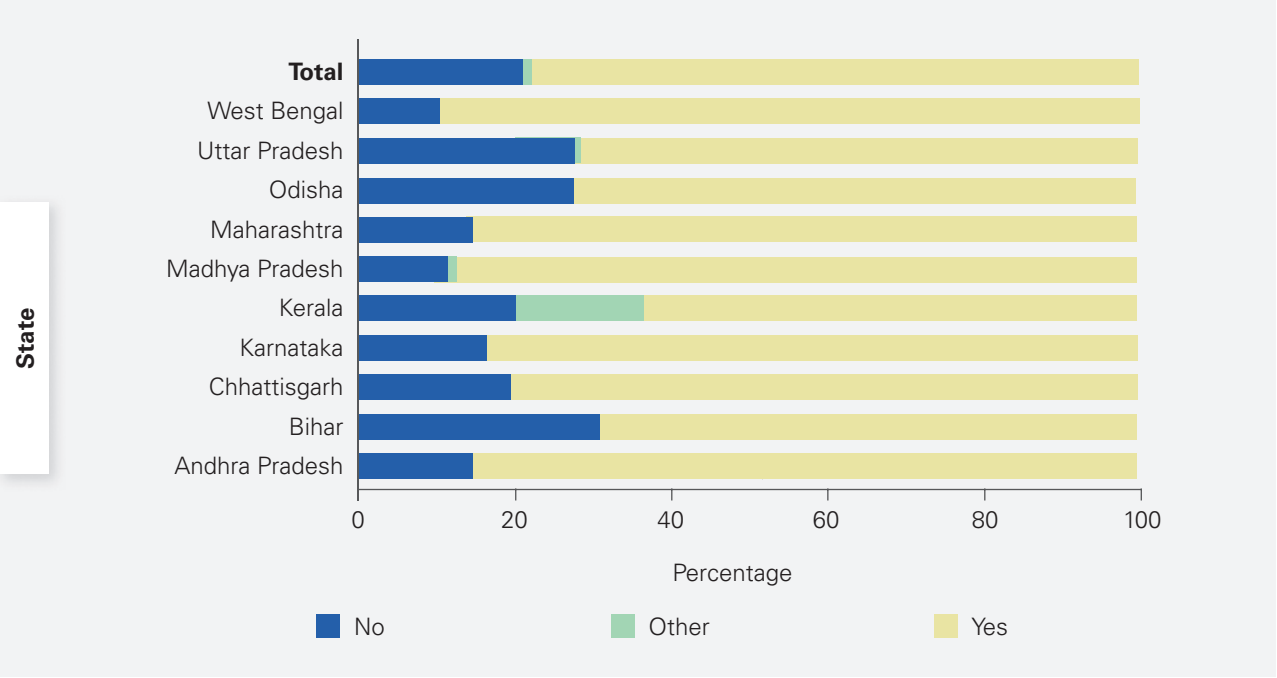
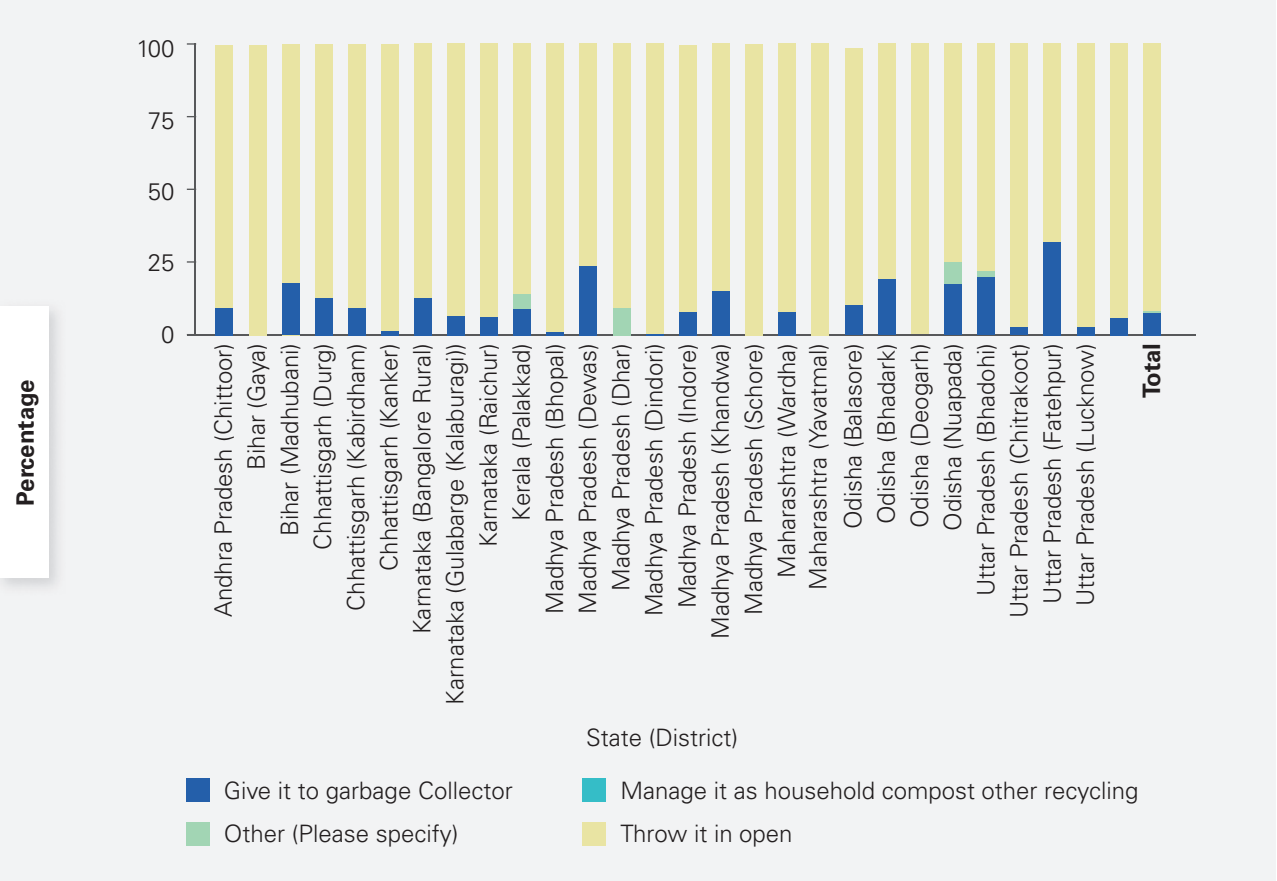


Figure 31: Satisfaction with the Services and System of Waste Collection at the District Level (Household)



Wastewater Disposal

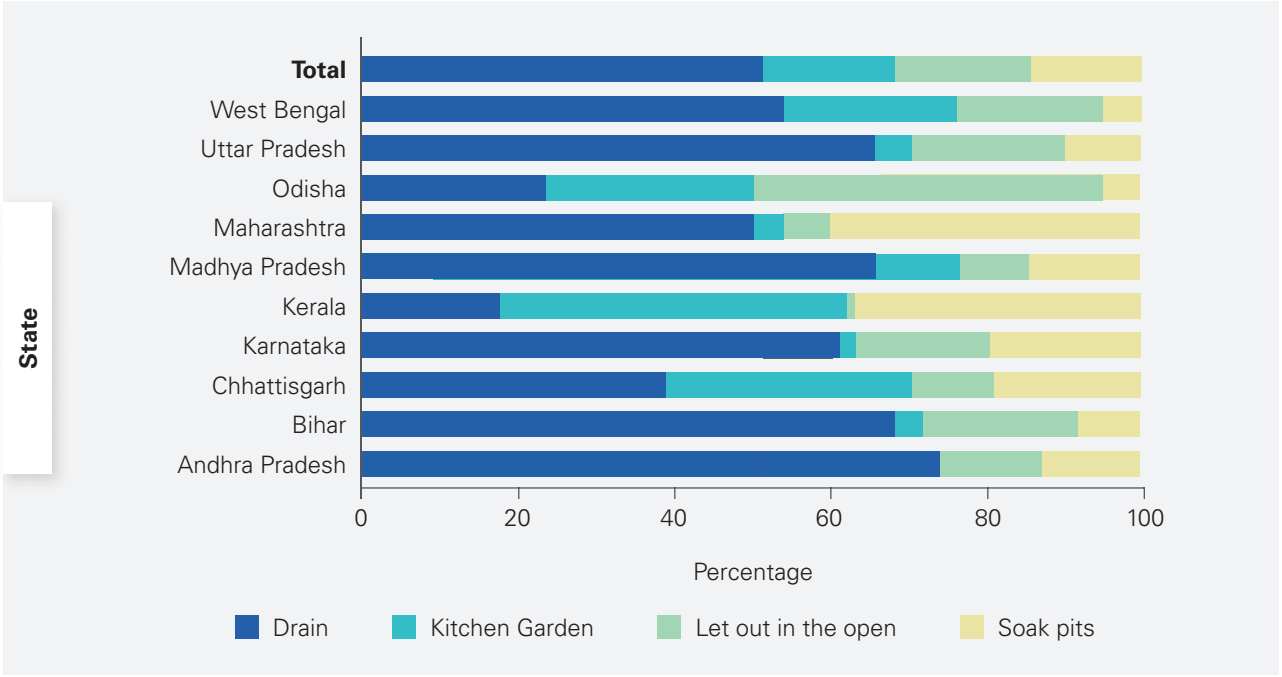
Household respondents were also asked about the wastewater disposal methods that they used. Nearly 52 per cent respondents disposed of the wastewater in drains, 17 per cent let out the wastewater into the open, 16 per cent disposed of it in soak pits and 15 per cent dumped the wastewater in kitchen gardens *(see Figure 32)*. Within the states, the maximum number (76 per cent) of respondents who used drains to dump the wastewater were from Andhra Pradesh, followed by Bihar (68 per cent) and Uttar Pradesh (68 per cent). Very few (10 per cent) households from Kerala utilized the drain system for wastewater disposal as 48 per cent respondents used kitchen gardens to cast out the wastewater, which is the highest number among all the states. No respondents from Andhra Pradesh reported using kitchen gardens for the disposal of wastewater. Around 45 per cent and 22 per cent participants from Odisha and Bihar respectively reported that they let out the wastewater in the open, whereas only 1 per cent respondents from Kerala followed this method. The maximum number (46 per cent) of respondents who used soak pits to dispose of the wastewater were from Maharashtra and the minimum number (5 per cent) of respondents were from West Bengal.

Within the districts, 97 per cent respondents in Unnao (Uttar Pradesh) and 90 per cent respondents in Bangalore Rural (Karnataka) used drains to dispose of the wastewater. About 78 per cent households in Bhadrak (Odisha) let out the wastewater into the open and 50 per cent of the residents of Yavatmal (Maharashtra) used soak pits to dispose of the wastewater.

Visibility of Waste in the Locality

Table 5 gives an overview of the percentage of respondents who answered in the affirmative when asked about the various types of waste they saw in their respective villages. Of the total household population, 51 per cent were of the opinion that they saw animal faeces as the most common type of waste around the village. Around

Figure 32: Method of Disposing Wastewater (Household)



47 per cent stated that they saw plastic waste, 37 per cent saw garbage dumped in the open, and 30 per cent saw human faeces. However, as per the NARSS[16] report, at the national level, 84.6 per cent of villages have minimal level of littering.

The maximum number of people who had responded in the affirmative about seeing human and animal faeces along with plastic waste were from Odisha and Bihar. This is in line with the responses of the intermediate functionaries of Bihar (71 per cent) and Odisha (55 per cent), who stated that their villages were not ODF.

Presence of Waste Collectors in the Community

Household respondents were asked about the presence of people in their community who are responsible for cleaning the village. Figure 33 depicts the response given by the respective participants in the sampled states. 51 per cent were of the opinion that no one in the community was cleaning the village, whereas 30 per cent reported that cleaning was performed by the waste collectors paid by the Gram Panchayat.

It is worth noting that 93 per cent respondents from Bihar reported that no one in their respective villages carried out any cleaning activities, and this number is the highest (99 per cent) in the district of Gaya in Bihar *(see Figure 34)*. About 78 per cent respondents in Andhra Pradesh stated that waste collectors paid by the Gram Panchayat kept the village clean, followed by Maharashtra (71 per cent). About 96 per cent and 94 per cent respondents from the Dindori (Madhya Pradesh) and Lucknow (Uttar Pradesh) districts respectively gave the credit to waste pickers paid by the Gram Panchayat as being responsible for keeping the villages clean.

The variations in the responses regarding the presence of waste collectors clearly indicates that the same system is not effective for all locations. Hence, it is imperative to have a decentralized drive for sanitation, as per what system works best in the areas in question.

Table 5: Percentage of People Saying Yes to Seeing Domestic Waste in their Villages (Household)

Waste Type	State										
	Andhra Pradesh	Bihar	Chhattisgarh	Karnataka	Kerala	Madhya Pradesh	Maharashtra	Odisha	Uttar Pradesh	West Bengal	Total
Human faeces	17	64	14	42	1	9	20	74	36	30	
Animal faeces	74	87	40	67	18	17	35	83	63	56	51
Plastic wastes	47	65	42	59	54	22	42	75	46	61	47
Bio-waste	1	4	12	14	12	9	6	45	32	6	18
Stagnant pool of water	37	7	11	50	6	10	28	25	41	9	23
Garbage dumped in the open	45	45	33	54	44	19	25	44	60	11	37
Blockage of drain	39	20	5	28	3	3	26	6	9	28	13

[16] http://www.indiaenvironmentportal.org.in/files/file/NARSS%20Round%202019-20.pdf

Figure 33: Individuals in the Community Responsible for Cleaning the Village (Household)

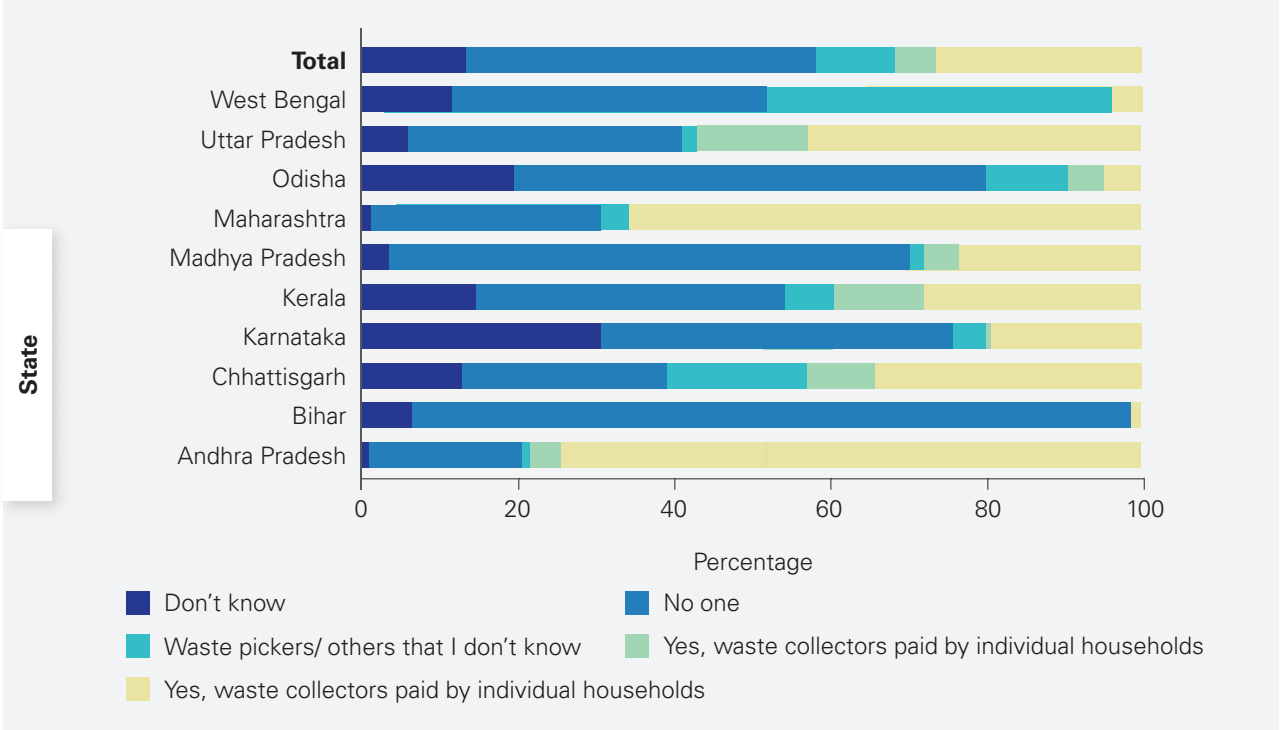


Figure 34: Individuals in the Community Responsible for Cleaning the Village at the District Level (Household)

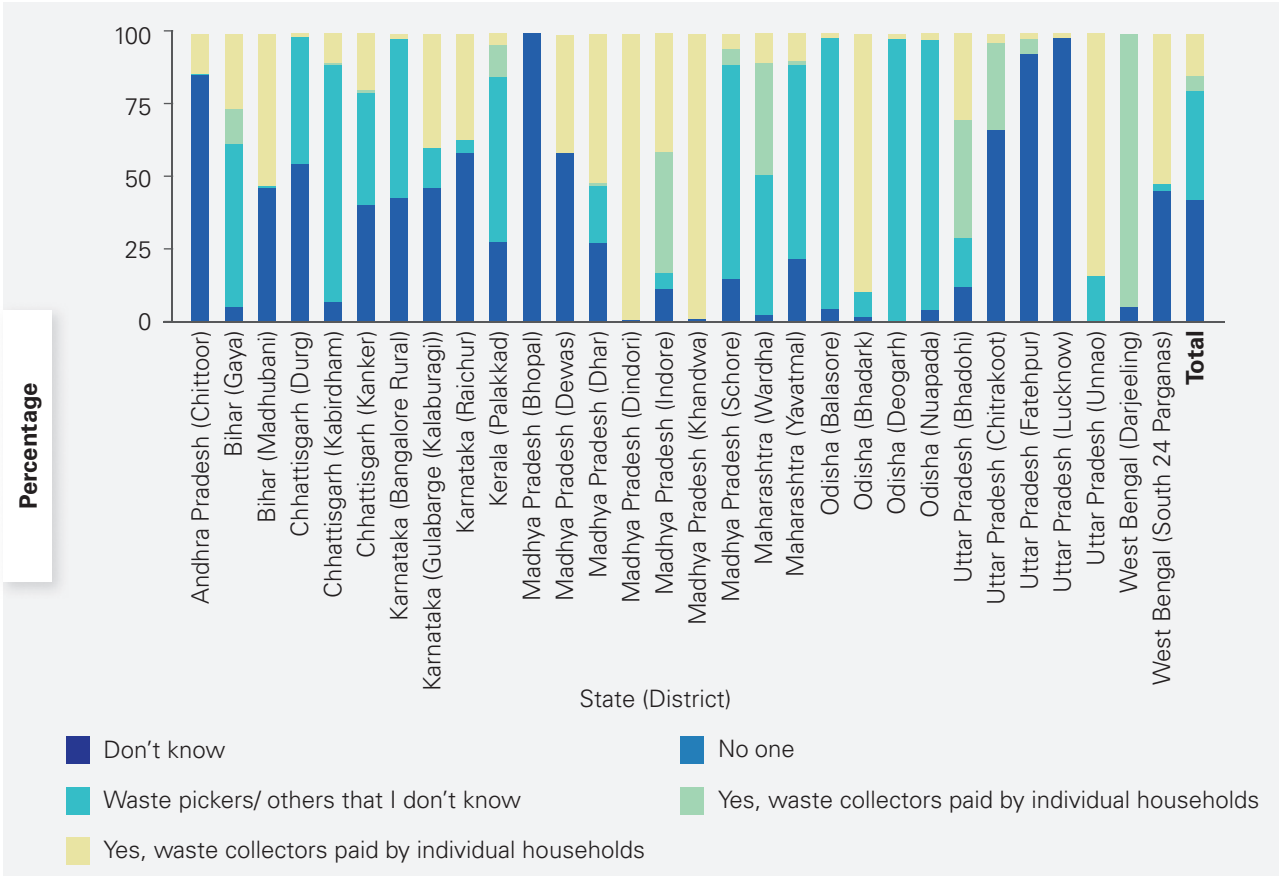
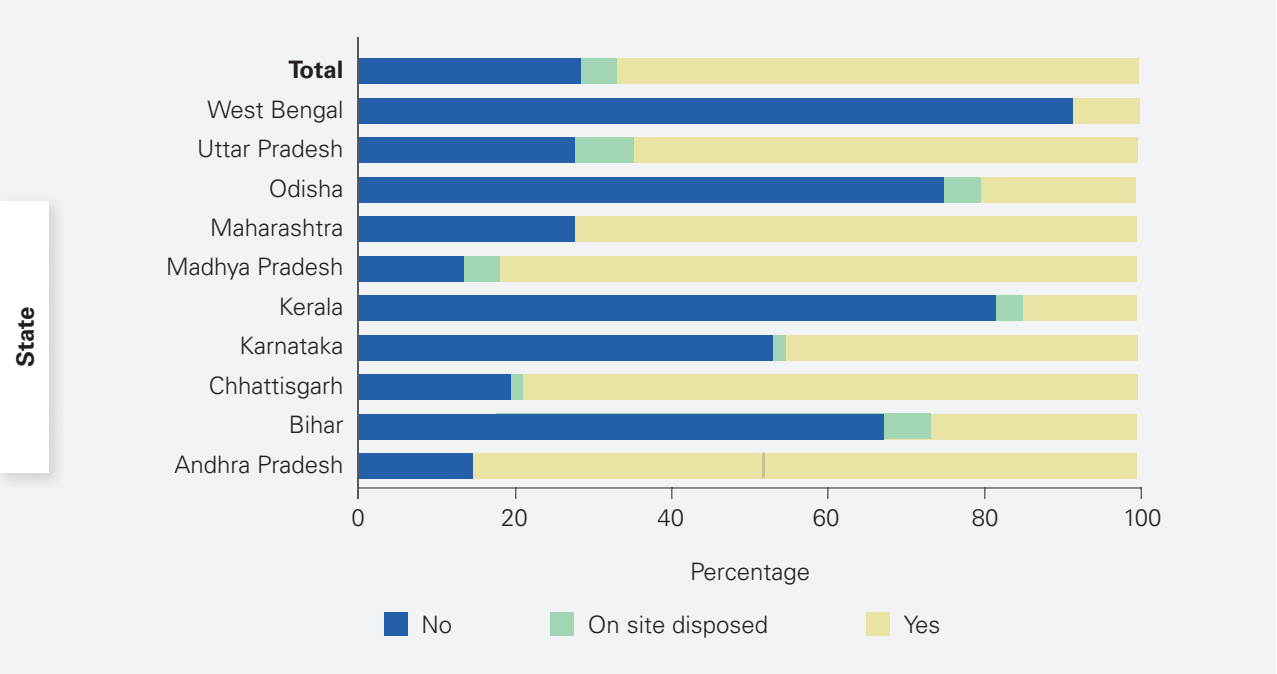


Figure 35: Waste Collection Frequency (Household)



Frequency of Waste Collection

A total of 1261 (14 per cent) out of 9015 respondents who disposed of the garbage by giving it to the garbage collector were asked if the waste was being collected regularly. About 67 per cent reported that the waste was collected regularly, 31 per cent reported no collection of waste and ~2 per cent reported that they performed on-site waste disposal *(see Figure 35)*. About 85 per cent respondents from Andhra Pradesh reported that garbage collectors collected the garbage every day. About 92 per cent and 78 per cent respondents from West Bengal and Kerala respectively reported that garbage was not collected on a daily basis.

Impact of COVID-19 on Waste Collection Service

All sampled respondents were asked if the waste collection service was affected or disrupted due to the pandemic. About 61 per cent respondents stated that they had no waste collection system in place whereas 21 per cent stated that they faced no disruptions as the waste was collected every few days. Only 12 per cent were of the opinion that COVID-19 had affected the waste collection services as waste was collected only sometimes now, with ~6 per cent stating that no one had come to collect the waste in a week *(see Figure 36)*. The findings also suggested that a majority of the population in household surveys who felt disruptions in waste collection (waste is only collected sometime) either belonged to Andhra Pradesh (44 per cent) or Uttar Pradesh (39 per cent).

At the district level, respondents belonging to Darjeeling (West Bengal), Wardha (Maharashtra), Khandwa (Madhya Pradesh) and Kanker (Chhattisgarh) experienced no disruptions in waste collection during the pandemic. The Uttar Pradesh districts of Lucknow (72 per cent), Chitrakoot (67 per cent), and Fatehpur (52 per cent) had experienced the maximum number of disruptions in waste collection. Figure 37 gives a detailed overview of the disruption in waste collection at the district level due to COVID-19.

Figure 36: Impact of COVID-19 on Waste Collection Services (Household)

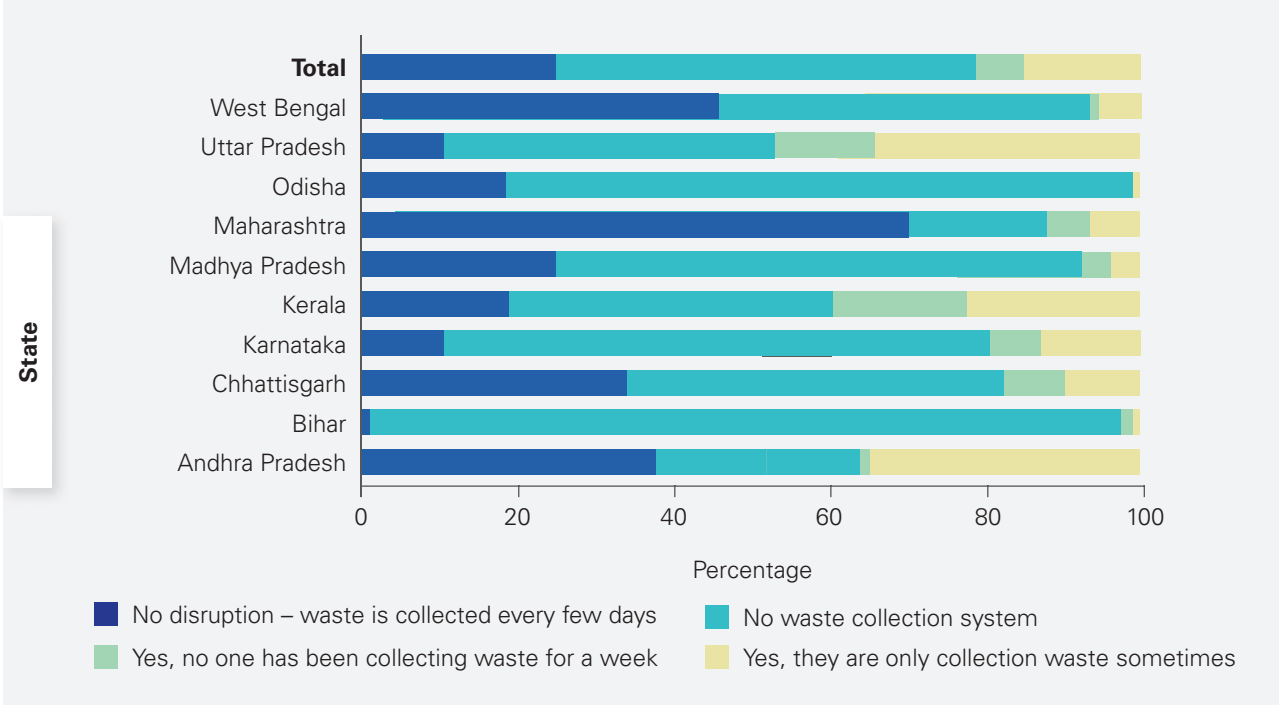


Figure 37: Impact of COVID-19 on Waste Collection Services at the District Level (Household)

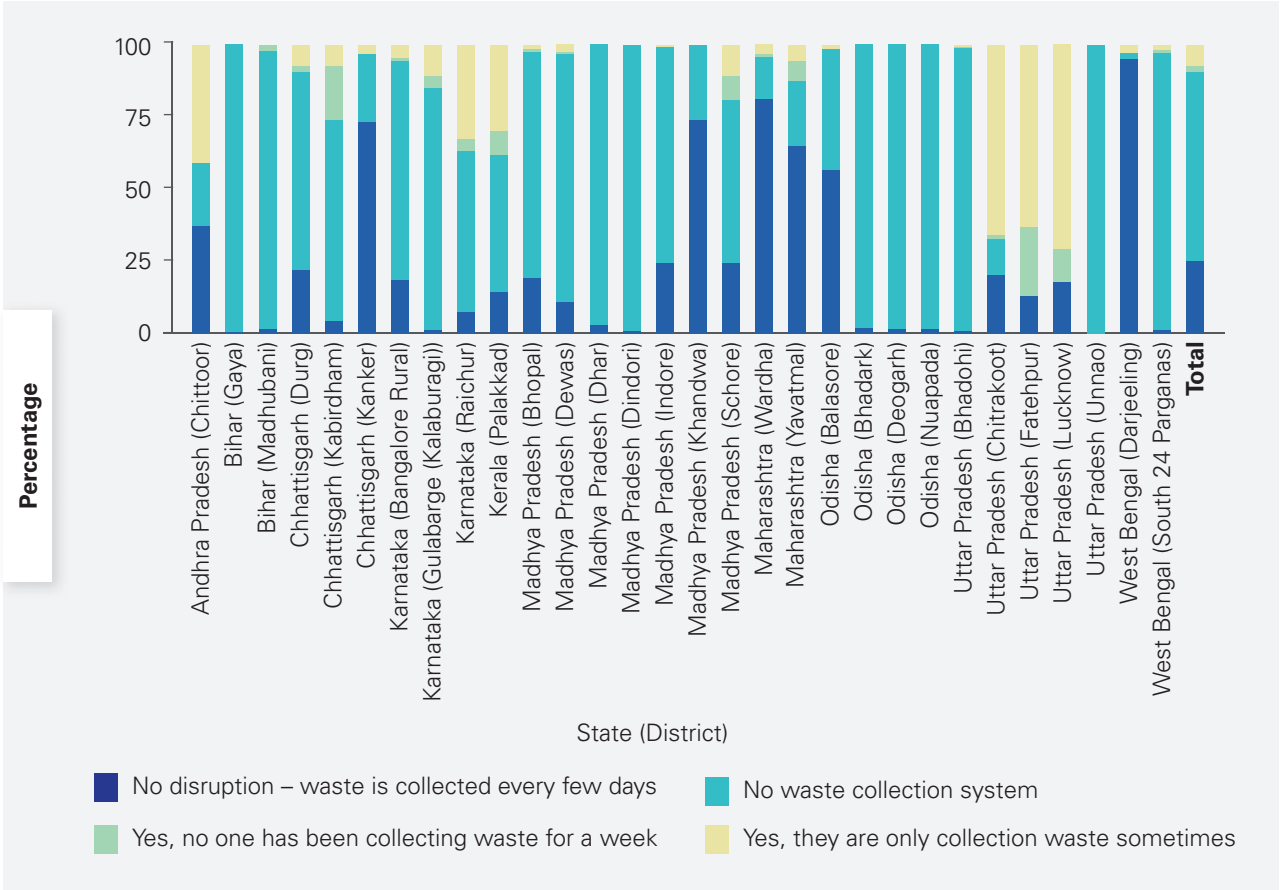


Table 6: Usage of Protective Gear by Sanitation Worker/Waste Collector (Household)

Gear	Times	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Mask	Always	44%	63%	89%	92%	97%	93%	95%	97%	58%	48%	76%
		6%	13%	0%	2%	0%	3%	2%	0%	2%	24%	4%
	Sometimes	49%	25%	10%	6%	3%	4%	4%	3%	40%	28%	20%
Gloves	Always	28%	25%	75%	68%	44%	92%	77%	97%	23%	53%	58%
	Never	35%	50%	4%	4%	14%	5%	4%	0%	17%	27%	12%
	Sometimes	37%	25%	21%	28%	41%	4%	20%	3%	60%	21%	30%
Boots	Always	2%	50%	86%	50%	16%	95%	63%	89%	38%	41%	56%
	Never	55%	25%	3%	24%	52%	3%	5%	4%	25%	51%	21%
	Sometimes	43%	25%	11%	27%	33%	2%	32%	7%	37%	8%	23%
	N	237	8	433	238	135	485	452	168	848	302	3306

Knowledge of Protection Used by Sanitation Workers/Garbage Collectors

The 3516 respondents who replied in the affirmative about garbage being collected during COVID-19 were asked to give details about the usage of basic protection gear used by the sanitation workers or garbage collectors in their villages. About 210 people stated that they did not know such details. The rest of the respondents stated various methods as depicted in Table 6. About 76 per cent respondents stated that sanitation workers/waste collectors always used masks, 58 per cent respondents stated that they used gloves and 56 per cent respondents stated that they used boots during garbage collection.

Village-level Disinfection Drive

Respondents of the household survey were asked about the details of disinfectant spraying and the cleaning practices used in their respective villages

Table 7: Status of Disinfection Drives – Spraying Disinfectant, Cleaning Carried Out in the Village/ Community (Household)

		Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Public water points	Don't know	1%	3%	13%	29%	22%	3%	1%	5%	4%	3%	8%
	No	7%	53%	43%	14%	23%	30%	4%	35%	31%	73%	32%
	Yes	92%	45%	44%	57%	54%	67%	96%	59%	65%	24%	60%
Commu-nity / street	Don't know	1%	3%	14%	33%	26%	2%	0%	19%	12%	2%	11%
	No	11%	28%	53%	16%	34%	30%	3%	33%	32%	37%	30%
	Yes	88%	69%	33%	51%	40%	68%	97%	48%	55%	61%	59%
Commu-nity toilet	Don't know	18%	29%	20%	45%	46%	7%	1%	35%	30%	4%	22%
	No	39%	48%	60%	33%	53%	49%	72%	43%	39%	83%	50%
	Yes	43%	23%	21%	22%	1%	44%	28%	22%	30%	12%	28%
	N	299	600	898	900	300	2104	600	1203	1500	611	9015

or communities *(see Table 7)*. About 60 per cent responded in the affirmative about cleaning and disinfectant spraying being carried out in public water points, followed by 59 per cent stating the same for their communities/streets. But half of the respondents (50 per cent) were of the opinion that no cleaning of community toilets was being carried out. Most of these respondents were from West Bengal (83 per cent), Maharashtra (72 per cent) and Chhattisgarh (60 per cent).

5.2.3. ODF Sustainability

ODF Sustainability Awareness

Figure 38 depicts the responses of the intermediaries regarding their awareness of ODF sustainability. Nearly 67 per cent of intermediate functionaries knew about ODF sustainability and 33 per cent had no knowledge about it. The highest number of intermediaries from Kerala (92 per cent), Chhattisgarh (87 per cent) and Odisha (82 per cent) knew about ODF sustainability. The maximum of respondents who did not know about it were from West Bengal (81 per cent) and Bihar (74 per cent). Within the districts, it was quite surprising to note that all representatives from Darjeeling (West Bengal), Madhubani (Bihar) and Dindori (Madhya Pradesh) mentioned that they had no knowledge about ODF sustainability.

ODF Sustainability Plan

Intermediaries were also asked if their Gram Panchayats had an ODF sustainability plan. Only 44 per cent responded in the affirmative. About 42 per cent stated that their respective Gram Panchayats had no ODF sustainability plan, followed by 14 per cent who claimed to not know about it. Similar to previous responses about ODF sustainability awareness, Gram Panchayats of Kerala (88 per cent) and Chhattisgarh (75 per cent) have ODF sustainability plans, whereas those of West Bengal (94 per cent) and Bihar (69 per cent) do not have a plan. About 40 per cent intermediaries from Andhra Pradesh did not know if their Gram Panchayats had an ODF sustainability plan.

Figure 38: ODF Sustainability Awareness (Intermediaries)

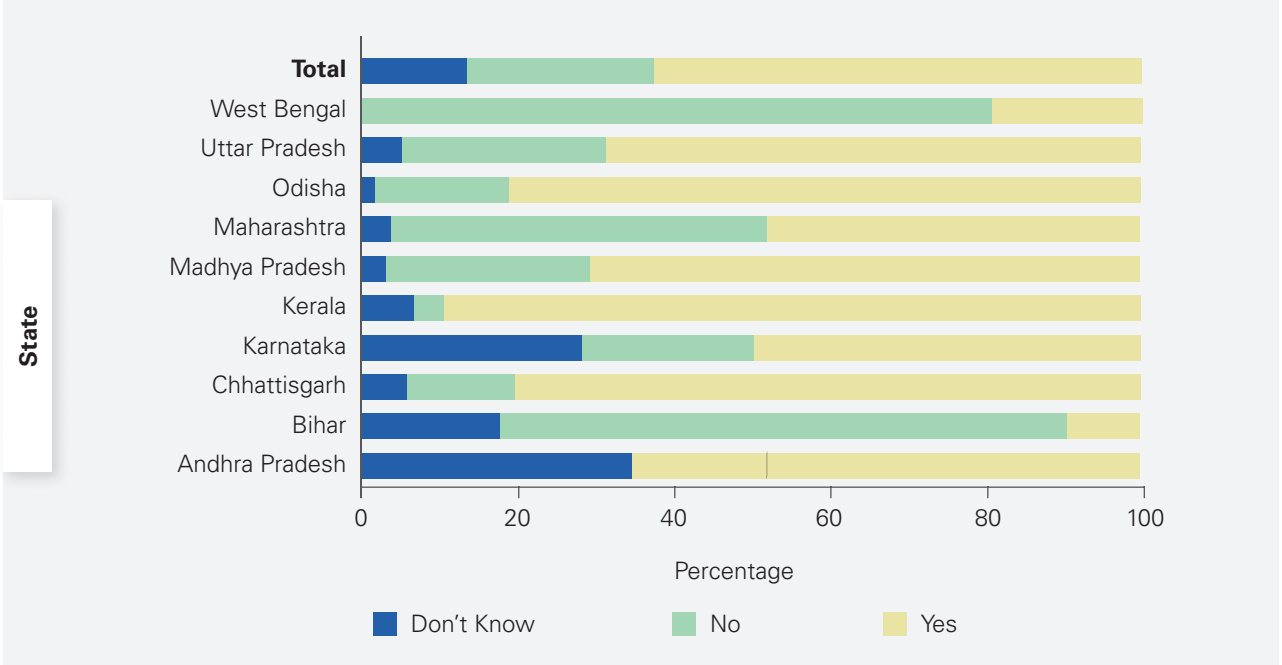


Table 8: Implementation of Sanitation Activities – Agencies Involved (Intermediaries)

Times	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Key line departments and their programme	5%	40%	70%	51%	100%	35%	49%	50%	36%	19%	44%
Frontline workers	35%	29%	18%	70%	92%	48%	68%	74%	33%	39%	49%
Village Sanitation Committee	65%	21%	48%	56%	96%	64%	49%	30%	62%	31%	53%
WASH Forum or any other civil society organization or their networks	75%	38%	2%	54%	64%	11%	27%	3%	39%	0%	26%
Self Help Groups	0%	76%	42%	49%	92%	34%	78%	75%	26%	33%	47%
CSR	0%	5%	3%	3%	100%	1%	7%	0%	3%	0%	6%
Any Other	0%	0%	2%	1%	28%	1%	10%	17%	8%	0%	6%
N	20	42	60	79	25	142	41	76	107	36	628

Agencies Engaged in Implementing Sanitation Activities

Table 8 depicts the various agencies that the intermediaries stated as being engaged in implementing sanitation activities in their communities. Village Sanitation Committees (53 per cent), frontline workers (49 per cent) and WASH Forums/Other Civil Society Organizations (47 per cent) are some of the commonly identified agents. A majority of the intermediaries from Kerala were of the opinion that all major agencies were engaged in sanitation activities, ranging from key line departments, frontline workers, Village Sanitation Committees, WASH forums, Self Help Groups (SHGs) and CSRs. However, most respondents from the intermediary sample in West Bengal thought otherwise, as a majority of the intermediaries stated that no major agency was engaged in implementing sanitation activities in their communities.

Village-level Sanitation Activities

Following this, the intermediaries were asked to lay down the various activities related to ODF being carried out in the villages. Table 9 represents the various activities reported by the intermediaries. A majority (67 per cent) of the intermediaries were of the view that awareness programmes for behaviour change were one of the most common activities being performed in the villages and all intermediate respondents from Andhra Pradesh agreed that the mentioned awareness programmes were being performed in the villages. In addition to this, drainage/soak pit facilities to dispose of wastewater (57 per cent), toilet construction (47 per cent) and Nigrani Committees for monitoring ODF sustainability (44 per cent) were reported by the intermediaries to be some of the major activities being performed.

When household respondents were asked similar questions about these activities, such as for the recommencement of toilet construction, only 28 per cent stated it had resumed, whereas 15 per cent reported that they had no knowledge on the matter. About 46 per cent household survey respondents stated that they knew about the Nigrani/Good Morning Committee formed under the Swachh Bharat programme.

Table 9: Awareness Regarding Village-level Sanitation Activities (Intermediaries)

	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Household-level toilet construction of new families and left out HHs	45%	33%	40%	46%	72%	46%	85%	58%	39%	25%	47%
Retrofitting or up gradation of existing defunct HH toilets	55%	7%	53%	24%	88%	40%	32%	18%	33%	0%	33%
All institutions in village have adequate functional sanitation facilities Repairing of existing community-level sanitation complexes	75%	2%	62%	16%	100%	45%	22%	22%	39%	0%	36%
Construction of new Community Sanitation Complexes	5%	14%	72%	3%	100%	50%	20%	1%	36%	3%	31%
Construction of new Community Sanitary Complexes	5%	14%	72%	3%	100%	50%	20%	1%	36%	3%	31%
Nigrani or vigilant committees actively monitoring the ODF sustainability	30%	24%	65%	29%	84%	69%	22%	20%	50%	3%	44%
Solid waste management system in place	90%	7%	42%	43%	8%	44%	29%	18%	27%	14%	33%
Drainage or soak pit facility to dispose waste water	85%	29%	78%	72%	0%	63%	51%	49%	60%	31%	57%
Awareness programmes for behaviour change	100%	26%	97%	48%	92%	85%	59%	68%	40%	81%	67%
Any Other – select option	10%	2%	12%	3%	4%	10%	10%	0%	8%	0%	6%
N	20	42	60	79	25	142	41	76	107	36	628

Impact of COVID-19 on Community Facilities

Figure 39 depicts the impact of COVID-19 on the maintenance of community facilities (toilets and water points). About 80 per cent intermediaries were of the opinion that no disruptions were faced in the maintenance of community facilities (toilets and water points) due to the pandemic and only 18 per cent stated that there were disruptions. A majority of the intermediaries (60 per cent) from Andhra Pradesh reported having disruptions. All intermediaries from Kerala and West Bengal stated that there were no disruptions. At the district level, intermediaries of the Bhadrak (90 per cent) district of Odisha and the Unnao (90 per cent) and Fatehpur (88 per cent) districts of Uttar Pradesh reported the highest numbers in terms of having disruptions due to the pandemic *(see Figure 40)*.

Figure 39: Impact of COVID-19 on Maintenance of Community Facilities (Toilet and Water Points) (Intermediaries)

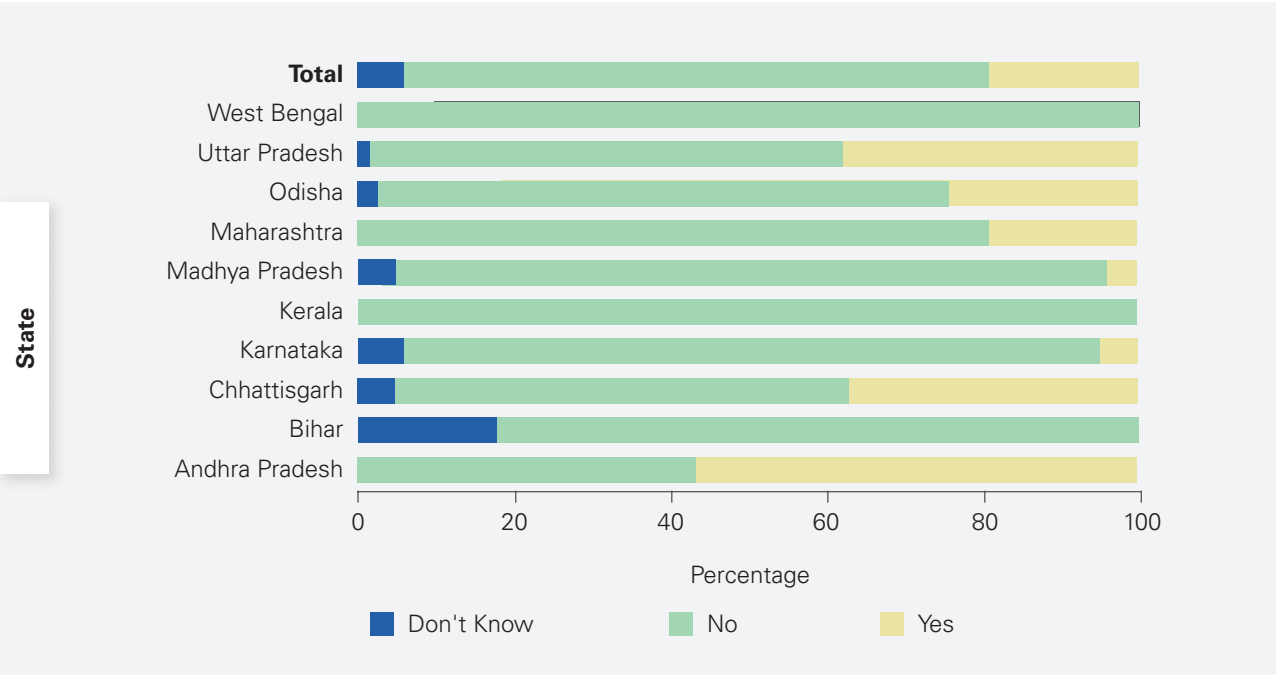


Figure 40: Impact of COVID-19 on Maintenance of Community Facilities (Toilet and Water Points) at the District Level (Intermediaries)

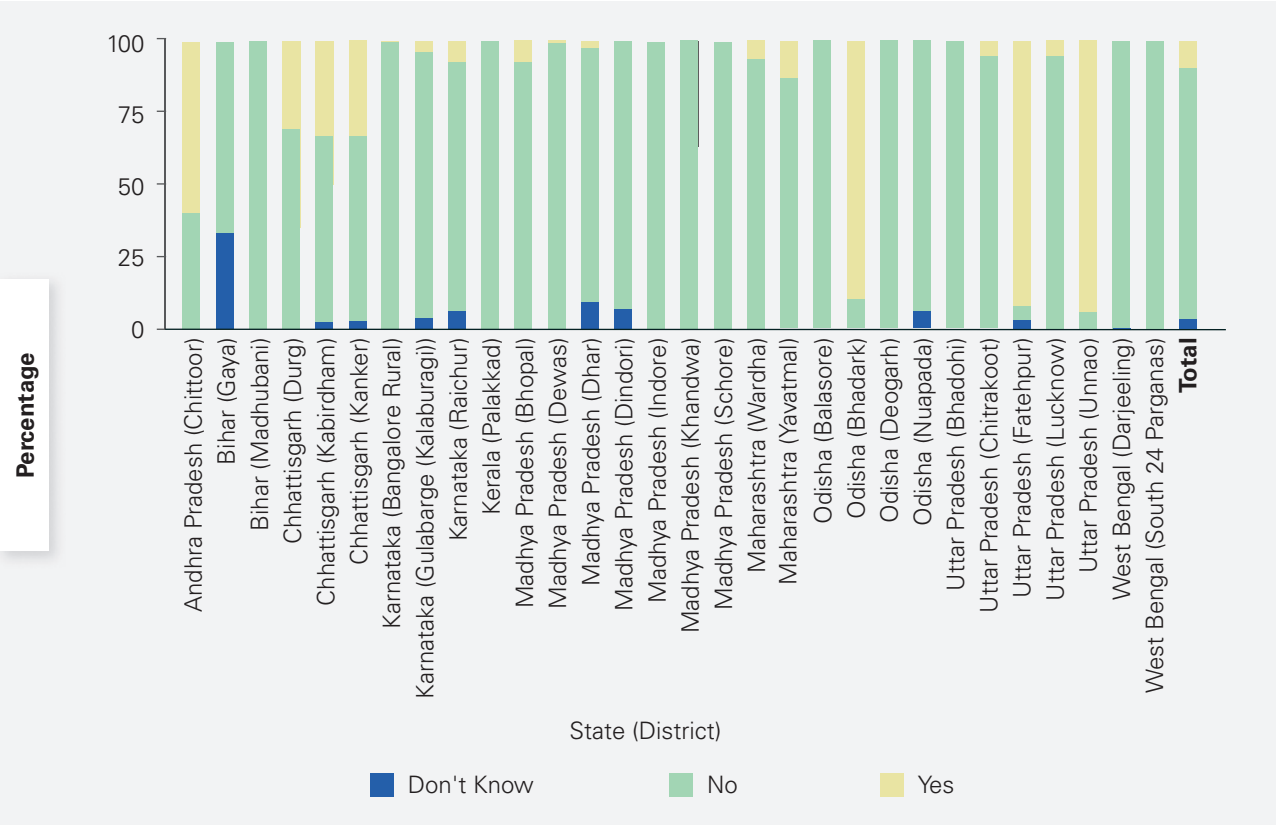


Figure 41: Facilities where Disruption was Faced (Intermediaries)

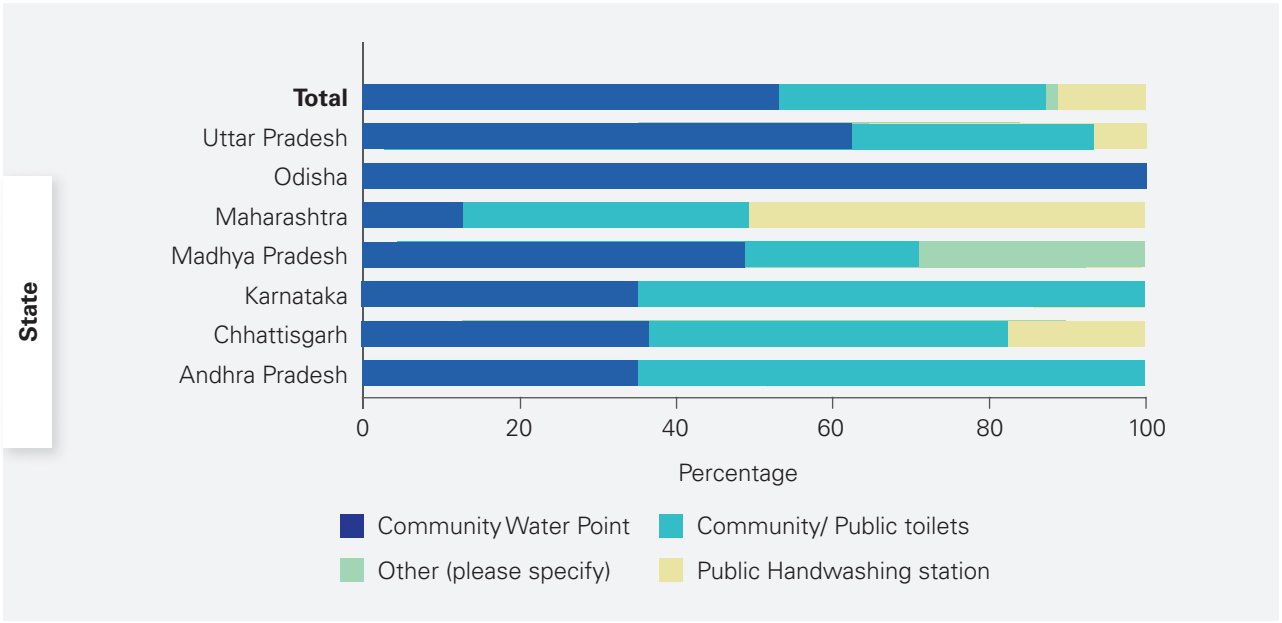


Figure 41 highlights the facilities where 110 (18 per cent) intermediaries faced disruptions in the operation and maintenance of community facilities. About 62 intermediaries (56 per cent) faced disruptions at community water points, 38 (35 per cent) at community toilets, 9 (8 per cent) at public handwashing stations and 1 (1 per cent) at other public facilities. All intermediary participants from West Bengal who reported disruptions in the maintenance of community facilities faced disruptions at community water points. About 67 per cent participants from Andhra Pradesh and Karnataka at community/public toilets and 50 per cent intermediary residents from Maharashtra at public handwashing stations reported having disruptions.

Table 10 elaborates the key areas on which the intermediaries thought priority action was needed. About 73 per cent intermediaries were of the opinion that wastewater management as well as the installation of solid waste collection/ disposal systems needed immediate attention. About 71 per cent pointed out that the cleaning of streets, drains and public places needed priority action. About 62 per cent noted that precedence should be given to sanitation activities promoting behaviour change. Interestingly, all intermediaries from Andhra Pradesh responded that no action was needed.

Table 10: Key Areas Requiring Priority Action (Intermediaries)

Priority Action Areas	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Waste water management measures e.g., Soak pit construction drainage, etc.	40%	72%	85%	87%	92%	74%	61%	76%	72%	31%	73%
Installation of solid waste collection and disposal systems	20%	67%	70%	81%	96%	73%	63%	86%	75%	53%	73%
Promotion of safe disposal of child faeces	0%	33%	57%	36%	84%	59%	41%	28%	48%	50%	46%
Activities to promote behaviour change on sanitation	80%	67%	80%	49%	92%	80%	29%	45%	53%	47%	62%
Cleaning of streets, drains and public places	35%	81%	68%	74%	92%	76%	76%	82%	55%	64%	71%
Support services for emptying pits and safe disposal of sludge	10%	31%	63%	44%	92%	62%	85%	24%	59%	8%	51%
Any other specify	0%	8%	2%	9%	0%	5%	12%	9%	13%	0%	7%
None of the above	0%	3%	0%	4%	0%	4%	0%	0%	1%	0%	2%
N	20	36	60	78	25	141	41	76	105	36	618

5.3. Water Services

5.3.1. Primary Source of Drinking Water Supply

Table 11 gives an overview of current sources of water supply for drinking purposes as per the respondents of the household survey. About 47 per cent respondents used hand pump as the major source, followed by household-level piped water (33 per cent), borewells (29 per cent), tap water (11 per cent) and about 10 per cent used water from dug wells. Among others, public stand posts (7 per cent), RO plastic bottles (5 per cent) and water tankers (2 per cent) were also utilized as sources of drinking water. It is worth noting that handpumps are the primary source of water supply for a majority of the respondents from Bihar (92 per cent), Uttar Pradesh (82 per cent) and Odisha (63 per cent). As per the data reported in Jal Jeevan Mission (JJM) MIS[17] (retrieved on 23 June 2021), the findings of Uttar Pradesh and Odisha are in line with this report, as only 11 per cent and 28 per cent households from each state respectively had tap water connections, whereas, the JJM MIS data from Bihar showed that 71 per cent households in the state had tap water connections, which is in stark contrast to the findings of this report.

About 79 per cent respondents in Kerala used household-level piped water as one of the major sources of water supply, followed by dug wells (55 per cent). The number reported by Kerala was significantly higher than the number available for tap water connections in Kerala as per the JJM MIS at ~34 per cent. About 71 per cent respondents from Maharashtra used tap water

[17] https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx

Table 11: Current Water Supply Source for Drinking Purpose (Household)

Priority Action Areas	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Household-level piped water supply	36%	27%	38%	54%	79%	43%	9%	29%	5%	38%	33%
Public stand post	19%	2%	5%	9%	3%	5%	0%	13%	13%	0%	7%
Handpump	2%	92%	49%	14%	0%	38%	10%	63%	82%	50%	47%
Borewell	45%	25%	30%	42%	28%	48%	19%	14%	18%	1%	29%
Tap	19%	24%	0%	24%	1%	1%	71%	4%	3%	2%	11%
Tanker	29%	1%	0%	2%	0%	2%	0%	0%	0%	1%	2%
RO plastic bottles	50%	1%	0%	20%	1%	1%	1%	1%	1%	7%	5%
Dug well	0%	3%	7%	2%	55%	26%	5%	5%	2%	0%	10%
Other (please specify)	1%	1%	0%	23%	34%	0%	6%	1%	1%	12%	5%
Total	**299**	**600**	**898**	**900**	**300**	**2104**	**600**	**1263**	**1500**	**611**	**9015**

Table 12: Current Water Supply Source for Drinking Purpose (Intermediaries)

Water source	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Household-level piped water supply	30%	26%	22%	84%	84%	54%	37%	29%	8%	39%	40%
Public stand post	0%	0%	0%	15%	12%	6%	5%	12%	14%	0%	8%
Handpump	10%	95%	27%	20%	0%	25%	15%	42%	59%	50%	36%
Borewell	0%	26%	57%	35%	36%	43%	24%	24%	60%	0%	37%
Tap	45%	43%	0%	15%	0%	3%	71%	0%	2%	11%	12%
Tanker	15%	2%	0%	1%	0%	2%	0%	0%	0%	3%	1%
RO plastic bottles	20%	0%	0%	18%	16%	3%	7%	0%	3%	0%	5%
Dug well	0%	2%	3%	0%	60%	20%	2%	7%	0%	8%	9%
Other (please specify)	0%	0%	0%	27%	68%	1%	2%	0%	0%	8%	7%
Total	**20**	**42**	**60**	**79**	**25**	**142**	**41**	**76**	**107**	**36**	**628**

as a major source of water supply for drinking purposes, which is almost in line with the data reported on JJM MIS at 64 per cent.

Similarly, intermediaries were also asked about the supply sources of drinking water *(see Table 12)*. In contrast to the household survey, a majority (40 per cent) of the respondents in the intermediary survey stated using the household-level piped water supply as a major source. Borewells and hand pumps are being used by approximately 36 per cent respondents from both samples each.. Intermediaries from Maharashtra showed a similar trend with their household counterparts in which 71 per cent intermediaries used tap water. Also, 95 per cent intermediaries from Bihar used hand pumps for water supply. Variances were seen in the responses of household and intermediary sample respondents from Karnataka, where 84 per cent intermediaries used household-level piped water in contrast to 54 per cent in the household sample.

5.3.2. Primary Water Source – Accessibility

Furthermore, about 3471 household respondents who were either using household-level piped water supply or public stand posts as one of the current water supply sources for drinking water were asked to identify the hours/days that water was accessible to them *(see Figure 42)*. About 1399 (40 per cent) out of 3471 households mentioned that water was available for more than one hour and 1068 (31 per cent) respondents mentioned that water was available for less than one hour a day. Only 674 (19 per cent) respondents claimed that water was available all the time and 330 (10 per cent) respondents stated that the water supply was irregular. About 92 per cent household respondents in Bihar mentioned round-the-clock water supply. About 466 (84 per cent) and 221 (60 per cent) residents from Karnataka and Chhattisgarh who used piped and public stand posts as drinking water supply sources respectively mentioned that they got water for more than one hour. Water was accessible for less than 1 hour for 541 (56 per cent) and 268 (54 per cent) respondents from Madhya Pradesh and Odisha respectively. About 124 (99 per cent) respondents from Andhra Pradesh stated that they got water either not on a daily basis or irregularly.

Figure 43 demonstrates the response collected for hours/days that water was accessible to 275 intermediaries who were using household-level piped water supply or public stand posts for water needs. About 122 (44 per cent) out of the 275 intermediary respondents said that water was available for more than 1 hour, which is similar to the responses from the household sample. About 27 per cent reported that it was available for less than 1 hour a day, 25 per cent reported that water supply was available all the time and a mere

Figure 42: Accessibility of Water – Hours/Day (Household)

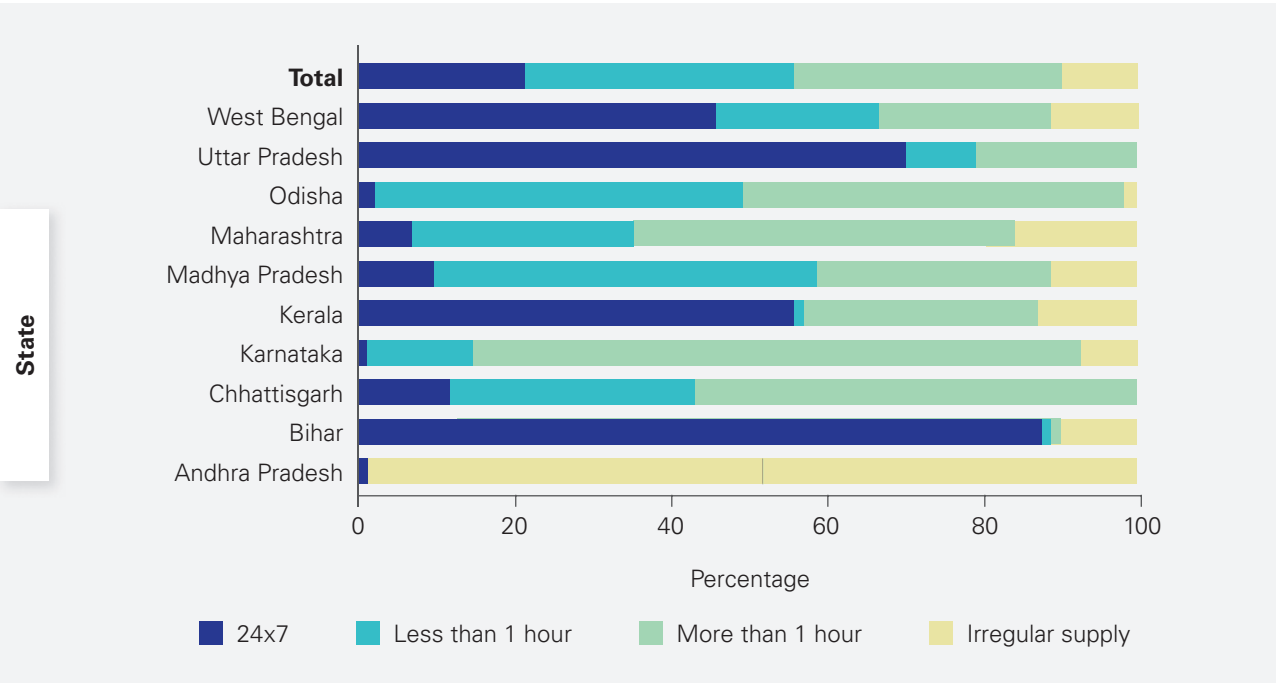
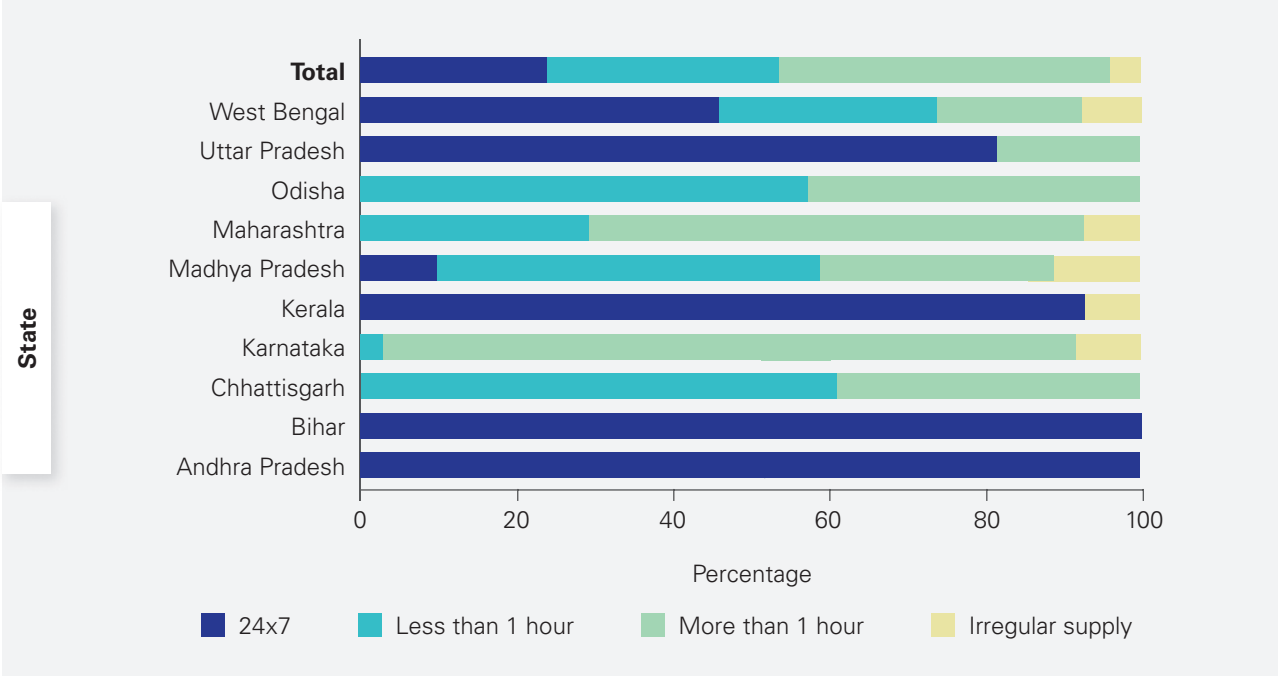


Figure 43: Accessibility of Water – Hours/Day (Intermediaries)



4 per cent responded that water supply was irregular. All intermediaries from Andhra Pradesh claimed to have access to water for the entire 24 hours.

Variances could be seen in the responses of the household and intermediate functionary respondents from Andhra Pradesh as intermediaries reported getting 24-hour water supply, as against household respondents who reported getting irregular water supply.

5.3.3. Water Source Availability within the House Premises

Figure 44 showcases the availability of water sources within the respondent's premises. About 6090 (68 per cent) of the total households reported that water was available in the premises. About 97 per cent and 92 per cent residents from Kerala and Karnataka respectively reported water availability within the premises of the household. The maximum number of participants who reported not having water sources in their house premises were from Odisha (54 per cent) and Uttar Pradesh (45 per cent). On the other hand, 76 per cent intermediary respondents had a water supply source at home and only 24 per cent stated otherwise *(see Figure 45)*. All intermediaries from Bihar and Kerala stated that they had in-house water supply sources. Odisha (58 per cent) and Madhya Pradesh (43 per cent) have the highest number of intermediaries without a source of water supply within their household premises.

Figure 44: Availability of Water Source within Household (Household)

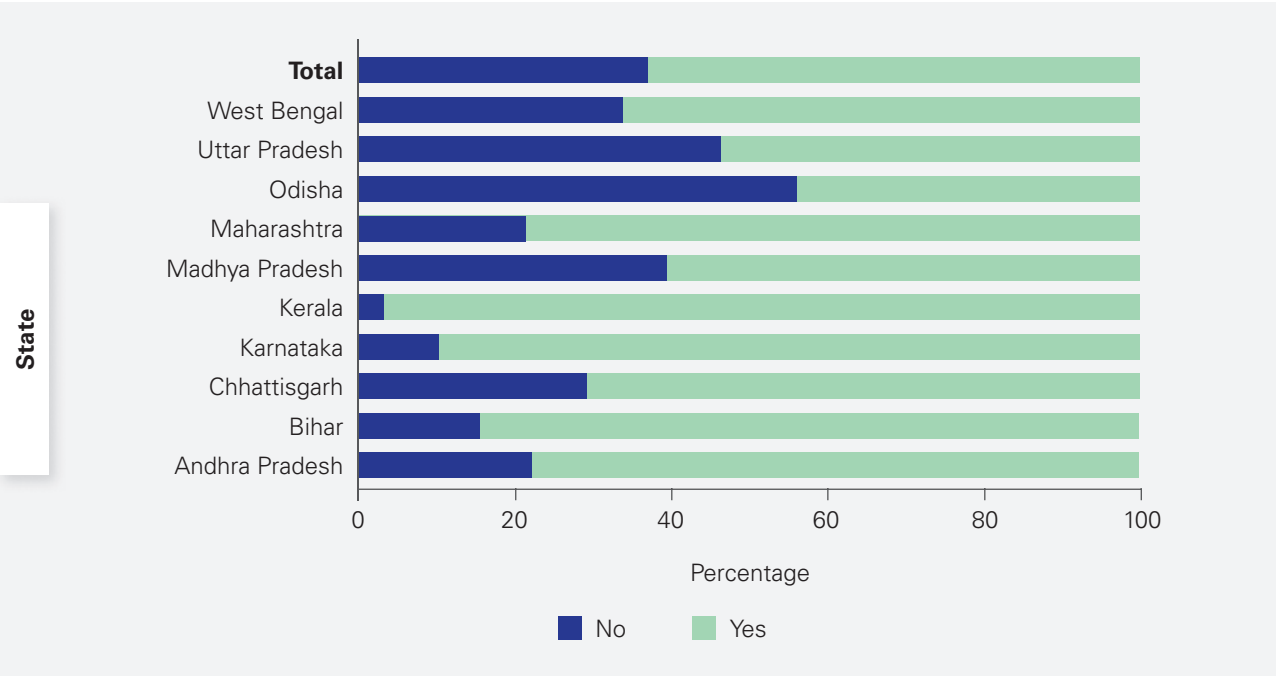
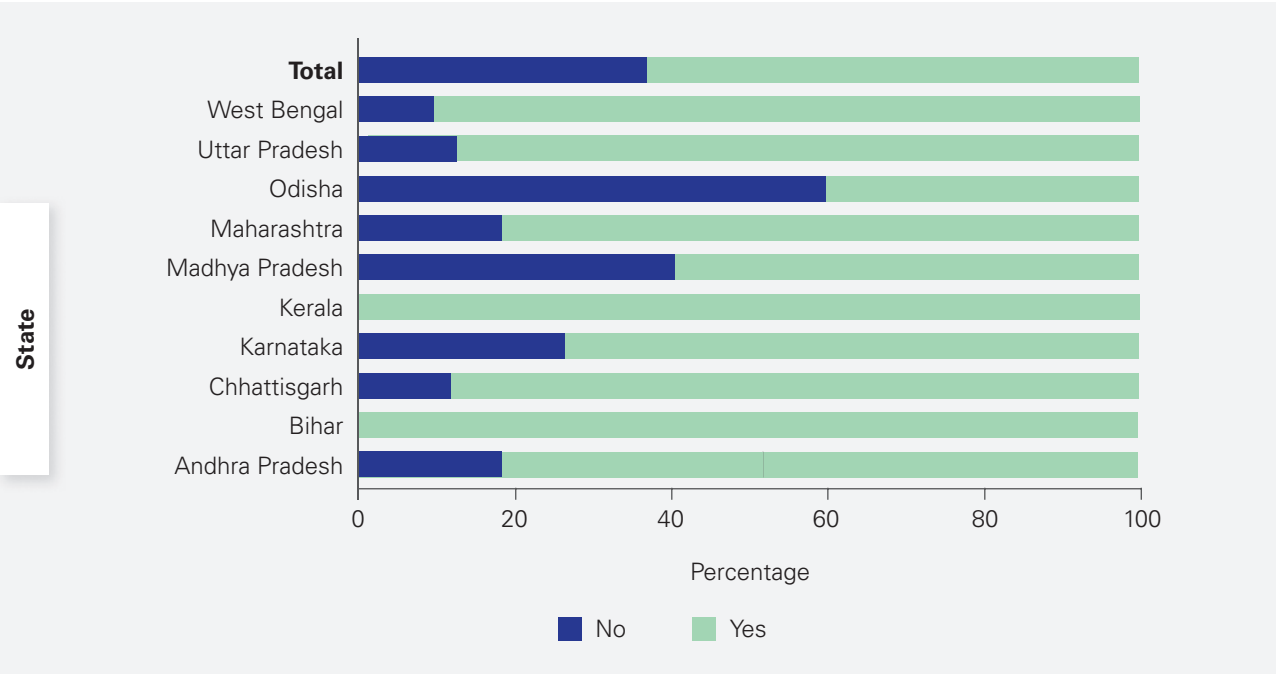


Figure 45: Availability of Water Source within Household (Intermediaries)



Figures 46 and 47 clearly show that for a majority of the household and intermediary districts of Odisha, particularly Bhadrak, Deogarh and Nuapada, water sources were not available in the house premises. The Bangalore (Rural) district of Karnataka, the Palakkad district of Kerala and the Gaya district of Bihar have the highest populations with in-house water supply as compared to the other sampled districts.

Figure 46: Availability of Water Source within Household at the District Level (Household)

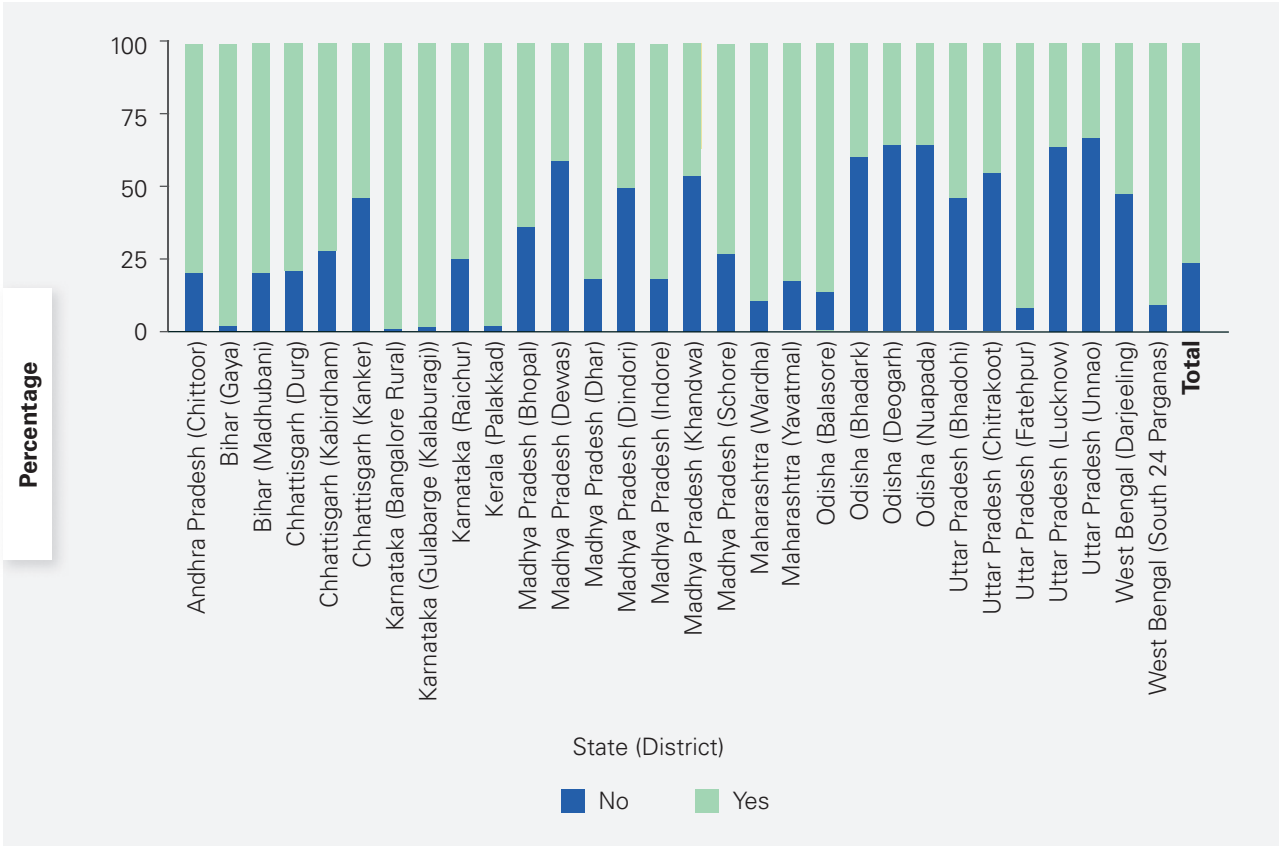
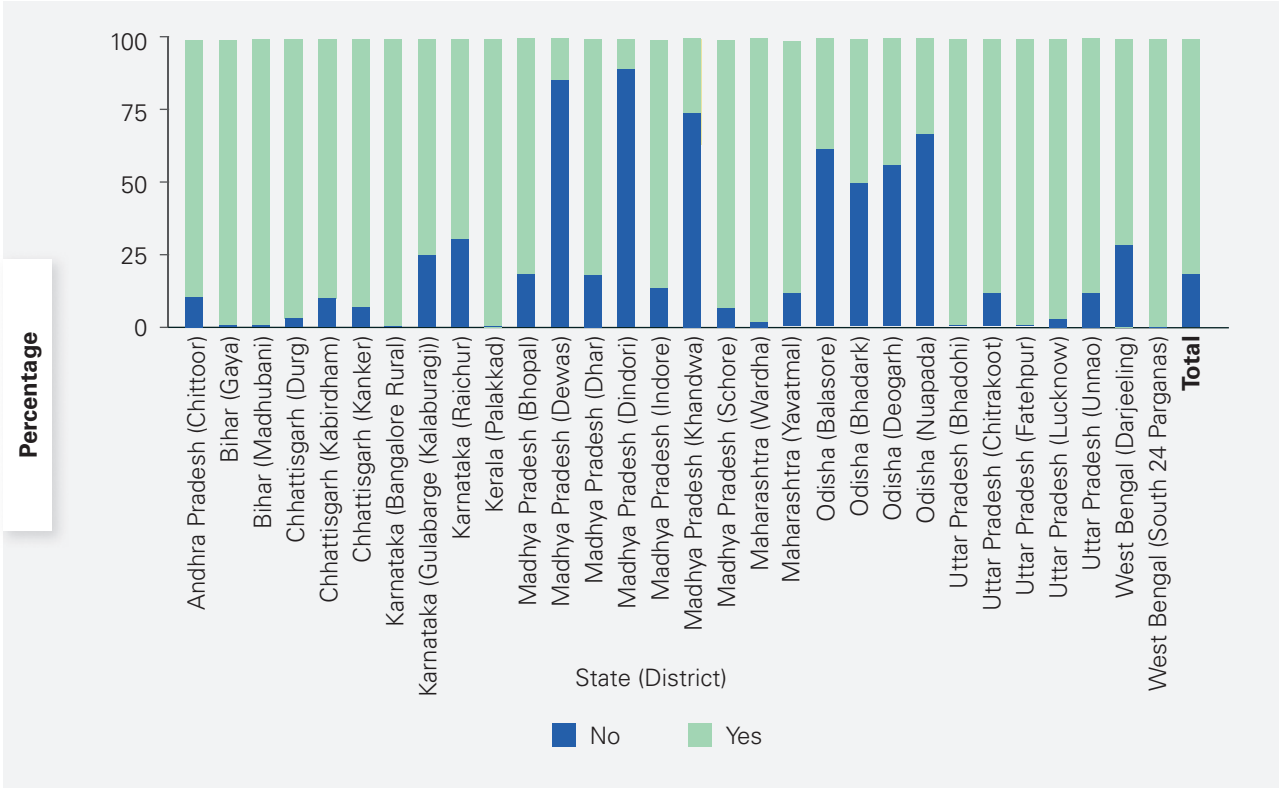


Figure 47: Availability of Water Source within Household at the District Level (Intermediaries)



5.3.4. Water Collection – Time Spent, Individuals Involved

Figure 48 illustrates the time spent on water collection in a day by 2925 (32 per cent) respondents who reported not having in-house water availability. Around 66 per cent of the 2925 respondents said that they spent more than 15 minutes in total collecting water every day. About 19 per cent respondents spent 10–15 minutes and 15 per cent spent less than 10 minutes collecting water. Respondents from Karnataka (97 per cent) and Andhra Pradesh (92 per cent) spent the highest amount of time collecting water.

Figure 48: Time Spent on Water Collection (Household)

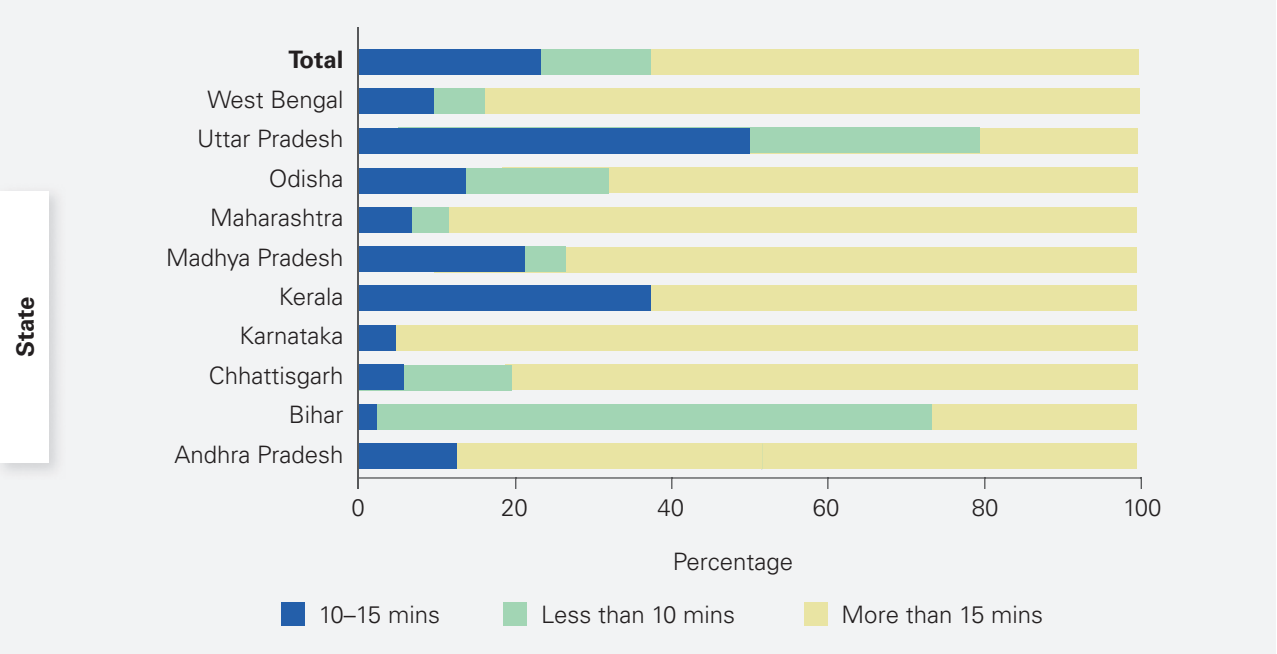
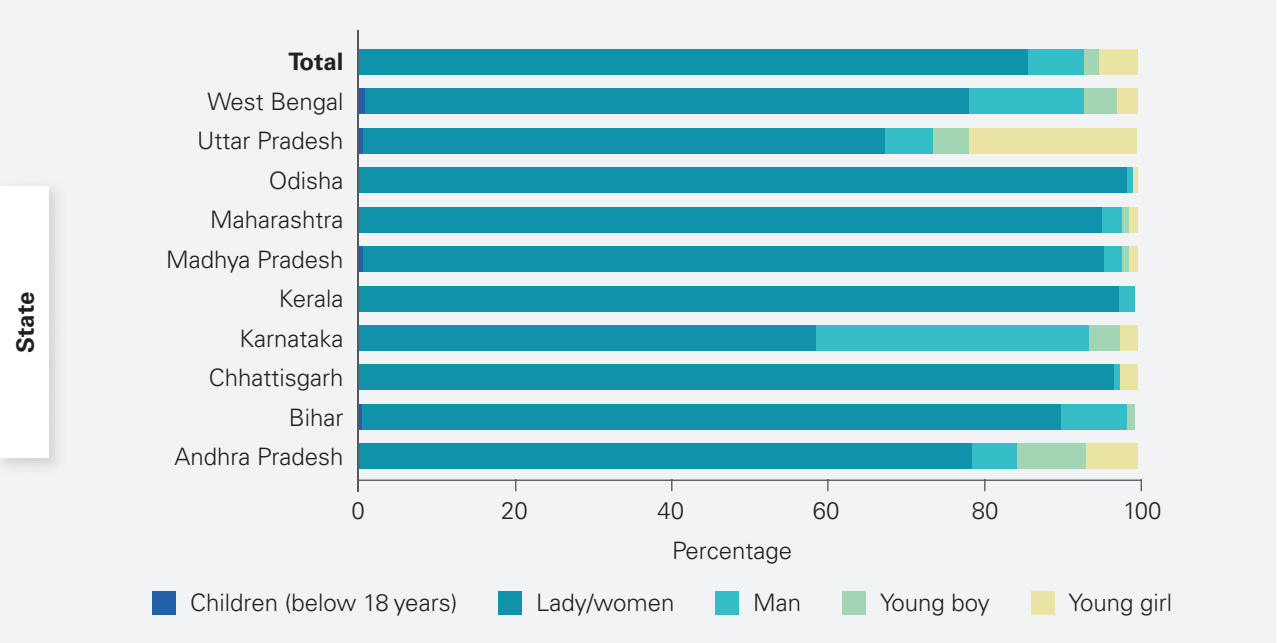


Figure 49: Water Collection Responsibility



Across the sampled states, mostly women were responsible for water collection as depicted in Figure 49. In 86 per cent households, primarily ladies and women held the responsibility of collecting water. Almost all respondents from Chhattisgarh, Kerala and Odisha reported that the ladies in their households collected water. Interestingly, 35 per cent respondents from Karnataka mentioned that the men collected water in their households, which is the highest reported number across all sampled states.

COVID-19 Prevention Protocols in Water Collection Point

Social distancing scenarios at water collection points are depicted in Figure 50 for the household sample. Overall, 51 per cent participants were of the opinion that social distancing was always followed at the water collection points, whereas 20 per cent stated that social distancing was taken care of only sometimes. About 19 per cent responded that it was taken care of most of the time and 10 per cent said that it was never taken care of. About 53 per cent respondents from West Bengal reported that social distancing was never followed at water collection points. Among the districts, all participants from the Gaya district of Bihar mentioned that social distancing was never taken care of at water collection points *(see Figure 51)*, whereas almost all respondents from the Dindori and Dewas districts of Madhya Pradesh, Bangalore Rural in Karnataka, and Unnao (Uttar Pradesh) claimed that social distancing was always taken care of.

For the household survey, Figure 52 illustrates the status of disinfection at water points used by the 2925 (32 per cent) respondents who did not have in-house water availability. About 47 per cent respondents stated that water points used by them were always disinfected and 19 per cent were of the opinion that water points were disinfected most of the time. Figure 53 demonstrates that all respondents from Bangalore (Rural) and Bhadrak responded that water points used by the families were regularly disinfected. A majority (60 per cent) of the participants from West Bengal said that water points were never disinfected. Data when analysed at the district level showed that

Figure 50: Status of Social Distancing at Water Collection Points (Household)

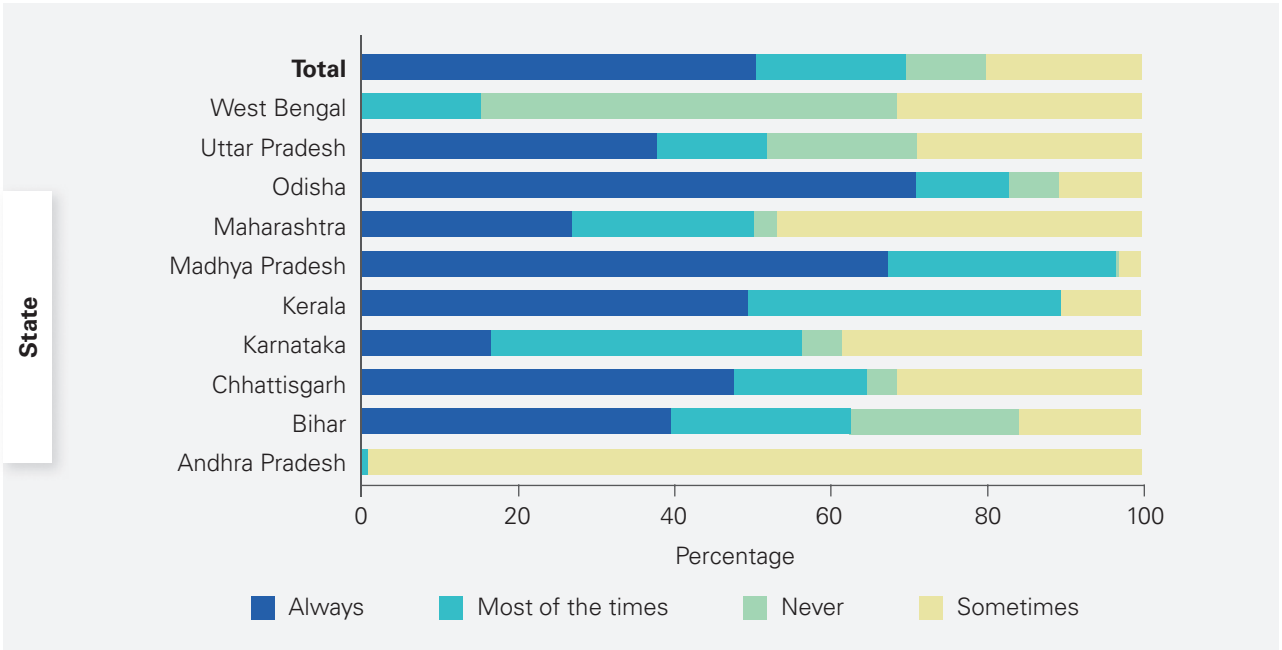


Figure 51: Status of Social Distancing at Water Collection Points at the District Level (Household)

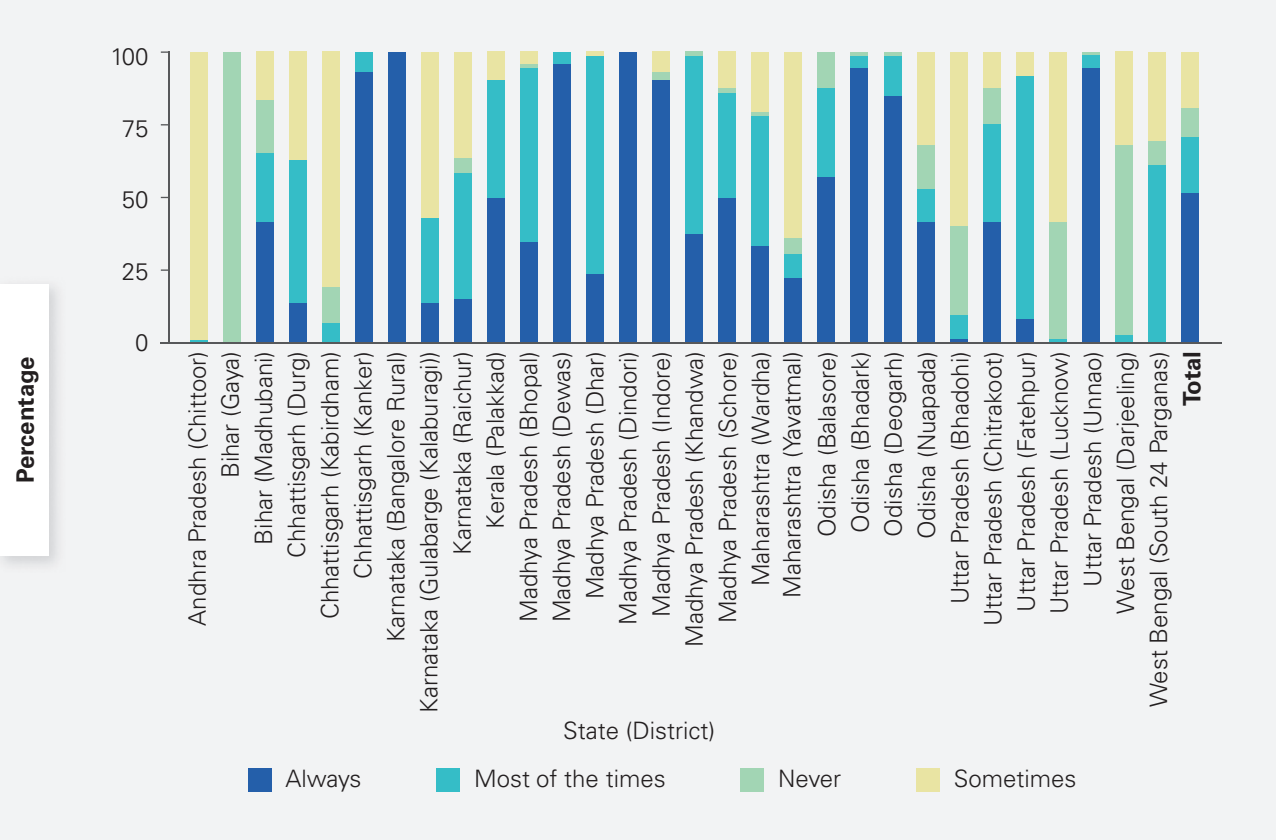


Figure 52: Regularity of Water Points Disinfection (Household)

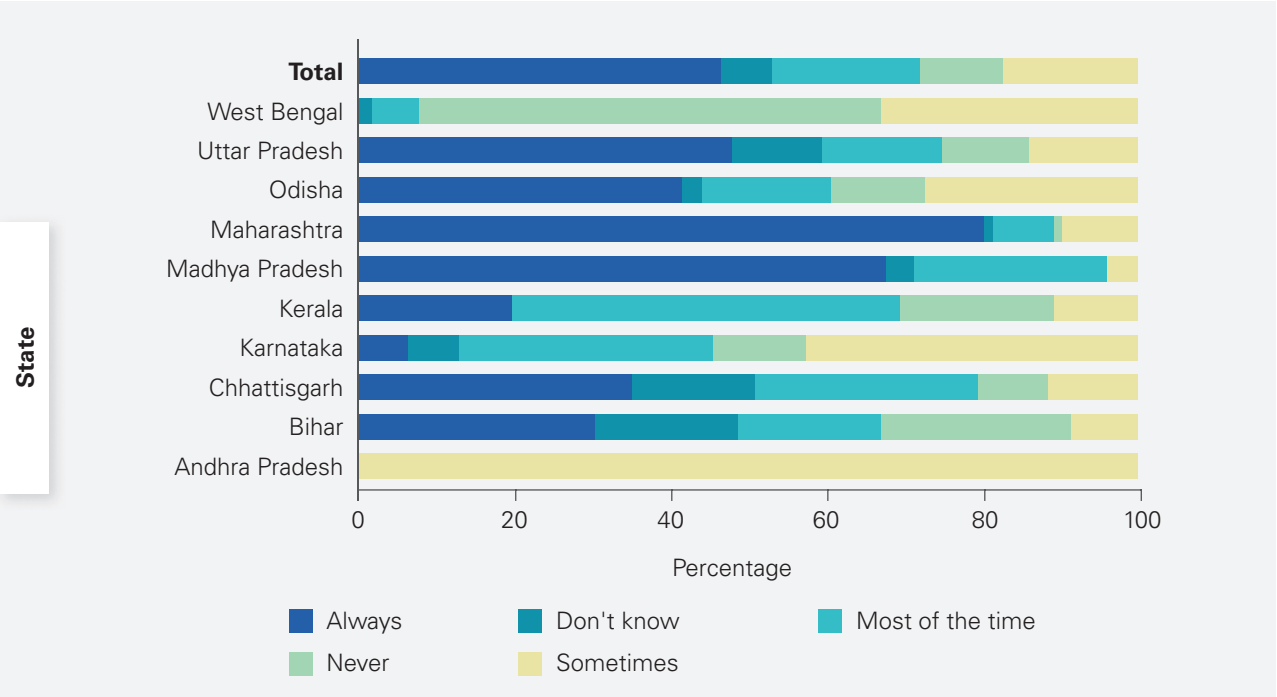


Figure 53: Regularity of Water Points Disinfection at the District Level (Household)

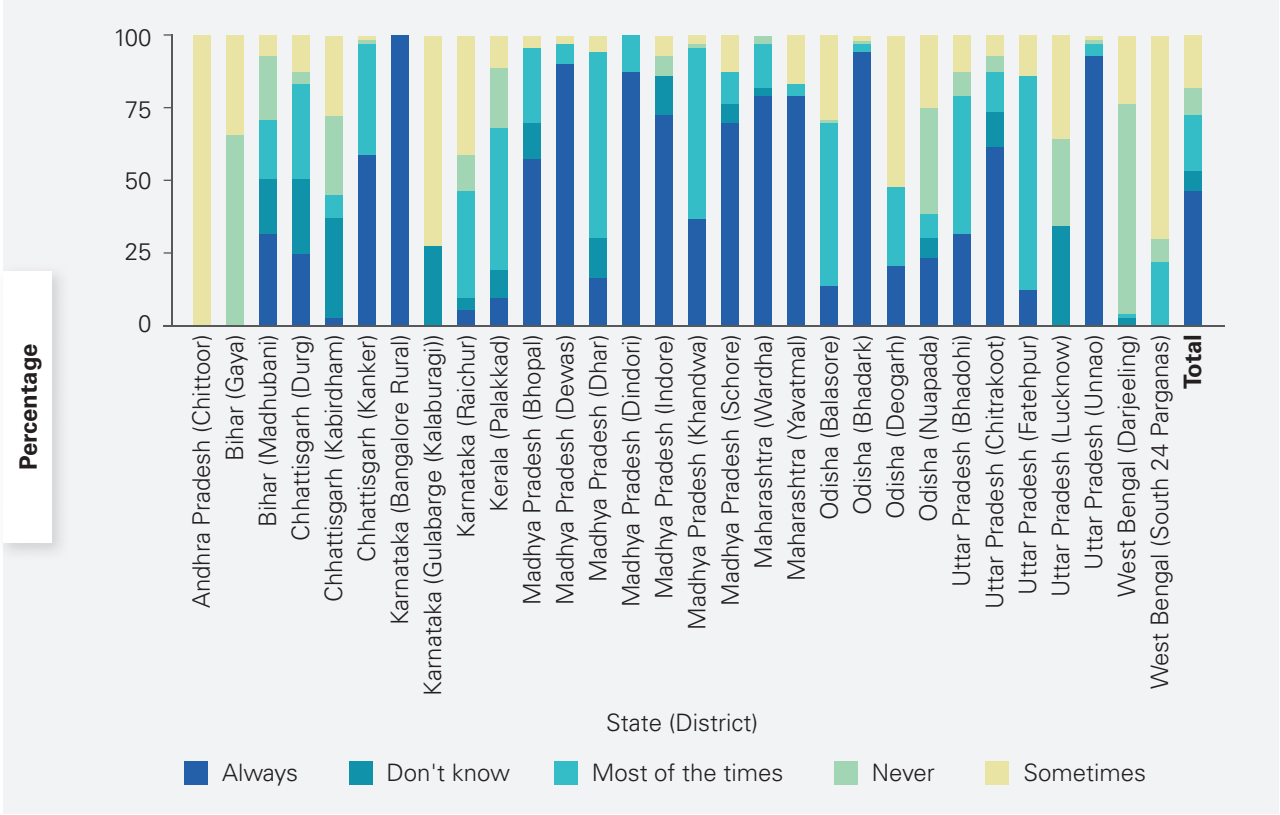
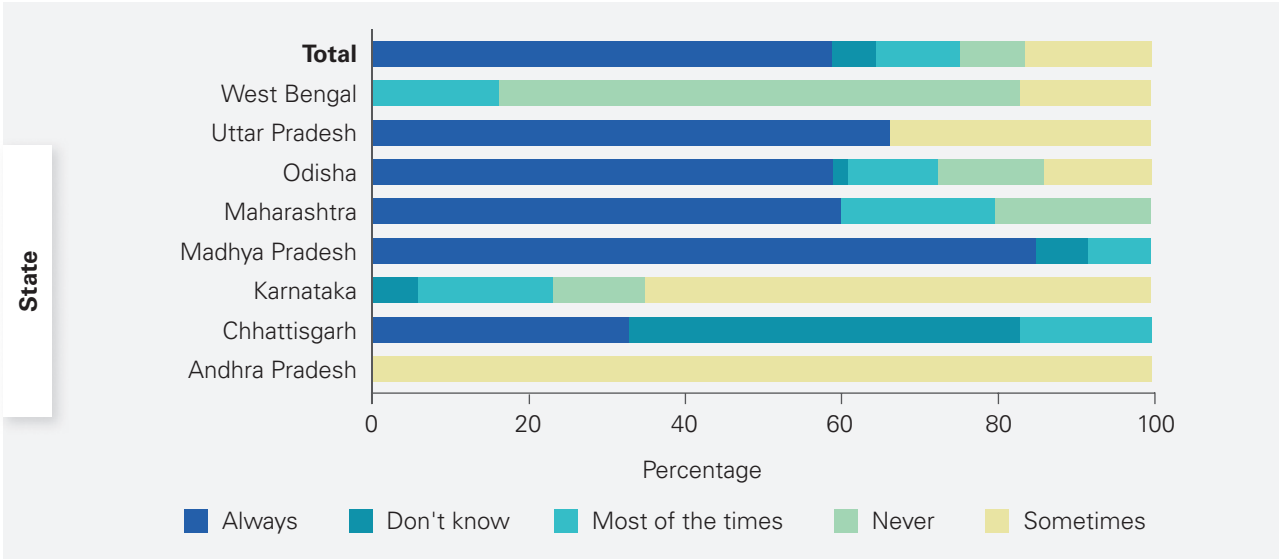


Figure 54: Regularity of Water Points Disinfection (Intermediaries)



74 per cent respondents from Darjeeling (West Bengal) and 67 per cent respondents from Gaya (Bihar) said that disinfection of water points had never taken place.

Similarly, the 151 intermediaries who did not have in-house water supply sources were asked if the water points from which they gathered water were disinfected *(see Figure 54)*. About

59 per cent intermediaries responded in the affirmative and 16 per cent said that it was disinfected only sometimes. A majority of the intermediaries from Andhra Pradesh and Karnataka responded with 'sometimes' when asked about the disinfection of water points. Intermediaries from West Bengal (67 per cent) were of the opinion that water points were never disinfected.

5.3.5. Water Storage Space and Access to Enough Water

The availability of enough space to store water was asked to household-level respondents *(see Figure 55)*. About 92 per cent respondents stated having enough space to store water and a mere 8 per cent said that they did not have enough space. A majority of the participants who did not have space for storing water were from Bihar (36 per cent) and West Bengal (20 per cent). Figure 56 clearly shows that 71 per cent respondents from the Madhubani district of Bihar faced shortage of space to store water, followed by 37 per cent respondents from Darjeeling (West Bengal).

On the question of having access to enough water, 86 per cent replied in the affirmative and only 14 per cent stated otherwise *(see Figure 57)*. Within the states, the maximum number (49 per cent) of respondents who were from Andhra Pradesh said that they were not getting enough water, followed by respondents from Bihar (36 per cent). From the Madhubani district in Bihar, 72 per cent residents claimed to not get enough water, followed by 44 per cent respondents from Darjeeling (West Bengal), 37 per cent from Deogarh (Odisha) and

Figure 55: Availability of Water Storage Space (Household)

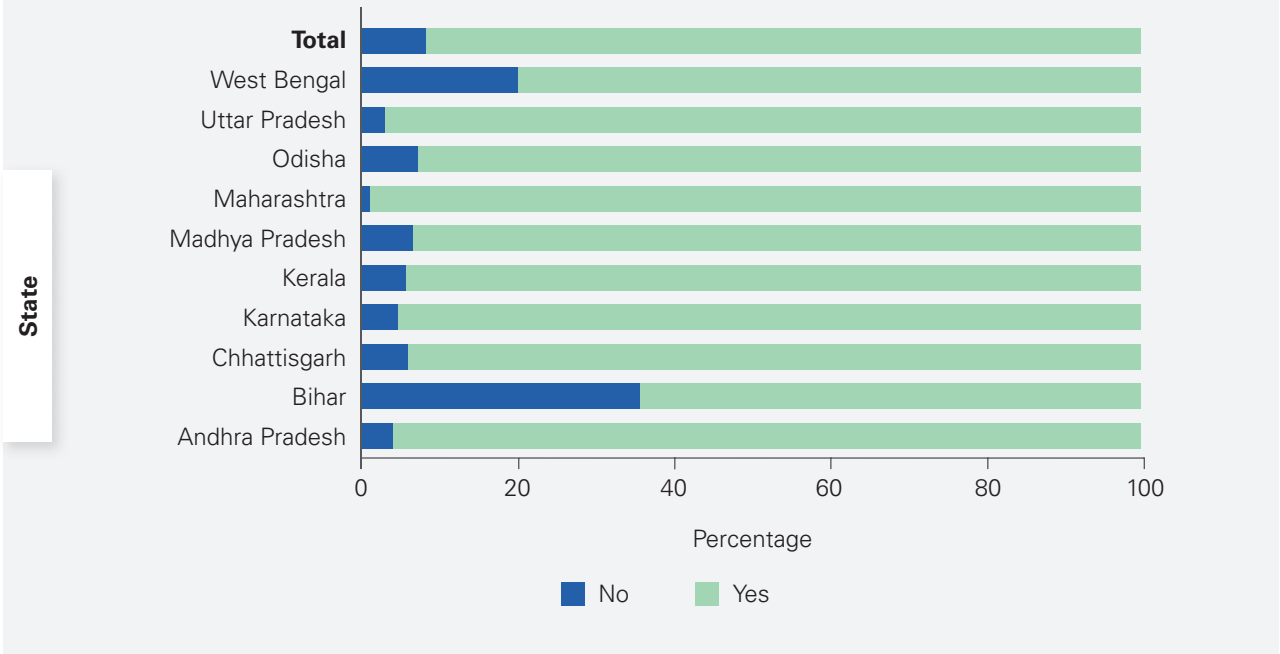


Figure 56: Availability of Water Storage Space at the District Level (Household)

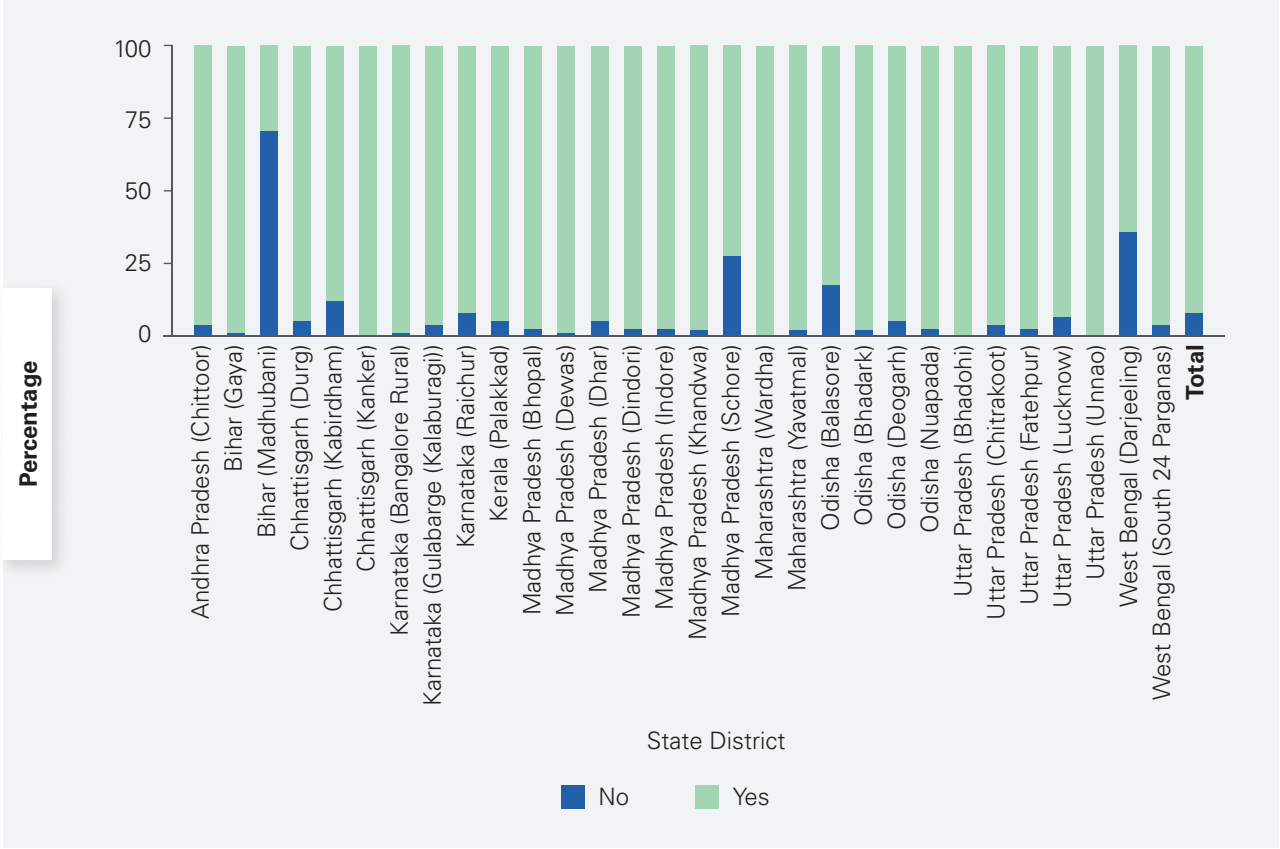


Figure 57: Access to Enough Water (Household)

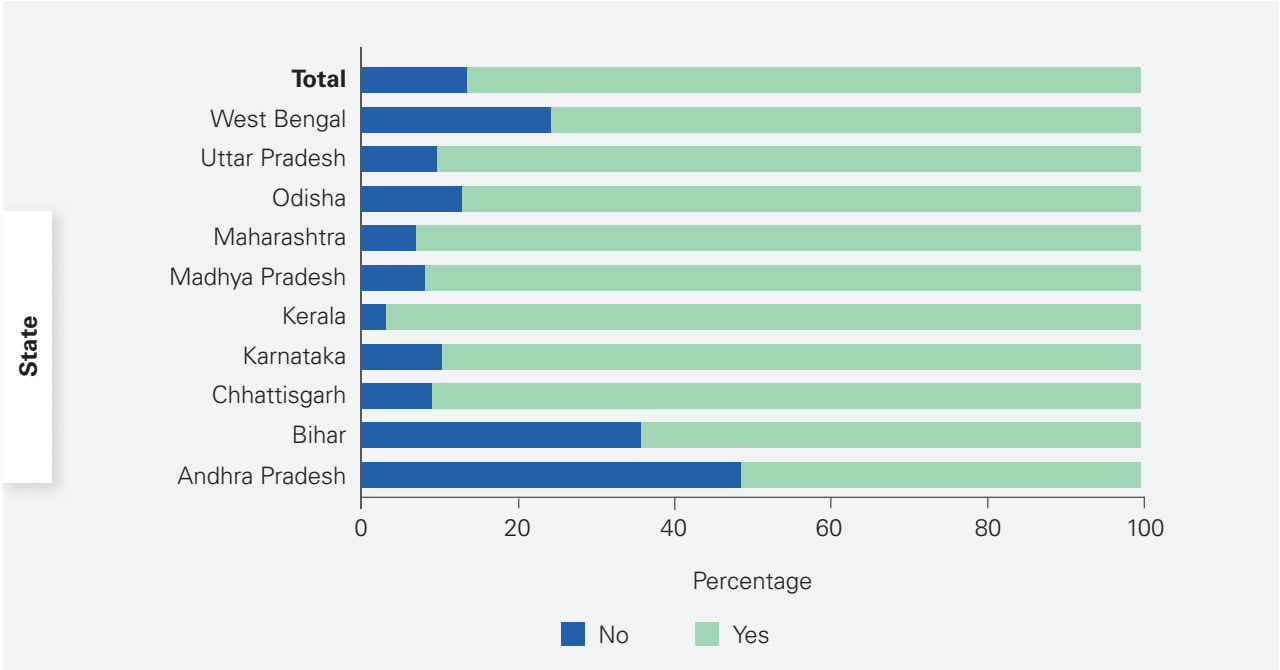
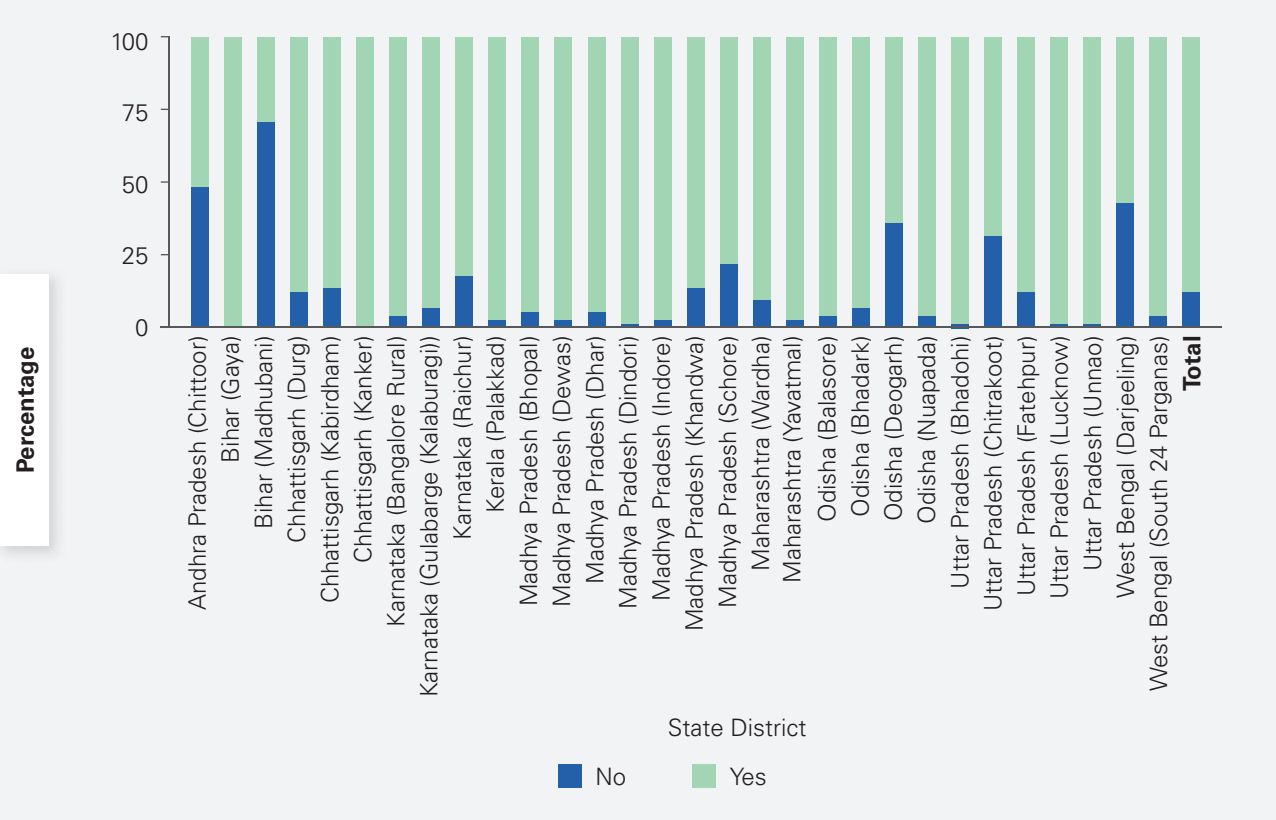


Figure 58: Access to Enough Water at the District Level (Household)



33 per cent from the Chitrakoot district in Uttar Pradesh *(see Figure 58)*.

5.3.6. Expenditure on Water Supply

Nearly 64 per cent of the respondents said that they don't pay anything for water supply, and the maximum number of these respondents were from West Bengal (90 per cent) and Bihar (89 per cent). About 29 per cent stated having to pay around Rs. 30–100 per month. Only 6 per cent of the respondents paid Rs. 100–500 per month, and a majority of them belong to Andhra Pradesh (26 per cent), Kerala (21 per cent) and Chhattisgarh (16 per cent). About 84 per cent residents from the Gulbarga (Kalaburagi) district of Karnataka and the Wardha district of Maharashtra paid Rs 30–100 per month on an average for water supply. Also, 30 per cent respondents from the Kanker (Chhattisgarh) district paid Rs. 100–500 per month for water supply.

5.3.7. Water Quality Testing

About 49 per cent household respondents stated that water quality testing was performed in the last six months and 33 per cent claimed otherwise *(see Figure 59)*. The highest number of respondents (84 per cent) from Maharashtra were of the opinion that water quality testing had been performed. Also, 75 per cent respondents from Bihar stated that no water quality testing had been performed in the last six months. Figure 60 illustrates that 79 per cent respondents from Darjeeling (West Bengal) and 75 per cent residents from both the Madhubani and the Gaya (Bihar) districts stated that no water quality testing had been performed in the last six months.

Figure 59: Status of Water Quality Testing in the Last Six Months (Household)

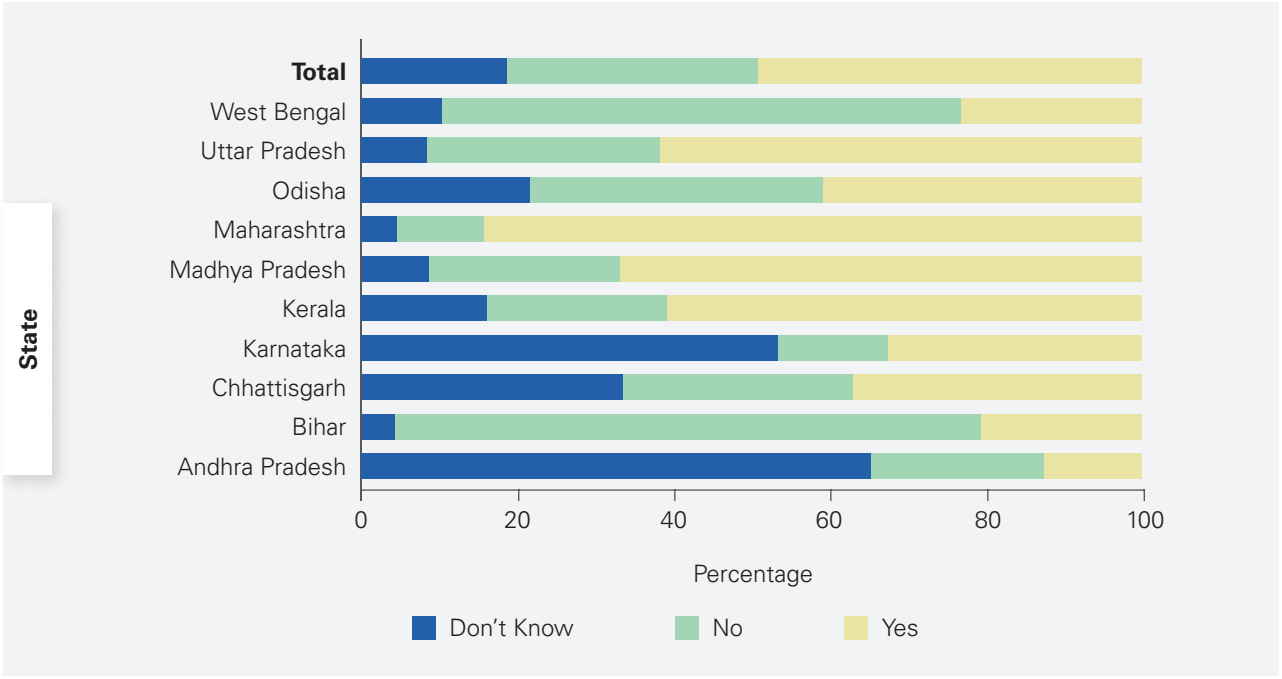
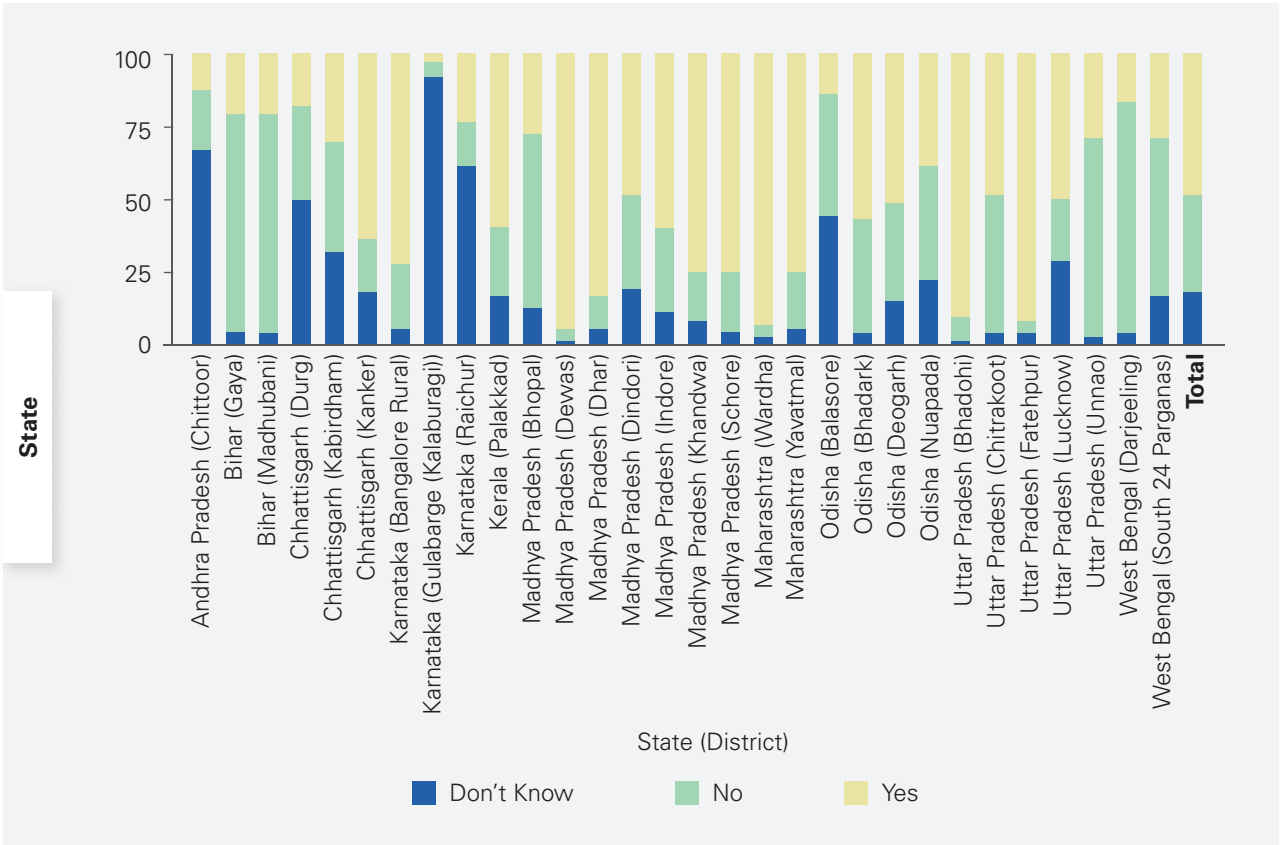


Figure 60: Status of Water Quality Testing in the Last Six Months at the District Level (Household)



5.3.8. Disruption of Water Supply due to COVID-19

The household respondents were also asked if water supply had been halted due to COVID-19 *(see Figure 61)*, where 95 per cent of the respondents said that no disruptions had been caused, whereas 5 per cent reported having disruptions. From the Fatehpur district of Uttar Pradesh, 46 per cent respondents stated that water supply had been disrupted due to the pandemic, followed by 28 per cent and 20 per cent respondents from the Kabirdham and Durg districts respectively *(see Figure 62)*.

Figure 61: Disruption of Water Supply due to COVID-19 (in the Last 6 Months) (Household)

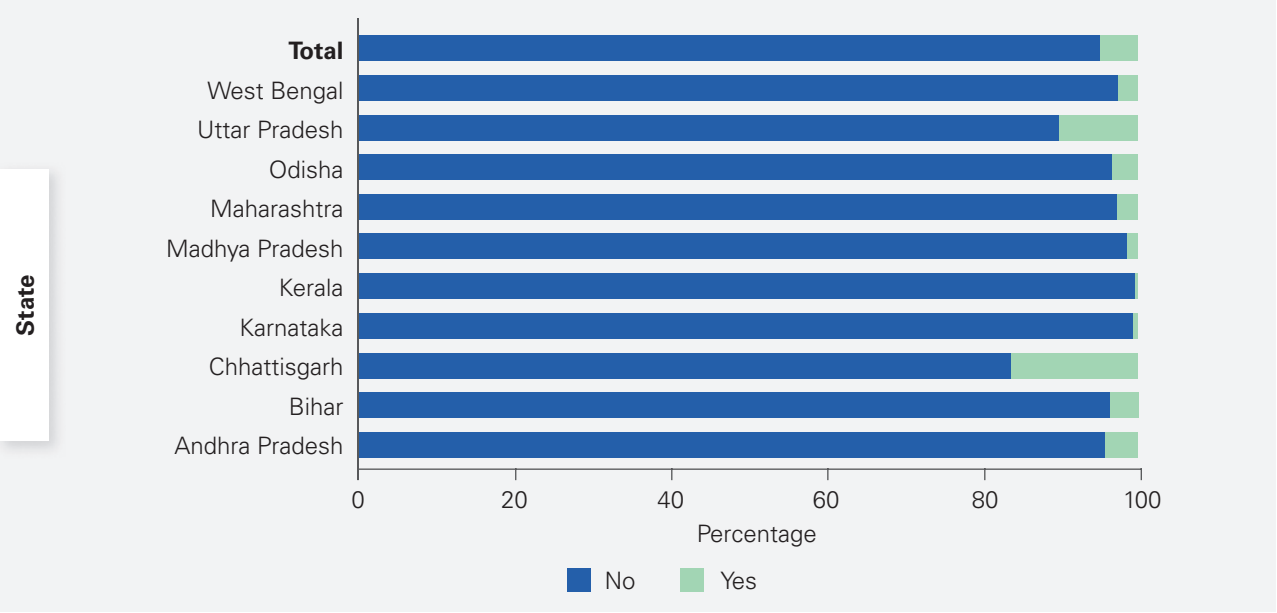


Figure 62: Disruption of Water Supply due to COVID-19 (in the Last 6 Months) at the District Level (Household)

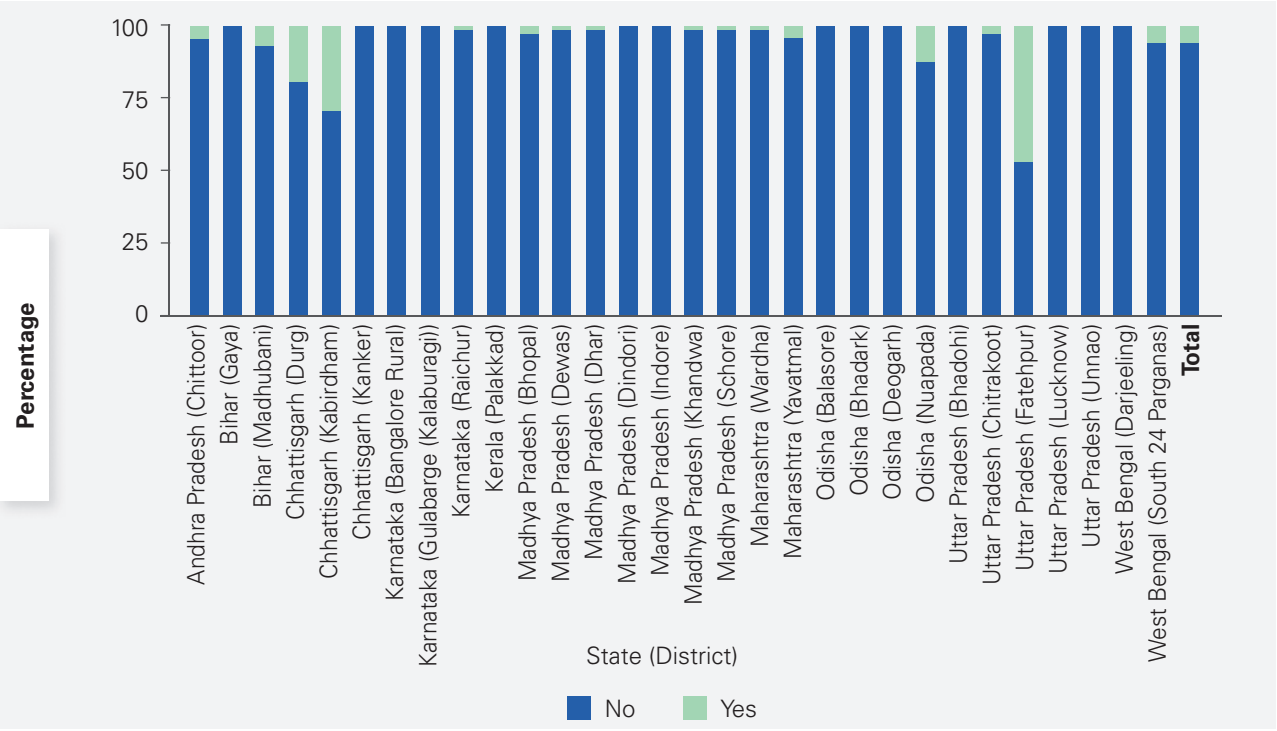
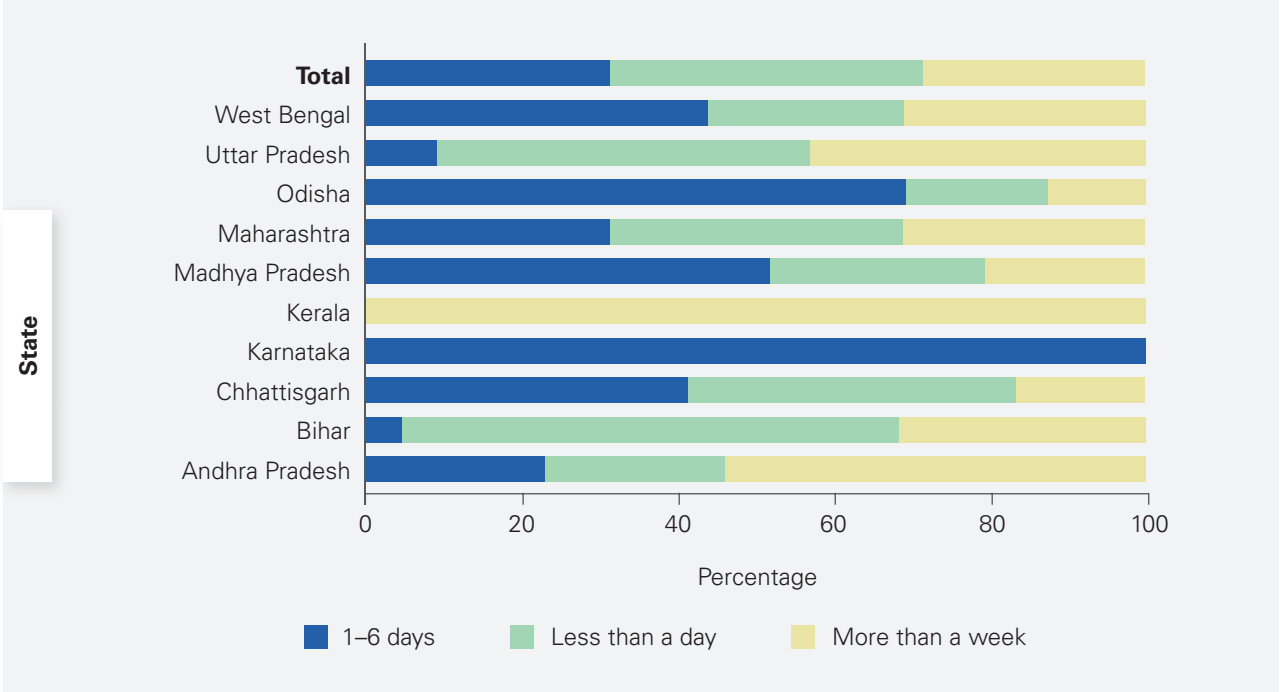


Figure 63: Period of Disruption of Water Supply (Household)



About 436 (5 per cent) out of 9015 participants who experienced disruptions were asked about the period of disruptions in the water supply. About 175 (40 per cent) said that disruptions lasted for less than 1 day, 31 per cent responded that they went on for 1–6 days and about 29 per cent reported that water supply had been disrupted for more than a week *(see Figure 63)*.

When asked about the actor behind the restoration of water services, 64 per cent household respondents said that the water supply had been restored by the Gram Panchayat, and 16 per cent claimed that it was done by the department.

5.3.9. Change in Water Consumption Pattern due to the Pandemic

When asked about the increase in water consumption due to the pandemic *(see Figure 64)*, 55 per cent household respondents responded in the affirmative, 28 per cent said that there was no effect on water consumption, and 17 per cent were of the opinion that water consumption had not increased. Across all the sampled states, respondents were mostly of the view that consumption had increased, particularly in Uttar Pradesh (76 per cent), but a majority of the respondents from Bihar (66 per cent) were of the opinion that the pandemic had no effect on water consumption. Also, 50 per cent and 33 per cent households from West Bengal and Bihar respectively reported no increase in water consumption. Figure 65 illustrates the maximum number of respondents from various sampled districts who felt that water consumption had increased due to the pandemic. About 59 per cent and 56 per cent respondents from the South 24 Parganas (West Bengal) and Madhubani (Bihar) districts respectively reported no increase in water consumption due to the pandemic.

Figure 64: Increase in Water Consumption due to COVID-19 (Household)

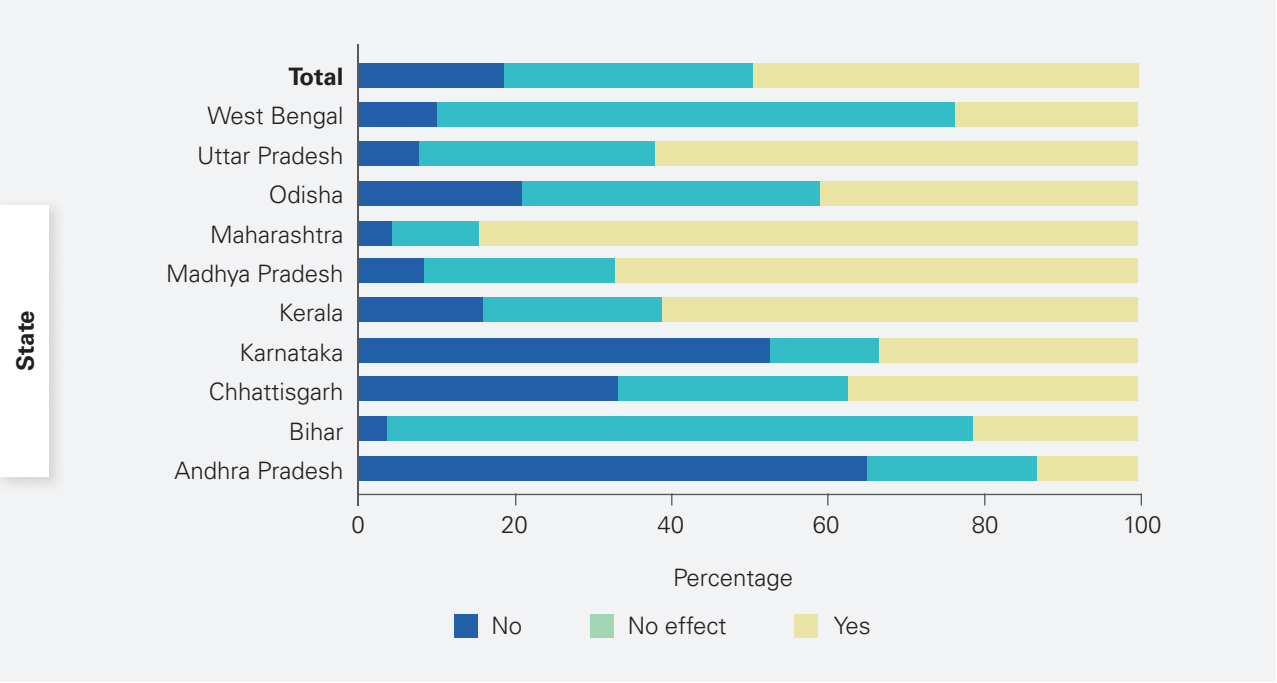
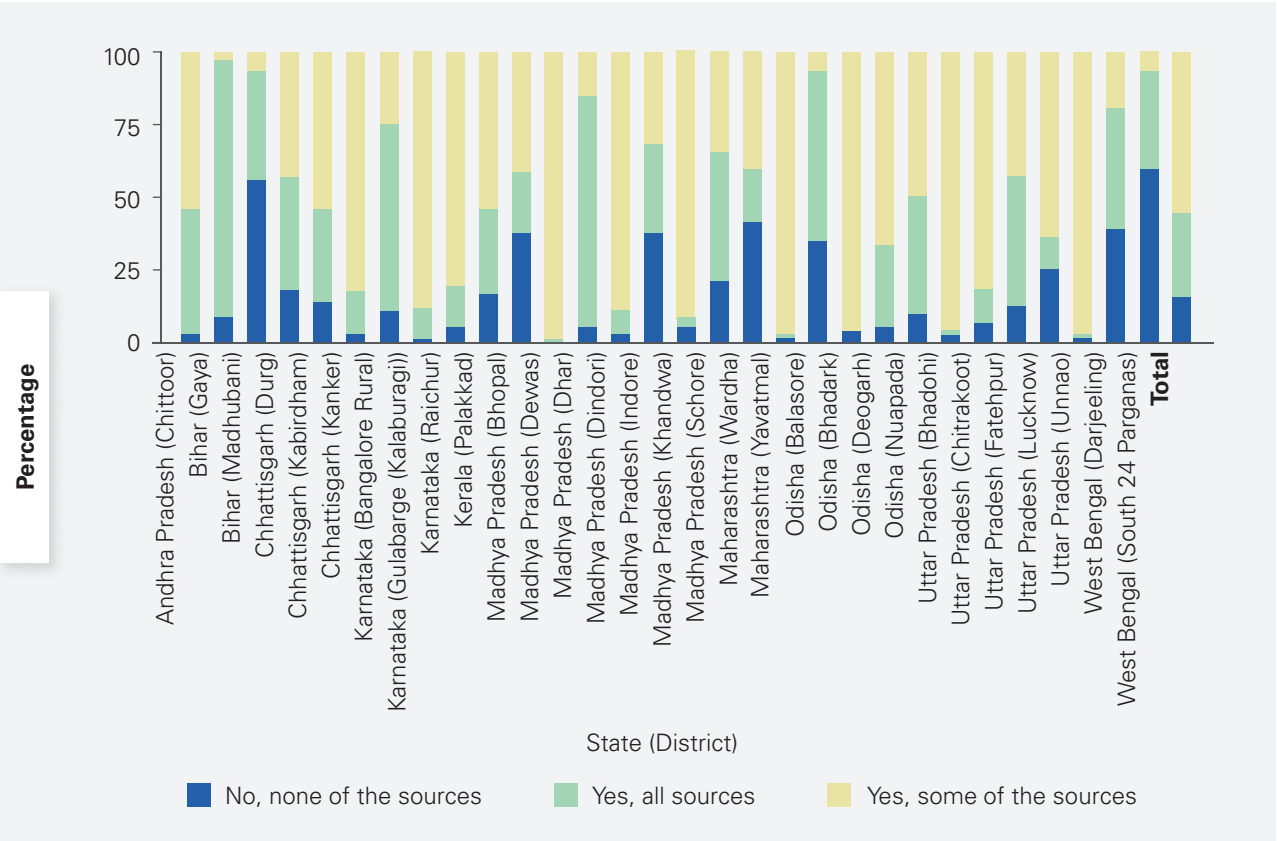


Figure 65: Increase in Water Consumption due to COVID-19 at the District Level (Household)



5.3.10. Sanitary Surveillance

Figure 66 gives an overview of the sanitary surveillance being performed for all public water points reported by intermediate functionaries. About 67 per cent intermediate functionaries stated that all sources had been covered under surveillance, 21 per cent were of the opinion that only some sources had been covered and 12 per cent reported that none of the sources had been covered. The maximum number of intermediaries were from West Bengal (36 per cent), as compared to the other states who reported that none of the water sources had been covered under surveillance. Figure 67 depicts the sanitary surveillance scenario at the district level.

The survey attempted to understand the participation of intermediate functionaries in sanitary surveillance exercises. About 68 per cent intermediaries responded in the affirmative that they have taken part in a sanitary surveillance exercise and 32 per cent stated otherwise. Most of the intermediaries who had not taken part in sanitary surveillance exercises belonged to Andhra Pradesh (80 per cent), Karnataka (76 per cent), Bihar (64 per cent) and West Bengal (58 per cent). Among all sampled districts, 95 per cent intermediaries from the Madhubani district of Bihar reported that they had not taken part in any such sanitary surveillance exercises.

Figure 66: Status of Sanitary Surveillance of Public Water Points (Intermediaries)

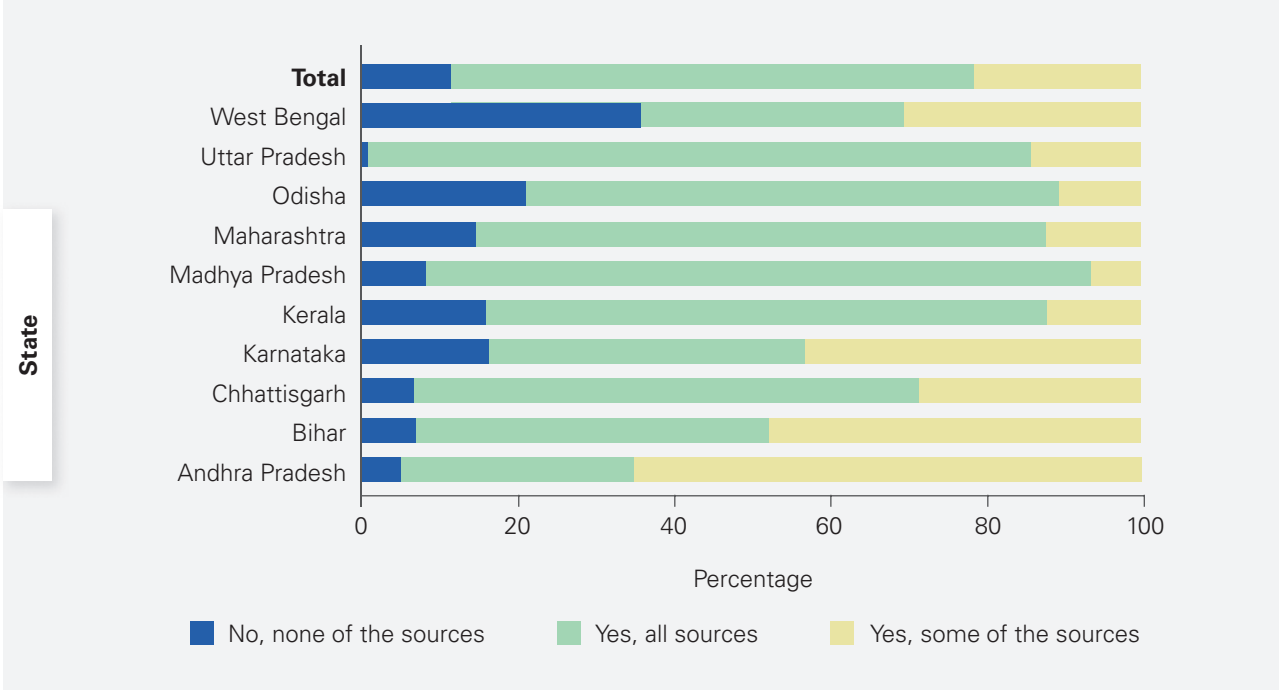
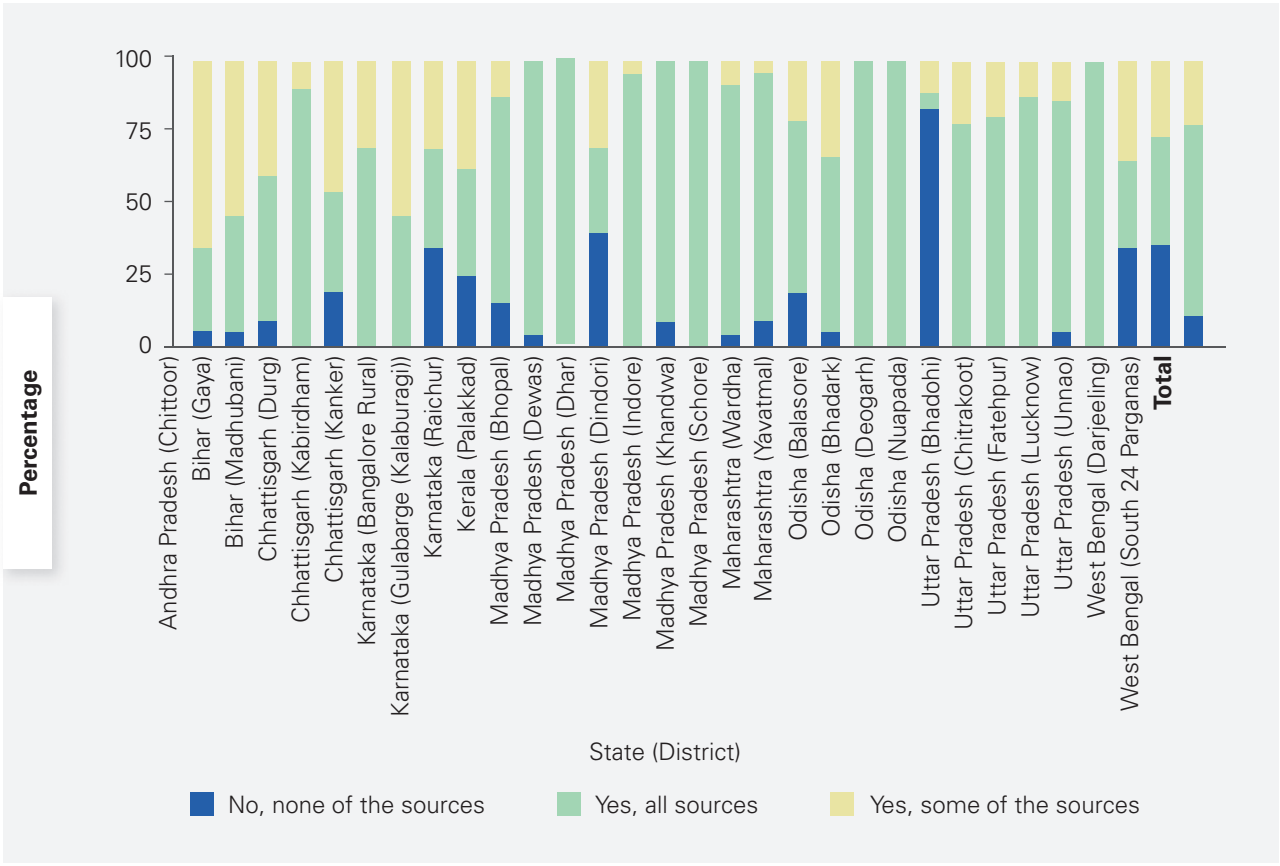


Figure 67: Status of Sanitary Surveillance of PublicWater Points at the District Level (Intermediaries)



CHAPTER 6

HYGIENE SERVICES AND SUPPLY

6.1. Handwashing services

6.1.1. Availability of Handwashing Facilities

Figure 68 illustrates the availability of handwashing facilities among household respondents. About 94 per cent households had a handwashing facility at home. Among the sampled states, a majority of the participants in Andhra Pradesh (24 per cent) and Bihar (24 per cent) reported not having access to handwashing facilities at home. Among the districts, 48 per cent respondents from Madhubani (Bihar) and 33 per cent from Chitrakoot (Uttar Pradesh) reported having no handwashing facility at their homes.

Figure 69 depicts the availability of handwashing facilities among the homes of intermediate functionaries. Overall, 98 per cent intermediaries had a handwashing facility at home and only 2 per cent reported otherwise. Interestingly, 17 per cent intermediaries from Bihar reported having no handwashing facilities in their homes, which is in line with the responses from the household sample of Bihar. Variances in the intermediary and household responses were seen in Andhra Pradesh, where all intermediaries reported having in-house handwashing facilities. Among the districts, 32 per cent intermediaries from Madhubani (Bihar) and 20 per cent from Dhar (Madhya Pradesh) reported having no handwashing facilities available at home.

Figure 68: Handwashing Facility in the Household (Household)

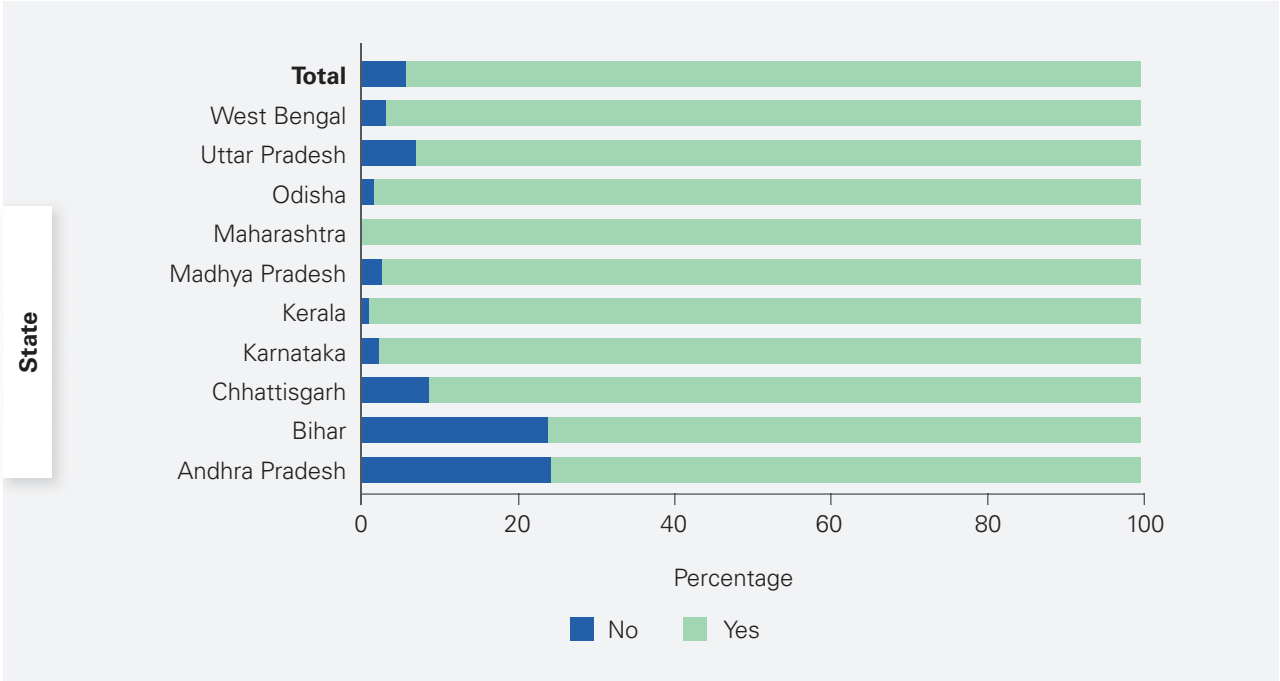


Figure 69: Handwashing Facility in the Household (Intermediaries)

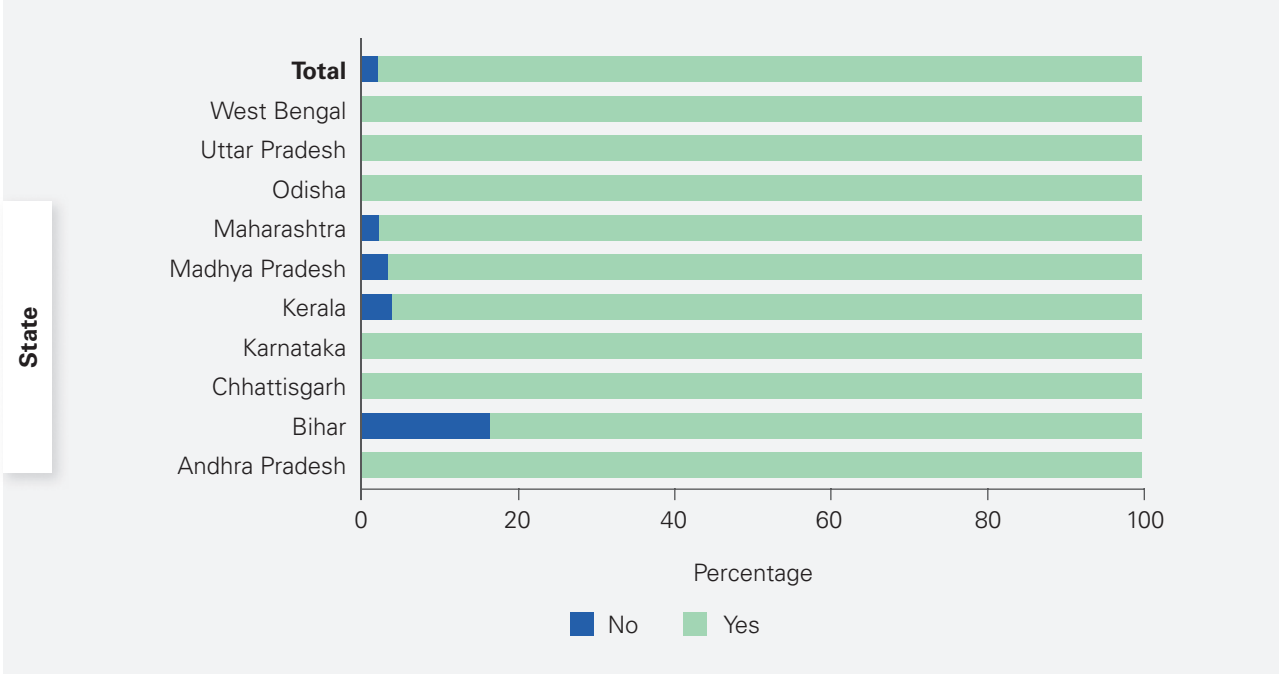


Table 13 gives an overview of the type of handwashing facilities households had. Out of 8481 (94 per cent) households having handwashing facilities, 67 per cent listed buckets and soaps as facilities, followed by wash basins with taps (13 per cent). Though a majority of the households used buckets and soaps, the maximum number of respondents were from Bihar who reported using hand pumps (65 per cent).

6.1.2. Handwashing Practices

Figure 70 depicts the handwashing practice (with soap and water) of household members. About 95 per cent respondents stated that all household members practised handwashing and 4 per cent said that only some practised the same. About 22 per cent and 9 per cent household members in West Bengal and Chhattisgarh

Table 13: Type of Handwashing Facility (Percentage) (Household)

Water source	State										
	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Dedicated space for handwashing	0	1	0	8	0	1	0	0	1	1	1
Bucket and soap	39	1	80	62	7	68	87	80	87	54	67
Handpump	0	65	3	0	0	0	0	7	2	7	6
Other (please specify)	0	3	0	0	0	1	6	0	0	13	2
Tap only	2	21	4	2	29	9	0	1	2	18	7
Wash basin with tap	30	9	8	23	63	18	2	11	2	6	13
Wash basin with water from bucket	30	0	4	5	1	4	4	1	6	1	4

respectively stated that only some members in the household practised handwashing, which is the highest number among all sampled states. At the district level, a majority of the respondents from Darjeeling (West Bengal) and Kabirdham (Chhattisgarh) responded that some household members practised handwashing with soap and water *(see Figure 71).*

Figure 70: Percentage of Household Members Washing Hands with Soap and Water (Household)

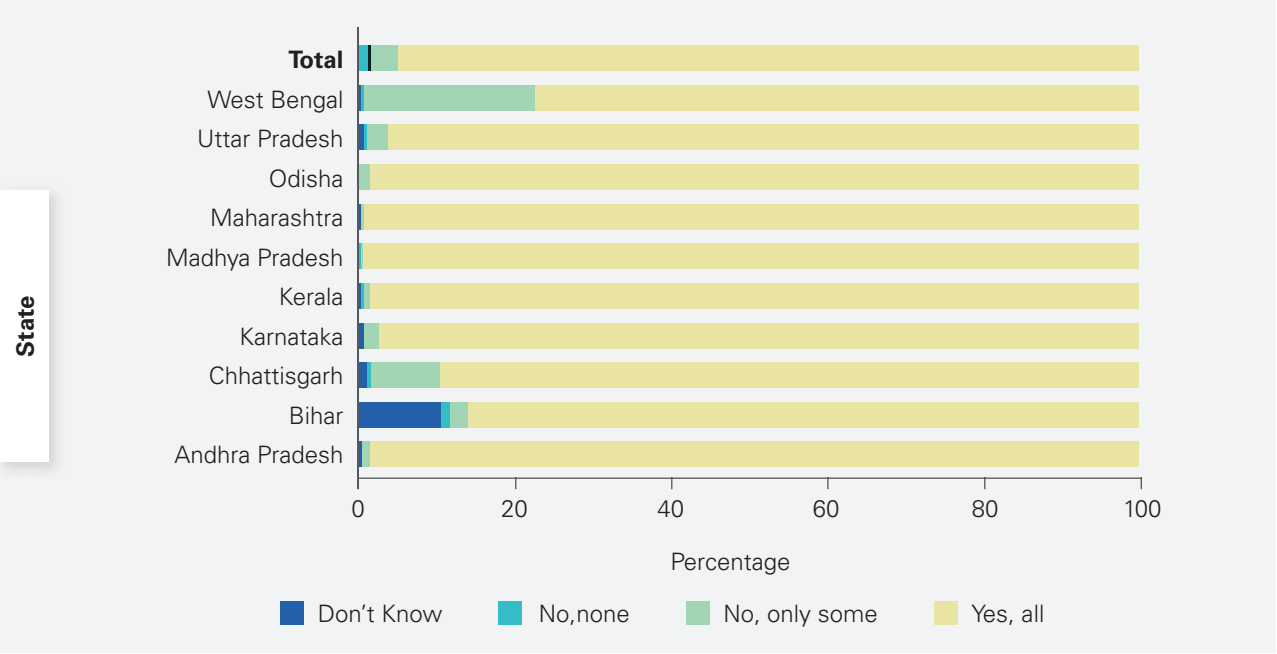


Figure 71: Percentage of Household Members Washing Hands with Soap and Water at the District Level (Household)

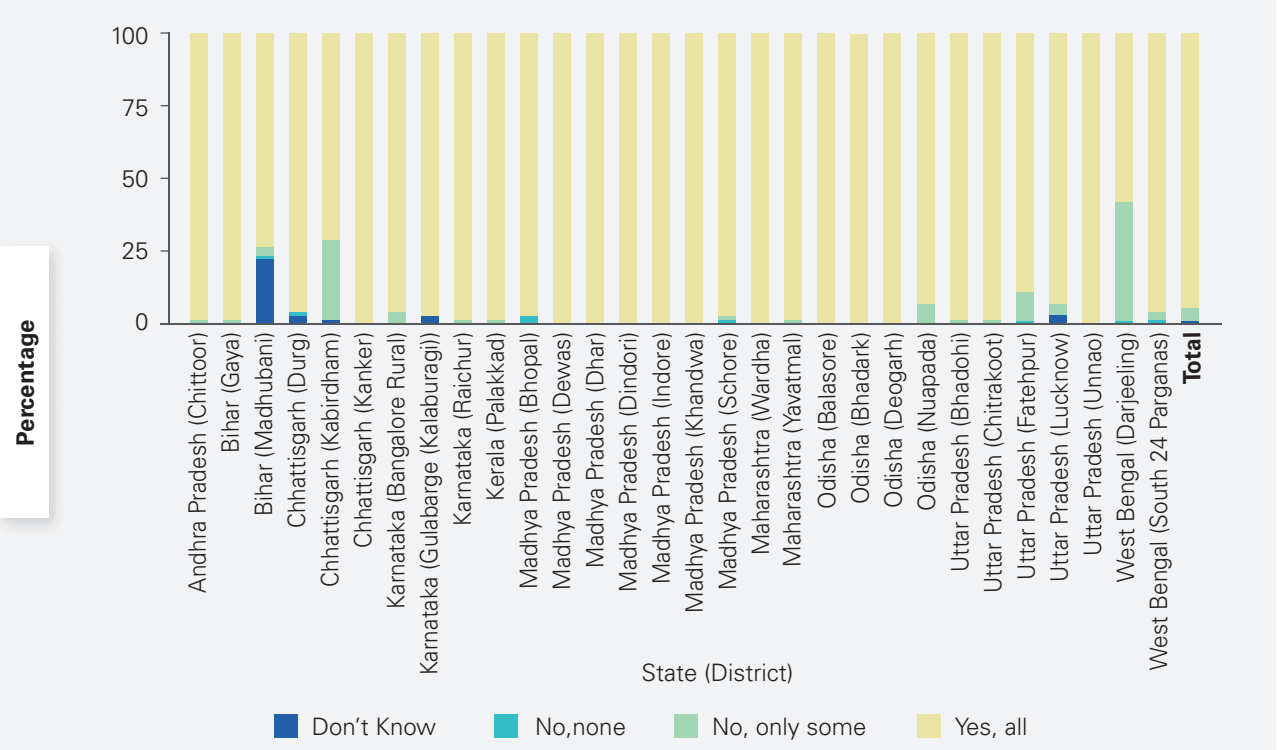


Table 14 shows the critical times when household members practised handwashing with soap and water. About 97 per cent respondents reported practising it after using toilets, 91 per cent before eating, 82 per cent after returning from outdoors and 76 per cent before cooking. The lowest numbers reported in terms of handwashing before serving the food were from respondents from Bihar (25 per cent) and West Bengal (33 per cent).

Similarly, Table 15 showcases the handwashing practice of the intermediaries. The findings are similar to the ones reported by the household respondents. About 95 per cent intermediaries practised handwashing after using toilets, 91 per cent before eating, 86 per cent after returning from outdoor activities, 72 per cent before cooking and 72 per cent after touching anything. Similar to household-level responses from respondents in Bihar, only 21 per cent intermediaries from the state reported that they had washed their hands before serving food.

6.1.3. Availability of Public Handwashing Facilities

The availability of handwashing facilities in public places in the communities of household-level respondents is depicted in Figure 72. About 70 per cent respondents denied having any handwashing facilities in public places in their communities and only 14 per cent responded in the affirmative. A majority of the households in Kerala (86 per cent) reported having handwashing facilities at public places. However, 87 per cent and 84 per cent respondents from West Bengal

Table 14: Critical Times when Handwashing is Practised with Soap and Water (Household)

Time	State										
	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Before cooking	98	71	84	67	90	76	67	89	72	57	76
After use of toilet	99	95	90	96	99	98	99	99	100	97	97
Before eating	92	86	85	86	95	96	97	97	87	94	91
Before serving food	91	25	69	60	76	74	58	62	77	33	64
After touching anything	73	45	61	53	79	76	53	50	61	68	62
After returning from outdoor	86	46	78	96	93	91	97	84	75	64	82

Table 15: Critical Times when Handwashing is Practised with Soap and Water (Intermediaries)

Time	State										
	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Before cooking	100	55	98	35	100	78	61	91	75	31	72
After use of toilet	100	100	92	91	100	96	95	100	95	83	95
Before eating	100	81	88	84	100	91	98	100	88	92	91
Before serving food	100	21	85	59	100	82	66	92	76	8	71
After touching anything	100	45	72	62	100	86	61	64	82	47	72
After returning from outdoor	100	48	72	86	100	94	88	99	89	64	86

and Madhya Pradesh respectively reported that they did not have handwashing facilities in public places. Also, all respondents from the Bhadrak (Odisha) district responded in the negative about the availability of handwashing facilities in public places *(see Figure 73)*.

Figure 72: Public Handwashing Facilities- Availability (Household)

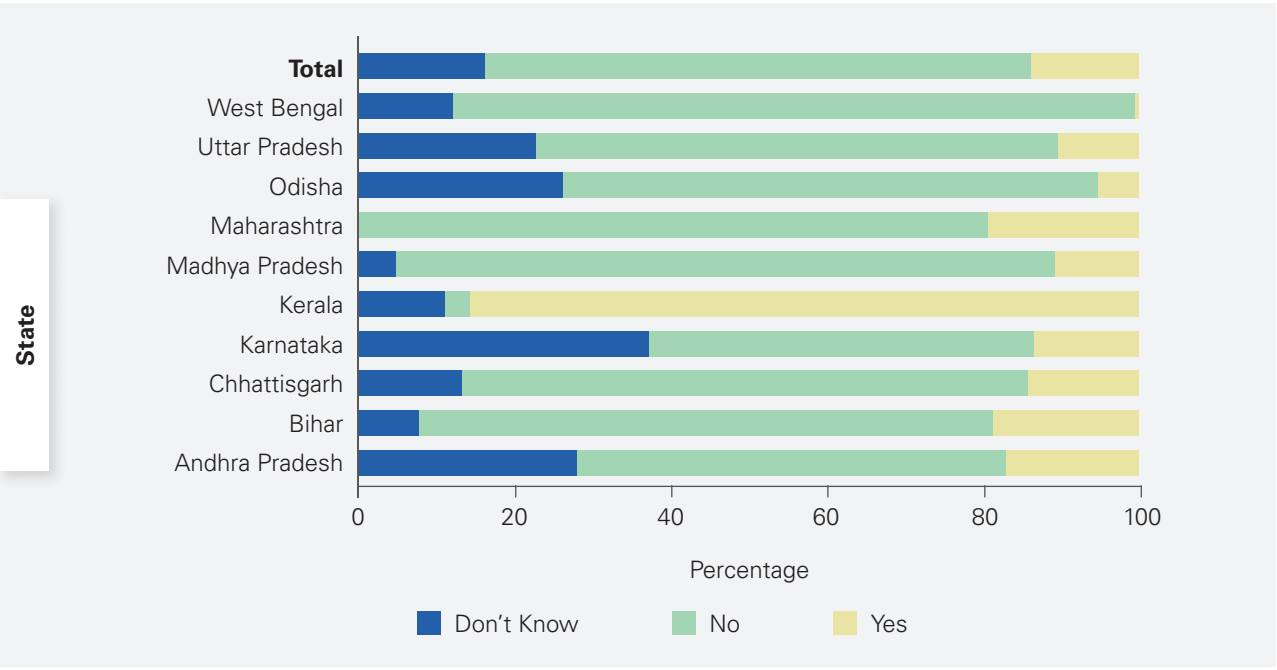


Figure 73: Public Handwashing Facilities- Availability at the District Level (Household)

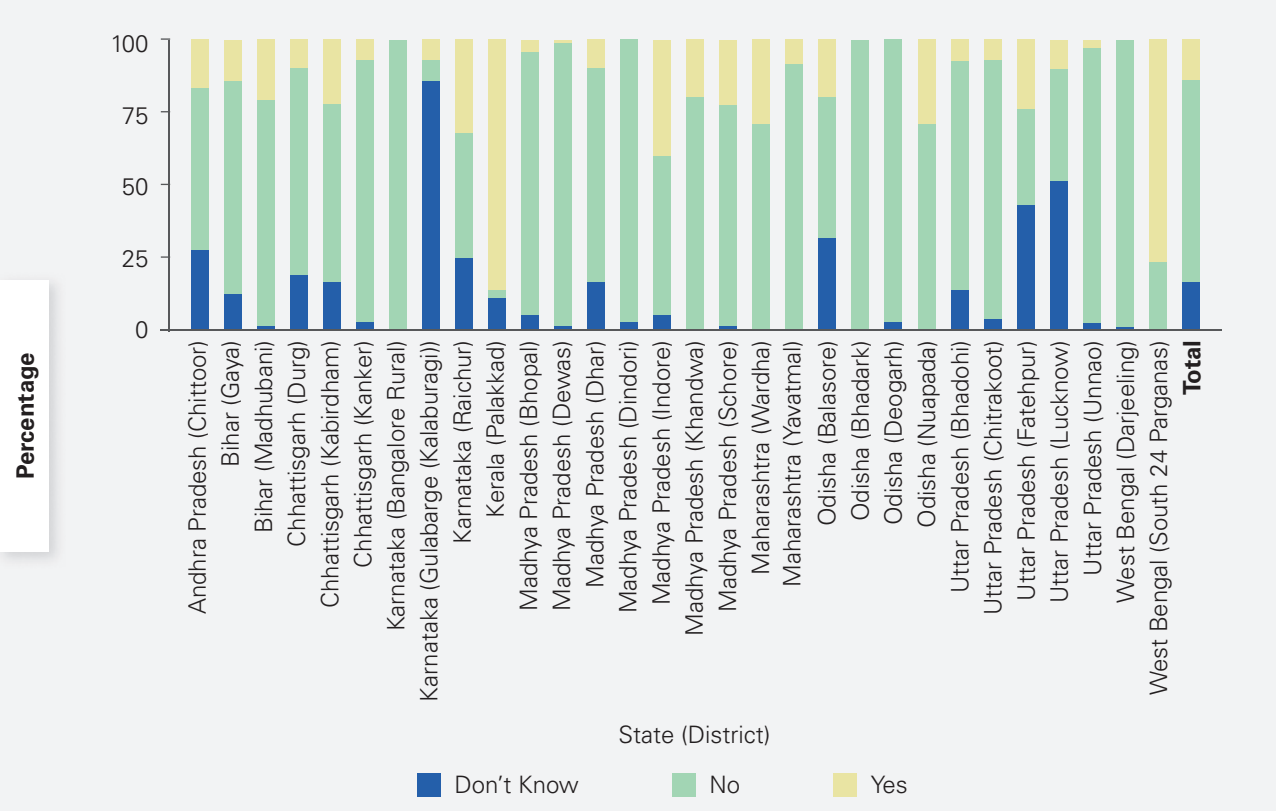


Table 16 gives details about the places where public handwashing facilities were available. This information was sought from the 1241 (14 per cent) household respondents who responded in the affirmative about the availability of handwashing facilities in public places. About 47 per cent respondents reported the availability of handwashing facilities at market areas, offices (46 per cent), bus stands (24 per cent) and 22 per cent reported their availability in other places like Panchayat Bhavans, schools, temples, hospitals, community toilets, etc.

When the same set of respondents (1241 household members) were asked about the agencies which had set up these handwashing facilities, the maximum number (44 per cent) of respondents had reported that the facilities were set up by Gram Panchayats, followed by 22 per cent who stated that these facilities were an initiative taken up by the government.

6.1.4. Availability and Affordability of Sanitary Items

Table 17 depicts the household-level responses of respondents on the availability and affordability of sanitary items in their respective local shops. Household respondents from all the states reported the availability (99 per cent) and affordability (95 per cent) of soaps in local shops. The item stated as the least available (53 per cent) and affordable (57 per cent) was the TCL powder/liquid. All respondents from Kerala reported the availability and affordability of almost all sanitary items. Among all the states, households from Maharashtra (~24 per cent) and Bihar (~38 per cent) reported minimum availability and affordability of the TCL powder/liquid. Also, among all sampled states, a majority of the households from Maharashtra stated that masks, toilet cleaners and hand sanitizers were the least available and affordable items.

Table 16: Places where Public Handwashing Facilities are Set Up (Household)

Time	State										
	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Market	27	72	8	56	82	16	23	79	55	67	47
Bus stand	96	40	11	70	18	11	16	17	4	0	24
Offices	27	31	83	76	50	45	15	54	23	67	46
Other public places	0	20	6	3	4	45	73	0	25	33	22

Table 17: Sanitary Items – Availability and Affordability (Household)

Place	Availability/ Affordability	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Soap	Availability/	97	99	99	100	100	99	100	100	99	99	99
	Affordability	95	94	98	99	100	98	99	83	94	99	95
Mask	Availability/	59	77	88	87	100	87	44	86	66	87	79
	Affordability	57	73	89	95	99	95	49	76	63	94	81
Toilet cleaner	Availability/	57	78	77	66	96	81	41	73	76	86	74
	Affordability	54	75	77	71	96	92	43	74	73	84	77

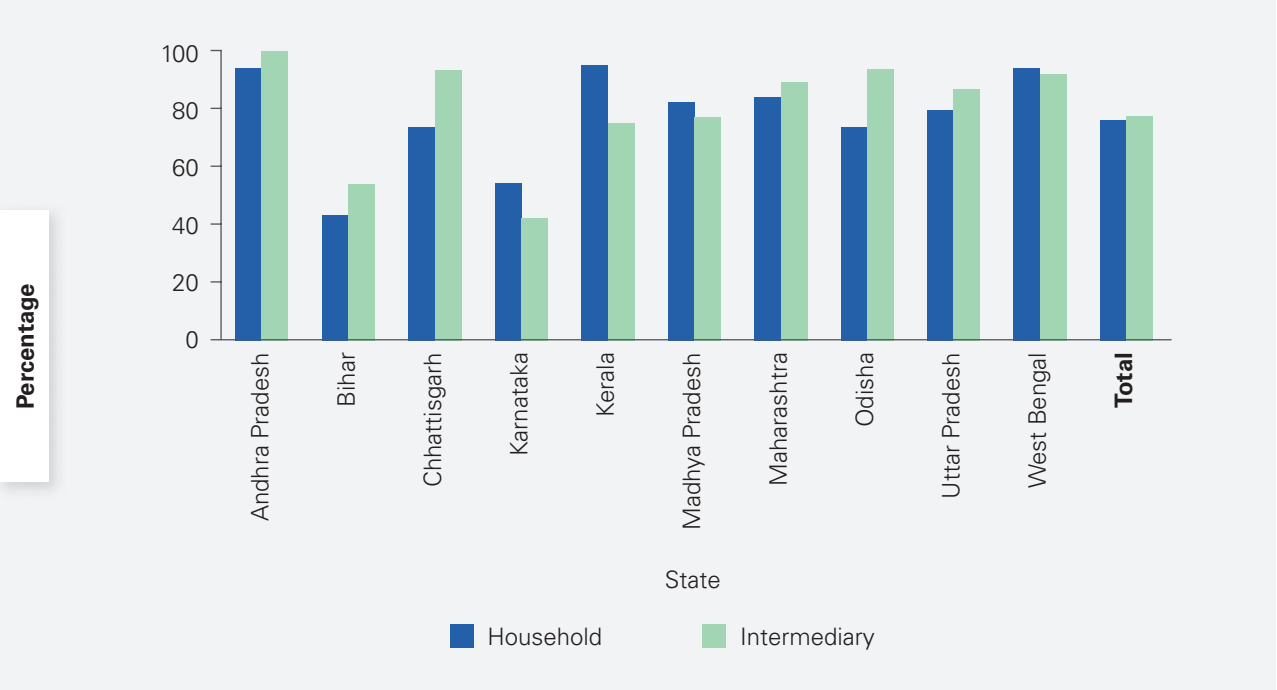
(Continued)

(Continued)

Place	Availability/ Affordability	Andhra Pradesh	Bihar	Chhattis-garh	Kar-nataka	Kerala	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Hand sanitizer	Availability/	54	59	74	62	100	77	41	78	62	84	70
	Affordability	53	55	68	70	98	85	44	74	59	77	70
Sanitary napkin for mens-truation	Availability/	94	45	74	55	97	83	85	75	79	94	77
	Affordability	93	42	71	65	95	88	85	75	75	87	77
TCL powder/ liquid	Availability/	47	39	43	48	93	51	24	61	59	81	53
	Affordability	45	38	45	64	92	61	24	67	57	75	57

Figure 74 showcases the comparison between the responses of the household members and intermediary functionaries who reported having access to sanitary absorbents or sanitary napkins. About 77 per cent household respondents and 79 per cent intermediaries claimed to have access to sanitary napkins or absorbents. Hence, no major differences in the responses of the two stakeholder groups were seen here. Respondents of both groups from Karnataka and Bihar reported the lowest percentages of access to sanitary absorbents and napkins.

Figure 74: Comparison between the Household and Intermediary Respondents having Access to Sanitary Absorbents/Sanitary Napkins



6.1.5. Impact of COVID-19 on Handwashing Practice

Figure 75 gives a visual representation of the responses of both household respondents and intermediate functionaries who stated that there had been an increase in handwashing practice due to the pandemic. Overall, 84 per cent households and 91 per cent intermediaries believed that handwashing practice has increased due to COVID-19. Household respondents and intermediaries from Bihar reported the smallest percentage of increase among all the states.

6.2. Operations, management and discrimination

6.2.1. Nigrani Committee – Awareness

Figure 76 illustrates that overall, 46 per cent household respondents and 64 per cent intermediates were aware about the Nigrani or Good Morning Committee formed under the Swachh Bharat programme in their respective villages. At the household level, respondents from Andhra Pradesh (92 per cent) had the highest percentage of awareness, whereas only 16 per cent household respondents from West Bengal were aware of such committees. Among the intermediaries, respondents from Uttar Pradesh had the highest percentage of awareness (90 per cent), whereas the lowest percentage (29 per cent) was reported from Bihar. At the district level, in the household survey, respondents from Gulbarga (Karnataka) had the lowest percentage (4 per cent) of awareness, whereas intermediaries from Gaya (Bihar) had the lowest percentage of awareness (55 per cent).

Figure 75: Comparison between the Household Respondents and Intermediaries who Believe that Handwashing Practice has Increased Because of COVID-19

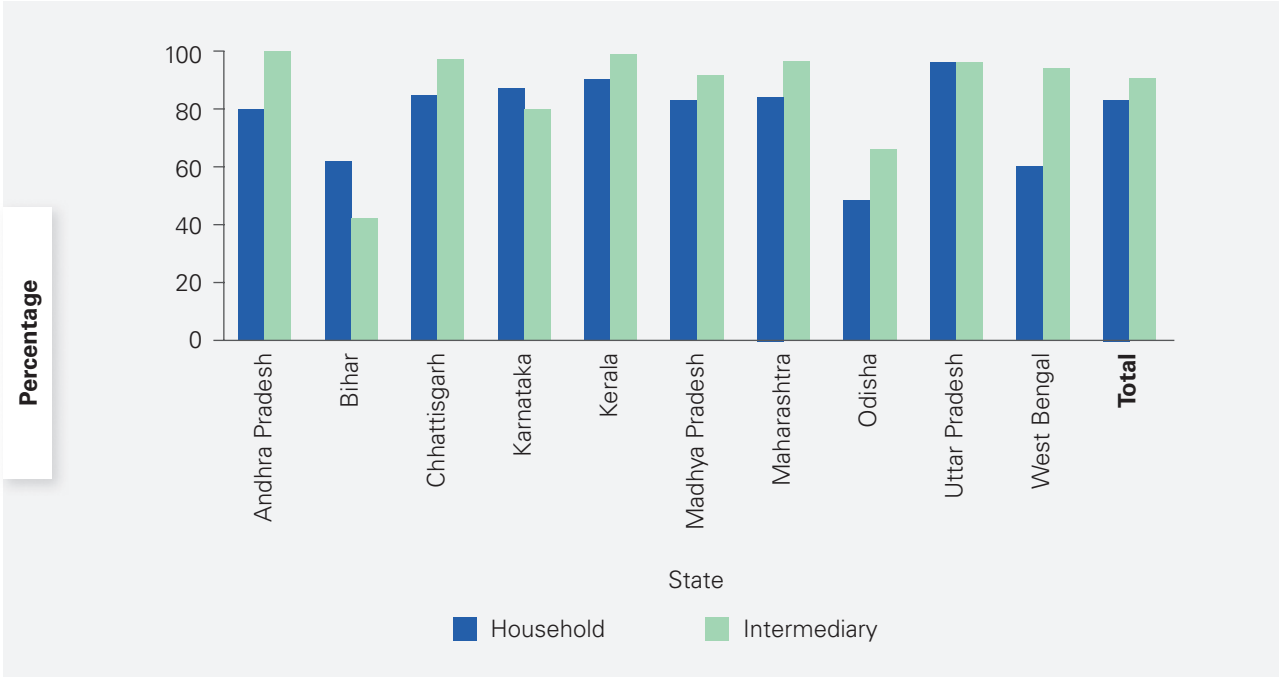
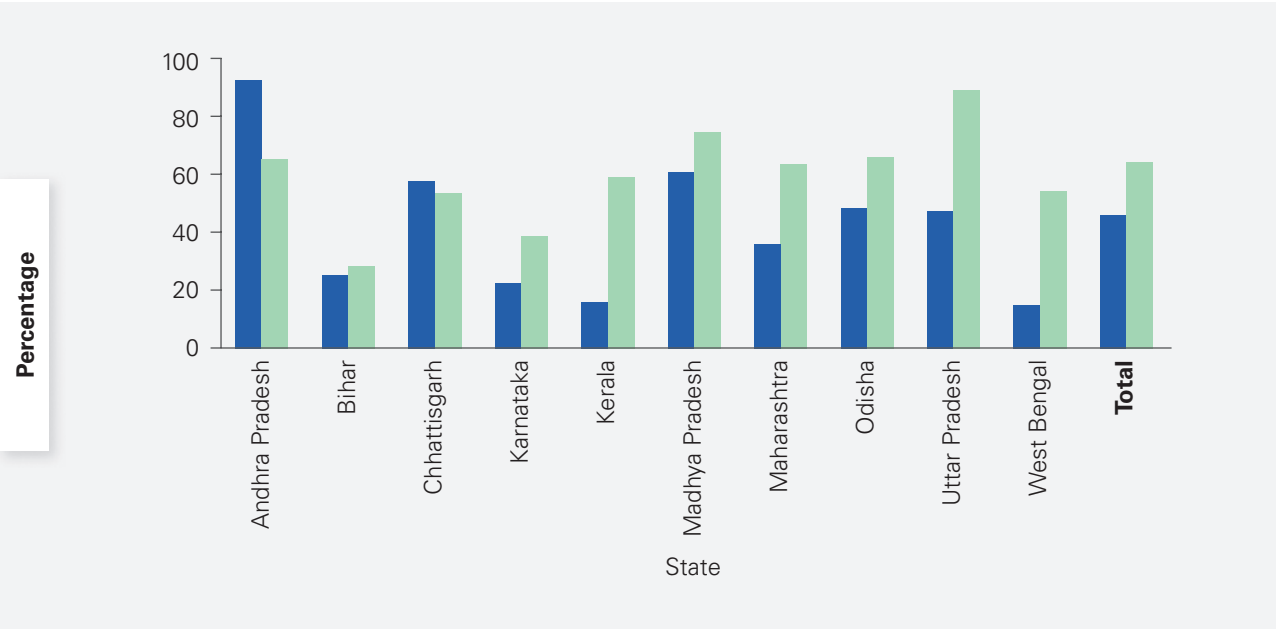


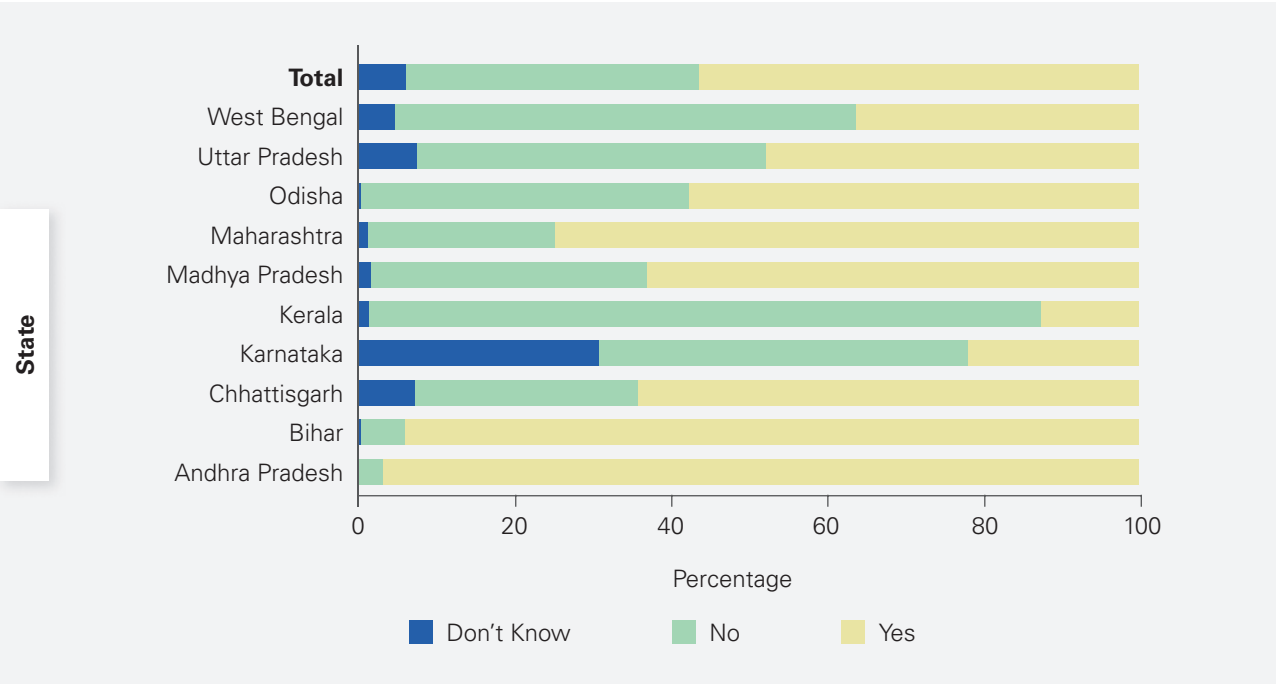
Figure 76: Comparison of the Level of Awareness between the Household Members and Intermediates about Nigrani Committees



6.2.2. Receipt of WASH Products

At the household level, Figure 77 shows that around 56 per cent respondents reported having received WASH products/items, like soaps, sanitizers, face masks from the Gram Panchayats, Urban Local Bodies (ULBs) or the administration, 39 per cent reported that they had not received anything and the remaining participants were not

Figure 77: Receipt of WASH Products from Gram Panchayat (Household)



sure about the status. At the state level, analysis shows that the highest number of respondents who received WASH products were from Andhra Pradesh (97 per cent) and Bihar (94 per cent), whereas only 13 per cent respondents from Kerala reported having received WASH products from the Gram Panchayats, ULBs or the administration.

6.2.3. Discriminatory Incident Related to COVID-19

Figure 78 illustrates the responses given in the affirmative by household and intermediate respondents when asked about the discrimination or stigmatized incidents related to COVID-19 around WASH services in their Gram Panchayats or communities. About 10 per cent households and 12 per cent intermediate functionaries stated that they had heard about such discrimination. At the state level, 28 per cent households and 56 per cent intermediaries from West Bengal reported the highest number in discrimination or stigmatized incidents related to COVID-19 around WASH services. Most of these responses were from the individuals interviewed from the South 24 Parganas district.

6.3. WASH in Schools

As per the objective of the survey, the intermediaries were asked about the status of WASH in schools in general and during the pandemic. Figure 79 illustrates the reported average number of schools in the areas of the intermediaries. Bihar had 10 schools on an average, which is the highest number among all sampled states. Intermediaries from Uttar Pradesh had reported having around six schools in the districts on an average, followed by Karnataka, Andhra Pradesh and Madhya Pradesh with an average of four schools each.

6.3.1. Schools Used for COVID-19 Response

Table 18 showcases the affirmative responses of intermediaries when asked about the status of schools utilized for various purposes related

Figure 78: Comparison of Responses of Household Members and Intermediaries Regarding Knowledge of Discriminatory Incident Related to COVID-19 around WASH Services

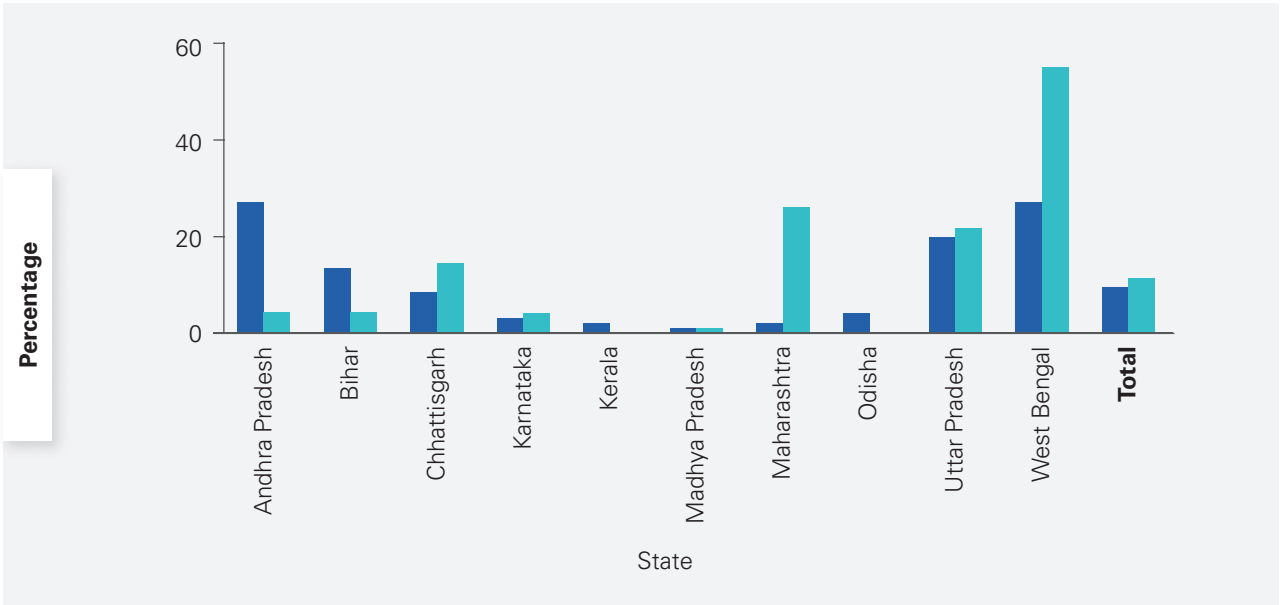


Figure 79: Average School Count in the Areas of the Intermediate Functionaries

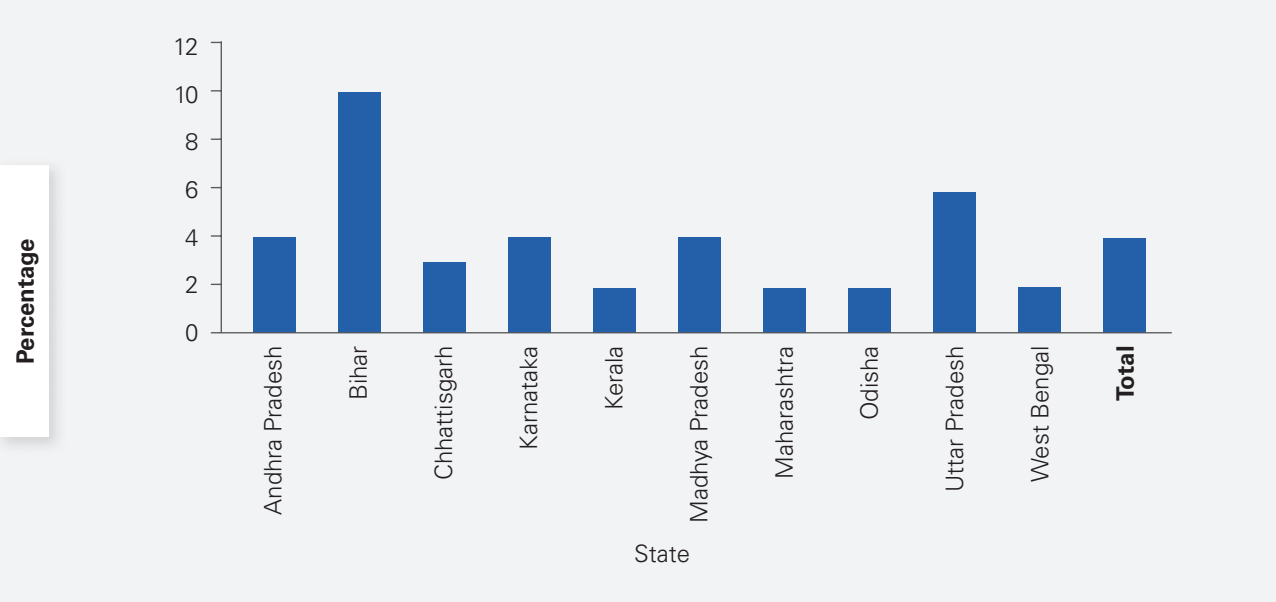


Table 18: Usage of Schools for COVID-19 Response (Percentage of Yes)

Usage of schools	Andhra Pradesh	Bihar	Chhattis-garh	Karna-taka	Madhya Pradesh	Maha-rashtra	Odisha	Uttar Pradesh	West Bengal	Total
Quarantine facility	100	100	90	100	77	97	100	75	100	91
Isolation facility	0	3	47	0	14	10	2	33	0	18
Shelter	0	18	13	0	41	10	0	15	0	12

to COVID-19. Overall, 91 per cent intermediaries reported that schools were being used as quarantine facilities[17], 18 per cent reported that schools were being used as isolation facilities[18] and only 12 per cent reported schools being utilized as shelters for migrants. Almost all intermediaries from Andhra Pradesh, Bihar, Karnataka, Odisha and West Bengal reported that the schools within the state were being utilized as makeshift quarantine facilities centres during COVID-19.

A majority of the schools in Karnataka, Madhya Pradesh, Odisha and Uttar Pradesh were either fully or partially prepared to ensure the safe operation of WASH and infection control in the current COVID-19 scenario. The lowest percentage of preparedness was reported from West Bengal.

6.3.2. Sanitary Facilities in Schools

An attempt was made to understand if schools had a mechanism for the daily cleaning of toilets with appropriate disinfectants. It was seen that on an average, around 1 to 2 schools in each district of the sampled states had such a mechanism in place.

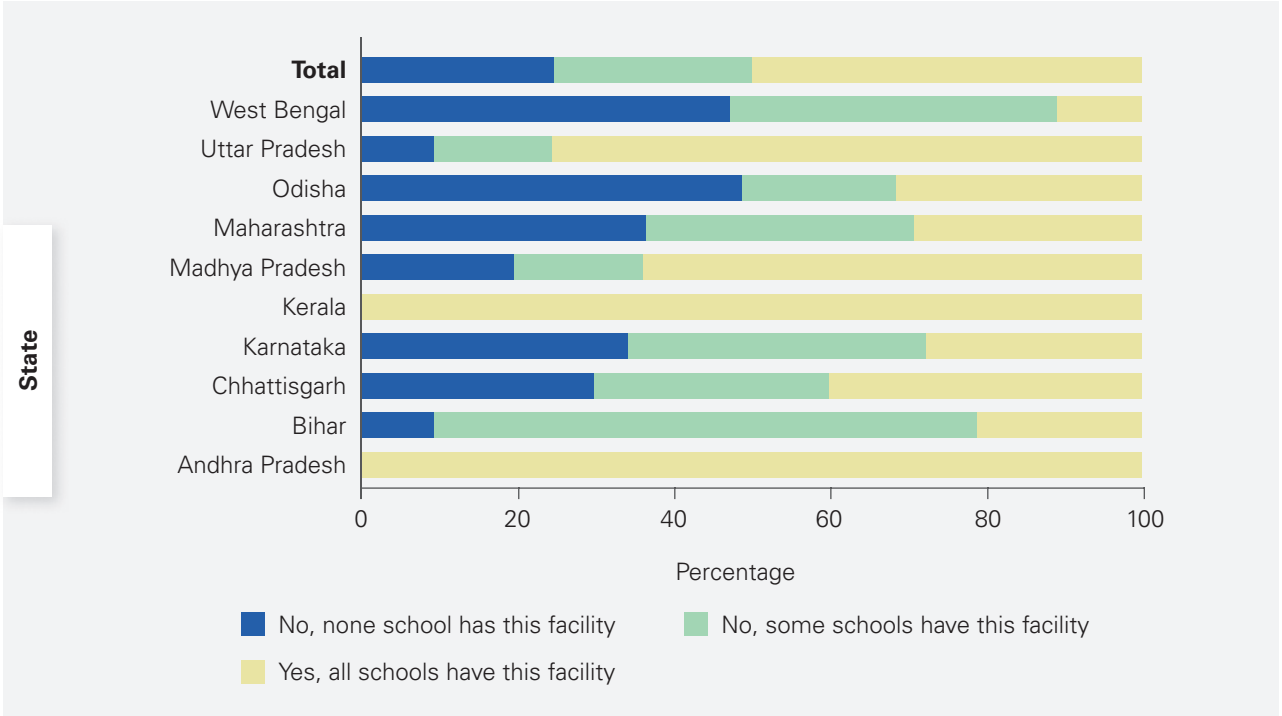
[18] Quarantine facility is the place used to separate and restrict the movement of people who were exposed to a contagious disease to see if they become sick. These people may have been exposed to a disease and do not know it, or they may have the disease but do not show symptoms.

[19] Isolation facility is the place where sick people with a contagious disease are separated from people who are not sick.

Figure 80 illustrates the responses of intermediaries when asked about the status of safe disposal facilities for menstrual waste in the upper primary and higher standard schools. About 50 per cent intermediaries were of the opinion that all the schools in their respective states had the facility of safe disposal of menstrual waste, 25 per cent intermediaries reported that only some schools had such facilities and the remaining 25 per cent stated that the schools in their states did not have any such facilities. All intermediaries from Andhra Pradesh and Kerala reported that schools in their states had safe disposal facilities for menstrual waste. About 49 per cent intermediaries from Odisha reported having no safe disposal facilities for menstrual waste in the schools in their state.

Intermediaries in their respective states were asked to report the number of schools not having adequate handwash points with a safe physical distance (2 gaj (6 feet)) in the COVID 19 context. During analysis it was seen that intermediaries from Maharashtra reported the maximum number of schools having handwash points, whereas the smallest numbers were reported from Bihar, Uttar Pradesh and Andhra Pradesh. Similarly, intermediaries were also asked to give an overview of schools having handwashing facilities either inside or attached to toilet blocks. Intermediaries from Madhya Pradesh reported the maximum number of schools having handwashing facilities in the school premises.

Figure 80: Schools with Facilities for Safe Disposal of Menstrual Waste



CHAPTER 7

CONCLUSION

This report examines the status of sanitation, water services, hygiene services and water supply across 10 states in India. The attempt is to understand the on-ground reality from the perspective of the general public (via household-level surveys) and intermediate functionaries (frontline workers, elected representatives, etc.). After careful analysis of the data at the state and district levels, the report brings out the gaps that exist as far as the availability and access to these services are concerned. Attempts were also made to understand the impact of COVID-19 on these facilities and how they have changed and evolved due to the ongoing pandemic.

It is seen that even though many states are performing well as far as the access and availability of WASH facilities are concerned, concentrated effort needs to be put in on improving the same to ensure better penetration of these facilities among the Indian population, particularly in the states of Bihar, Uttar Pradesh, Andhra Pradesh and West Bengal.

Of the respondents who stated that they did not have toilets within the premises of their homes, the maximum number of them are from the states of Bihar, Uttar Pradesh and Odisha. Usage of community toilets is also very low among those respondents in household and intermediary surveys who have either no or non-functional toilets, as a majority of them practice OD. Respondents from the household survey who have reported having 'no' or 'some' family members who use toilets elaborated that this is primarily because of two reasons: that those household members are elderly, infants or people with disabilities, and due to insufficient water availability inside/next to the toilets to flush/clean the toilets. A majority of the intermediaries from Bihar have reported that their Gram Panchayats have not yet achieved ODF status. This clearly indicates that along with increasing toilet construction activities, efforts should be made to ensure water supply to these toilets to keep them functional. Additionally, awareness drives on the benefits of toilet usage can go a long way in increasing the usage of toilets.

Garbage disposal in the open is common in Bihar, as a majority of the households have reported this practice. Of the total household population, 51 per cent have stated that they see animal faeces as the most common type of waste around the villages, followed by plastic waste, open dumped garbage and human faeces. In Odisha and Bihar are the maximum number of people who have responded in the affirmative about seeing human and animal faeces along with plastic waste, which is in line with the responses of the intermediate functionaries of Bihar and Odisha who have stated that their villages are not ODF. Robust and decentralized garbage disposal methods to cater to the needs of specific locations can help in tackling the problem of littering.

About 67 per cent intermediate functionaries have knowledge about ODF sustainability. However, most of the respondents from West Bengal and Bihar do not know about ODF sustainability. About 42 per cent intermediaries have stated that their respective Gram Panchayats have no ODF sustainability plans. Also, intermediate functionaries have reported that Village Sanitation Committees, frontline workers and WASH Forums/Other Civil Society Organizations are some of the commonly identified agents who are engaged in implementing sanitation activities in their communities. Trainings and workshops for intermediate functionaries on ODF sustainability and increased hand-holding in coming up with these ODF sustainability plans can play a vital role in making ODF sustainability more achievable.

For a majority of the households, handpumps are the primary source of water supply, followed by household-level piped water supply and borewells. In contrast to the household respondents, a majority of the intermediate functionaries stated using household-level piped water supply as the

primary source of water supply. This variance in response can be attributed to a desirability bias on the part of the intermediate functionaries. The households had access to more than one source of drinking water. However, the key takeaway is the fact that access to household-level piped water supply needs to be increased.

About 51 per cent household respondents stated that social distancing was always taken care of at water collection points. However, almost half of the respondents from West Bengal reported that social distancing was never followed at water collection points. Nearly 50 per cent household respondents stated that water points used by them were always disinfected. Again, a majority of the participants from West Bengal said that water points were never disinfected. On the question of sanitary surveillance, a majority of the intermediate functionaries stated that all sources were covered under surveillance. The maximum number of intermediaries from West Bengal, as compared to the other states, have reported that none of the water sources were covered under surveillance. Among all sampled states, it can be seen that special attention needs to be paid to West Bengal in terms of adherence to COVID-19 prevention protocols.

The maximum number of households have handwashing facilities. Among all sampled states, majority of the participants reporting not having access to handwashing facilities at home were from the states of Andhra Pradesh and Bihar. Variance in the intermediary and household responses was seen in Andhra Pradesh, where all intermediaries reported having in-house handwashing facilities which is in opposition to the figure reported by the household respondents. Interestingly, a majority of the households have denied having any handwashing facilities in the public places of their communities, and the maximum number of households are from West Bengal and Madhya Pradesh. As handwashing is one of the primary preventive measures against COVID-19, efforts should be made to set up more public handwashing facilities.

The detailed findings mentioned in this report highlight the present scenario and provide a deep insight into the needs of the hour, which in turn, have the potential of aiding policy recommendations substantially.

KEY TAKEAWAYS

1. Improve access and availability of WASH facilities
2. Ensure water supply to toilets to keep them functional
3. Organize awareness drives on the benefits of toilet usage
4. Increase handholding in formulating ODF sustainability plans
5. Increase access to household-level piped water supply
6. Adhere to COVID-19 prevention protocols at water collection points
7. Set up more public handwashing facilities
8. Tackle the issue of littering through robust and decentralized garbage disposal methods
9. Conduct trainings and workshops for intermediate functionaries on ODF sustainability

CHAPTER 8

RECOMMENDATIONS

8.1. Sanitation Services

1. **Construct household toilets:** Bihar, Uttar Pradesh and Odisha need attention in terms of household-level toilet construction. In Andhra Pradesh too, household toilet construction needs to be amped up, as the highest number of intermediaries from these states have reported having no functional toilets.

2. **Make toilets functional and use them:** Appropriate measures should be taken in West Bengal to ensure that the existing toilets at the household level are in functional condition. Across all states, awareness drives to promote the usage of community toilets should be undertaken.

3. **Supply water in toilets:** Efforts should be made to facilitate adequate water supply in toilets for the purposes of flushing and cleaning the toilets. This is primarily because insufficient water supply in toilets was cited as one of the key reasons for not using the toilets, especially in Chhattisgarh.

4. **Achieve ODF status:** The ODF status in states must be looked into as intermediaries from most of the sampled states have reported that their Gram Panchayats were not ODF. The ODF status at Gram Panchayats needs verification as the survey numbers do not align with the data reported on the Swachh Bharat Mission dashboard[20]. The ODF status should only be granted to those states which meticulously fulfil the ODF guidelines. Special attention should be given to the states of Bihar, Odisha and Karnataka as a majority of the intermediaries from these states have reported that their Gram Panchayats have not yet achieved ODF status.

8.2. Environmental Services

1. **Segregate and recycle wastes:** There is a need to develop an action plan for garbage disposal facilities (both solid and liquid waste) at the state level. Immediate attention should be paid to the states of Bihar and Odisha. Practices, such as the separation of waste into solid and liquid along with recycling practices (in the form of compost) should be encouraged at the state level.

2. **Sensitize people on safe waste disposal:** Behavioural training programmes for waste disposal at the Gram Panchayat level will help in sensitizing the people of the villages about safe disposal of waste.

3. **Conduct sanitation drives:** Decentralized sanitation drives, i.e., having location specific services for waste collection, have the potential of playing an important role in reducing the visibility of waste in the villages.

4. **Collect waste more frequently:** The frequency of waste collection should be increased in those areas or states, where low frequency of waste collection was observed during the pandemic.

5. **Use appropriate gear for waste collection:** Use of masks, gloves and boots should be made mandatory for sanitation workers and garbage collectors.

6. **Clean and disinfect public water points:** It is imperative to emphasize on the cleanliness and disinfection of public water points in streets, particularly in community toilets, in a majority of these states.

[20] https://sbm.gov.in/sbmdashboard/Default.aspx#

8.3. ODF Sustainability

1. **Conduct awareness drives:** ODF sustainability awareness drives should be carried out in the villages with the help of Gram Sabhas, key line departments, frontline workers, Village Sanitation Committees, NGOs, CSRs, WASH forums, SHGs, etc. Along with awareness drives, village-level ODF sustainability plans should be made compulsory for the ODF certification process of villages or Gram Panchayats. The maximum amount of focus in this regard should be on the states of West Bengal and Bihar.

2. **Manage wastewater and encourage behaviour change:** Some of the key areas requiring priority action, as per the intermediaries, are wastewater management as well as the installation of solid waste collection/disposal systems, followed by the cleaning of streets, drains, public places and the promotion of behaviour change on sanitation practices.

8.4. Water Services

1. **Provide treated water supply:** Treated tap water supply should be provided at the household level in the states where the primary sources of drinking water are dug wells and hand pumps. The states requiring the maximum amount of focus in this regard are Bihar, Uttar Pradesh and Odisha, as a majority of the population in these states relies on hand pumps as the primary source for drinking water.

2. **Follow COVID-19 prevention protocols:** COVID-19 prevention protocols, such as social distancing at water collection points, and regular disinfection of community water collection points, should be implemented at all water points across all states in a more rigorous manner. Special focus should be on West Bengal, as a majority of the participants from this state have said that water points were never disinfected and social distancing was never followed.

3. **Construct water storage space:** Water storage space should be constructed in the states of Bihar and West Bengal, as the maximum number of participants from these states did have space for storing water. Also, the issue of accessibility of water in the states of Andhra Pradesh and Bihar should be looked into, as a majority of the participants from these states have reported that they were not getting enough water.

8.5. Water Quality Testing

1. **Build water quality testing capacity:** There is a need to build water quality testing capacity at the village level. The Gram Panchayat should form committees to conduct water quality testing every 6 months. Special attention for water quality testing is needed in Bihar, where a majority of the population has stated that no water quality testing has been performed.

8.6. Hygiene Services and Supply

1. **Set up handwashing facilities at homes:** Households should be encouraged to set up handwashing facilities within the household premises to promote better hand hygiene. The states requiring special focus are Andhra Pradesh and Bihar, as a majority of the participants from these states have reported not having access to handwashing facilities at home.

2. **Promote handwashing practices:** There is a need to continuously promote handwashing practices among the population. Camps at villages should be organized to sensitize the population on handwashing and its benefits.

3. **Set up public handwashing facilities:** The government should take the initiative to set up more public handwashing facilities. It should become a part of the village ecosystem, especially during the COVID-19 pandemic. The state governments of West Bengal and Madhya Pradesh should actively look into the matter of the availability of public handwashing facilities, as the maximum number of participants from these states have reported that they did not have handwashing facilities in public places.

8.7. Operations, Management and Discrimination

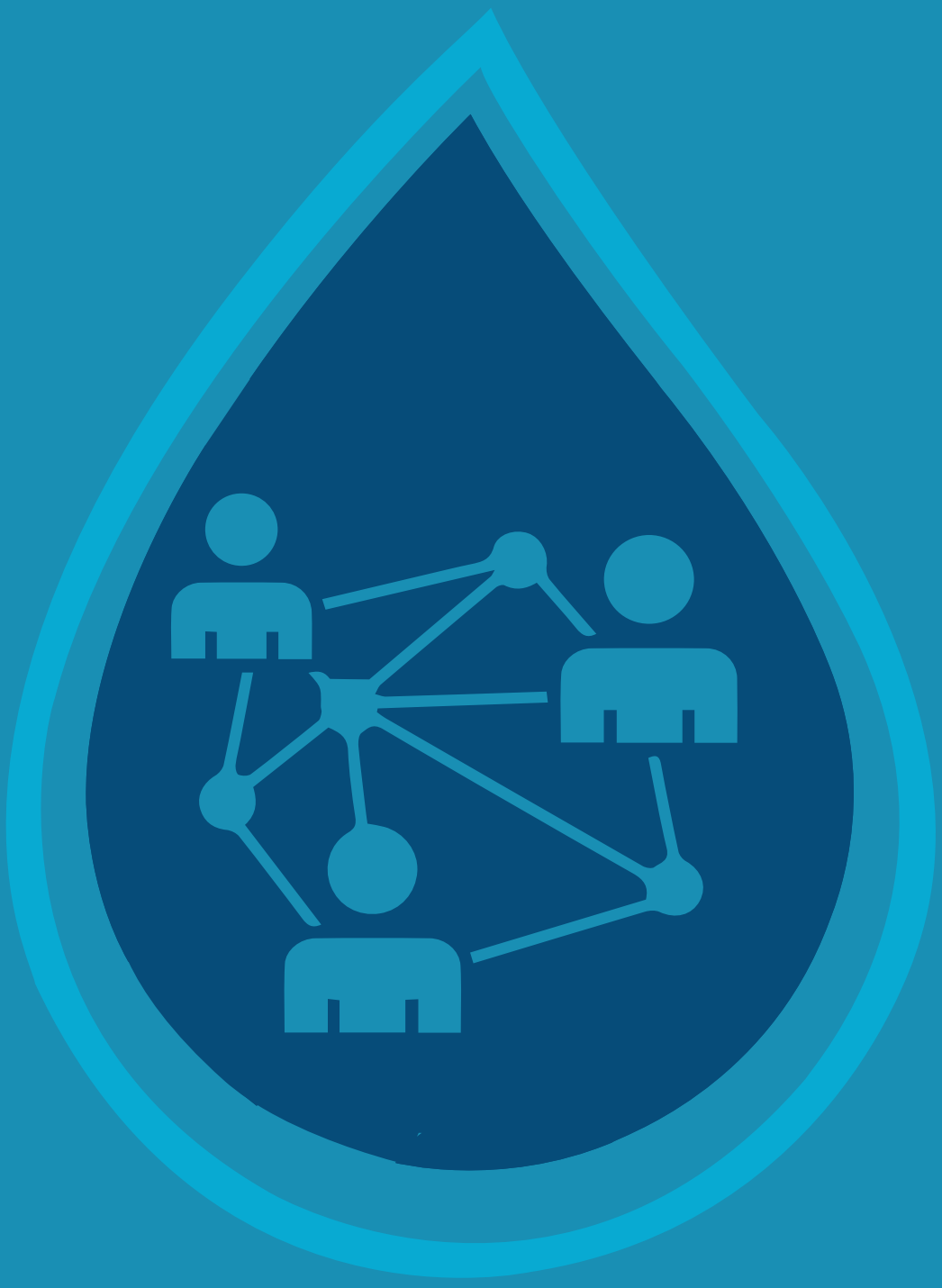
1. **Encourage Nigrani Committees:** The Central Government (with the help of state governments) should create awareness about the Nigrani or Good Morning Committees formed under the Swachh Bharat Mission (SBM). The best performing Nigrani Committees should be awarded at the district/state levels.

2. **Provide WASH products to vulnerable groups:** Attempts should be made by the government and other agencies working in the WASH space to provide WASH products like soaps, sanitizers, face masks, etc. to the vulnerable populations.

8.8. Discriminatory Incidents Related to COVID-19

1. **Address discriminatory practices:** The government should take strict measures against individuals involved in incidents relating to COVID-19-specific discrimination around WASH services. Immediate attention is needed in West Bengal, as respondents from this state have reported the highest number in discrimination or stigmatized incidents.

APPENDICES



Appendix I: Survey Questionnaire (Household)

Continuity of WASH services in households during COVID-19

Introduction and Informed Consent

Introduction

Note for interviewer - During the current Covid-19 pandemic, people may be stressed, anxious or fearful. A suitably amicable/ approachable tone should be adopted, and only proceed if the respondent is willing to contribute towards the research. If not, ensure that there is no sense of guilt and thank them for their time.

Points to cover· **Introduction**– Namaste, my name is _____, and I am supporting a study undertaken by WaterAid India and UNICEF jointly.

Purpose of the call & objective of the research–The purpose is to collect feedback on water, sanitation and hygiene services at the household level. There is no right or wrong answer. We request you to be honest in your responses.

Expected duration– This survey will only take 20 minutes of your time.

How the data will be recorded and used Your responses will be recorded on the mobile phone. Your name and other personal details will not be shared with anyone. We are speaking to people all over India, and will use all the responses together to understand current water, sanitation and hygiene practices at the household level. We will share findings with government and other organizations implementing programs in communities.

Ask if s/he has any questions– If you have any questions about your participation, please do ask.

Informed consent Your participation in this survey is purely voluntary. You can decline participation at any time, and stop the interview at any time. Please let me know if you would like to participate in the survey, and we will proceed.

1.2 Do I have permission to start the survey?

- ◯ Yes
- ◯ No

If 1.2 Do I have permission to start the survey? is No:

1.3 **Politely thank the respondent for their time.**

The interview is complete. Press the**DISCARD** button below.

1.4 **Please thank the participant(s) for agreeing to be surveyed.**

Tell the participant that during this survey you will be typing into your mobile device. Let them know that this is how you are recording their answers.

If 1.2 Do I have permission to start the survey? is Yes:

General Information of Respondent

Name of Respondent

Gender

- ◯ Male
- ◯ Female
- ◯ Prefer not to say

Age

Hint: Do not interview anyone under age of18 years

- ◯ 18 – 25 years
- ◯ 26 – 45 years
- ◯ 46 – 60 years
- ◯ Over 60 years

Location

State

District

Caste

- ◯ Scheduled caste
- ◯ Scheduled tribe
- ◯ Other backward caste
- ◯ General
- ◯ Other (please specify)

What ration card do you have?

- ◯ Above Poverty Line - APL
- ◯ Below Poverty Line - BPL
- ◯ Antodaya
- ◯ No Ration Card

How many members do you have in your family?

	Male	Female
Children under 6 years		
Elderly over 60 years		
Family member with disability		

Is anyone in your family affected by COVID-19 in last six months?

- ◯ Yes
- ◯ No
- ◯ Prefer not to say

Has anyone returned from out station?

- ◯ Yes
- ◯ No

If Has anyone returned from out station? is Yes:

How many people have returned

	Male	Female
Number of people who returned		

Are you holding any of the positions?

- ◯ Swachhgrahis
- ◯ Jalsurakshaks
- ◯ PRI members
- ◯ Citizen group member
- ◯ Government representative/employee
- ◯ Frontline workers - ASHA, AWW, ANM etc.
- ◯ Teacher
- ◯ Sanitation Worker
- ◯ None

If 1.2 Do I have permission to start the survey? is Yes:

Sanitation services

Do you have functional toilet in your house?

- ◯ Yes, functional toilet
- ◯ Yes, toilet not functional
- ◯ No toilet

If Do you have functional toilet in your house? is one of Yes, toilet not functional, No toilet:

Where do you defecate?

- ◯ community toilet
- ◯ neighbour toilet
- ◯ open defecation

If Do you have functional toilet in your house? is Yes, functional toilet:

Do all members in your household use the toilet?

- ◯ yes
- ◯ only some
- ◯ no none

☐ Don't Know

How do you dispose of child faeces?

Hint: Hint: link this question with number of family members. If they have children below 5 years at their home

- ◯ in the toilet
- ◯ outside in open drain
- ◯ in garbage
- ◯ Other (please specify)

☐ Not Applicable

If Do all members in your household use the toilet? is one of only some, no none:

In your opinion, what are the main issues for not using the toilet regularly in your household?

- ◯ in-sufficient water available inside/next to the toilet to flush/clean the toilet
- ◯ the toilet is dirty, and no one cleans it
- ◯ the pit is full
- ◯ some people cannot use the toilet in the family - as elderly people, infants, people with disabilities

Are there any left out households without toilet in the community?

- ◯ yes
- ◯ no

☐ Don't Know

If Are there any left out households without toilet in the community? is yes:

Have toilet construction activities for left out HHs resumed in your village?

- ◯ yes
- ◯ no

☐ Don't Know

How was the toilet usage changed due to COVID-19?
Hint: Hint: change in usage pattern for household toilet

- ◯ improved
- ◯ decreased
- ◯ no effect

☐ Don't Know

If How was the toilet usage changed due to COVID-19? is improved:
If Improved what are the reasons?

- ☐ scared of infection from neighbour or community toilet
- ☐ personal choice
- ☐ safety and security
- ☐ Other (please specify)

If How was the toilet usage changed due to COVID-19? is decreased:
If decreased what are the reasons?

- ☐ Lack of water availability
- ☐ increased burden of fetching water
- ☐ shared toilet is far from house
- ☐ Other (please specify)

If 1.2 Do I have permission to start the survey? is Yes:

Environmental sanitation

How/where do you dispose your household garbage or solid waste?

- ◯ throw it in the open
- ◯ give it to the garbage collector
- ◯ manage it as household compost or other recycling
- ◯ Other (please specify)

If How/where do you dispose your household garbage or solid waste? is give it to the garbage collector:
are you satisfied with the services and system of waste collection?

- ◯ yes
- ◯ no
- ◯ Other (please specify)

How is waste water disposed in your household?

- ◯ drain
- ◯ soak pits
- ◯ kitchen garden
- ◯ let out in to the open

In or around your village, do you see any of these?

- ☐ human faeces
- ☐ animal faeces
- ☐ plastic wastes
- ☐ bio waste - (all kind of waste that can degrade)
- ☐ stagnant pool of water
- ☐ garbage dumped in the open
- ☐ blockage of drain
- ☐ none of these

Are there people in the community who are cleaning your village?

- ◯ yes, waste collectors paid by the GP
- ◯ yes, waste collectors paid by individual households
- ◯ waste pickers/ others that I don't know
- ◯ no one

☐ Don't Know

If How/where do you dispose your household garbage or solid waste? is give it to the garbage collector:
Is waste being collected from your house regularly - every day

- ◯ yes
- ◯ no
- ◯ on site disposal
- ◯ Other (please specify)

Has the waste collection service been affected/disrupted due to COVID-19?

- ◯ yes, no one has been collecting waste for a week
- ◯ yes, they are only collecting waste sometimes
- ◯ no disruption – waste is collected every few days
- ◯ No waste collection system

If Has the waste collection service been affected/disrupted due to COVID-19? is one of yes, no one has been collecting waste for a week, yes, they are only collecting waste sometimes, no disruption – waste is collected every few days:

Does the sanitation worker/waste collector use the following

	select option
mask	
gloves	
boots	

☐ Don't Know

Were there any disinfection drives spraying of disinfectant, cleaning been carried out in your village/community?

	select the option
public water point	
community/ street	
community toilet	

If 1.2 Do I have permission to start the survey? is Yes:

Water services

What is the current water supply source you use for drinking purpose?

Hint: (tick all relevant ones)

☐ household level piped water supply
☐ public stand post
☐ handpump
☐ borewell
☐ tap
☐ tanker
☐ RO plastic bottles
☐ dug well
☐ Other (please specify)

If What is the current water supply source you use for drinking purpose? is one of household level piped water supply, public stand post:

For how many hours/day water is accessible?

◯ not on daily basis/irregular supply
◯ less than 1 hour a day
◯ more than 1-hour
◯ 24X7

Is water source available in the premises of your house?

- ◯ yes
- ◯ no

If Is water source available in the premises of your house? is no:

How much time is spent on total water collection in a day?

- ◯ less than 10 mins
- ◯ 10-15 mins
- ◯ more than 15 mins

Who primarily collects water?

- ◯ young girl
- ◯ lady/women
- ◯ man
- ◯ young boy
- ◯ children (below 18 years)

If Is water source available in the premises of your house? is no:

Is social distancing being maintained at the point of water collection?

Hint: Hint: Social distancing, also called "physical distancing," means keeping a safe space between yourself and other people who are not from your household. To practice social or physical distancing, stay at least 6 feet (about 2 arms' length) from other people who are not from your household in both indoor and outdoor spaces.

- ◯ always
- ◯ most of the times
- ◯ sometimes
- ◯ never

If Is water source available in the premises of your house? is no:

Are all the water points used by you and your family disinfected regularly?

- ◯ always
- ◯ most of the times
- ◯ sometimes
- ◯ never

☐ Don't Know

Do you have enough space to store water?

- ◯ yes
- ◯ no

Are you getting enough water?

- ◯ yes
- ◯ no

How much do you pay on average for water supply on monthly basis?

- ◯ Nil
- ◯ Rs 30-100 per month
- ◯ Rs. 100-500 per month
- ◯ 500-1000 per month
- ◯ More than 1000 per month

Do you know in last six months water quality testing was done?

- ◯ yes
- ◯ no

☐ Don't Know

Has the water supply been affected/disrupted due to COVID-19 (in the last 6 months)
Hint: example less water, inconsistent supply, no supply at all

- ◯ yes
- ◯ no

If Has the water supply been affected/disrupted due to COVID-19 (in the last 6 months) is yes:
If yes, what is the period of disruption?

- ◯ less than a day
- ◯ 1-6 days
- ◯ more than a week

If If yes, what is the period of disruption? was answered:
If yes, who restored it?

- ◯ by Gram Panchayat
- ◯ by department
- ◯ private entity

☐ Don't Know

Has water consumption increased due to COVID-19?

- ◯ yes
- ◯ no
- ◯ no effect

If 1.2 Do I have permission to start the survey? is Yes:

Hygiene services and supply

Do you have handwashing facility in your household?

- ◯ yes
- ◯ no

If Do you have handwashing facility in your household? is yes:

What type of handwash facility do you have?

- ◯ wash basin with tap
- ◯ wash basin with water from bucket
- ◯ tap only
- ◯ bucket and soap
- ◯ handpump
- ◯ any dedicated space for handwashing
- ◯ Other (please specify)

Do members in your household wash hands with soap and water?

- ◯ yes, all
- ◯ no, only some
- ◯ no, none

☐ Don't Know

What are the critical times you are practicing handwashing with soap and water?

Hint: (tick all relevant ones)

- ☐ before cooking
- ☐ after use of toilet
- ☐ before eating
- ☐ before serving food
- ☐ after touching anything
- ☐ after returning from outdoor activities
- ☐ Other (please specify)

Are handwashing facilities available in public places in your community?

- ◯ yes
- ◯ no

☐ Don't Know

If Are handwashing facilities available in public places in your community? is yes:

Where are they set up?

- ☐ market
- ☐ bus stand
- ☐ offices
- ☐ Other public place specify

If Where are they set up? was answered:

Who has set it up?

- ◯ government
- ◯ gram panchayat
- ◯ NGO
- ◯ market associations
- ◯ Other (please specify)

☐ Don't Know

Can you tell me, for each of the following items, whether these are available and is affordable in your local shops?

	Availability	Affordability
soap		
mask		
toilet cleaner		
hand sanitizer		
sanitary napkin for menstruation		
TCL powder/liquid		

In your opinion has hand washing practice affected in your household because of COVID -19?

- ◯ increased
- ◯ decreased
- ◯ no effect

If 1.2 Do I have permission to start the survey? is Yes:

Operations, Management and Discrimination

Have you heard of Nigrani / Good Morning committee formed under Swachh Bharat programme working in your village?

- ◯ yes
- ◯ no

☐ Don't Know

Have you or anyone in your family received any WASH products/items, like Soap, sanitiser, Face masks from GP/ULB/administration?

- ◯ yes
- ◯ no

☐ Don't Know

Have you heard of any discrimination or stigmatized incident related to COVID-19 around WASH services in your village/community?

Hint: (Hint: any act which restricts any individual in accessing basic services like not allowing to take water from community water points etc. It can be on the basis caste, colour or creed)

◯ yes
◯ no

☐ Don't Know

If 1.2 Do I have permission to start the survey? is Yes:

Finish

8.1 Any significant observation of Enumerator at the end?

Politely thank the respondent for their time. The interview is complete. Press th**SUBMIT** button below

Appendix II: Survey Questionnaire (Intermediary)

Continuity of WASH services in communities during COVID-19 (Intermediaries)

Introduction and Informed Consent

Introduction

Note for interviewer - During the current Covid-19 pandemic, people may be stressed, anxious or fearful. A suitably amicable/ approachable tone should be adopted, and only proceed if the respondent is willing to contribute towards the research. If not, ensure that there is no sense of guilt and thank them for their time.

Points to cover· **Introduction**– Namaste, my name is _____, and I am supporting a study undertaken by WaterAid India and UNICEF jointly.

Purpose of the call & objective of the research–The purpose is to collect feedback on water, sanitation and hygiene services at the household level. There is no right or wrong answer. We request you to be honest in your responses.

Expected duration– This survey will only take 20 minutes of your time.

How the data will be recorded and used Your responses will be recorded on the mobile phone. Your name and other personal details will not be shared with anyone. We are speaking to people all over India, and will use all the responses together to understand current water, sanitation and hygiene practices at the household level. We will share findings with government and other organizations implementing programs in communities.

Ask if s/he has any questions– If you have any questions about your participation, please do ask.

Informed consent Your participation in this survey is purely voluntary. You can decline participation at any time, and stop the interview at any time. Please let me know if you would like to participate in the survey, and we will proceed.

1.2 Do I have permission to start the survey?

- ◯ Yes
- ◯ No

If 1.2 Do I have permission to start the survey? is No:

1.3 **Politely thank the respondent for their time.**

The interview is complete. Press the**DISCARD** button below.

1.4 **Please thank the participant(s) for agreeing to be surveyed.**

Tell the participant that during this survey you will be typing into your mobile device. Let them know that this is how you are recording their answers.

If 1.2 Do I have permission to start the survey? is Yes:

General Information of Respondent

Name of Respondent

Gender

- ◯ Male
- ◯ Female
- ◯ Prefer not to say

Age

Hint: Do not interview anyone under age of18 years

- ◯ 18 – 25 years
- ◯ 26 – 45 years
- ◯ 46 – 60 years
- ◯ Over 60 years

Location

Hint: Hint: where a respondent is responsible for. In case a person is responsible for multiple GP consider only one GP and ask them to give their responses accordingly

State

District

Caste

- ◯ Scheduled caste
- ◯ Scheduled tribe
- ◯ Other backward caste
- ◯ General
- ◯ Other (please specify)

Target Audience?

- ◯ Swachhgrahis
- ◯ Jalsurakshaks
- ◯ PRI members
- ◯ Citizen group member
- ◯ Government representative/employee
- ◯ Frontline workers - ASHA, AWW, ANM etc.
- ◯ Teacher
- ◯ Sanitation Worker
- ◯ None

If 1.2 Do I have permission to start the survey? is Yes:

ODF Sustainability

Is the Gram Panchayat still ODF?

Hint: Hint: all HH have and use toilets and no sign of faeces in the village

- ◯ yes
- ◯ no

☐ Don't Know

Have you heard about the ODF Sustainability?

Hint: (Hint: Safe disposal of human excreta is sustained post the attainment of ODF status; waste water and solid waste are disposed safely).

- ◯ yes
- ◯ no

☐ Don't Know

Does your Gram panchayat have an ODF Sustainability plan?

- ◯ yes
- ◯ no

☐ Don't Know

Are you aware if any of the following agencies Government departments, CSR, CBOs, frontline workers etc. are engaged in implementing any of sanitation activities (ODF sustainability plan)?

Hint: if any other is selected specify in the comment

- ☐ key line departments and their programme - (Hint: Jal Jeevan Mission, Swatch Bharat Mission etc.)
- ☐ frontline workers
- ☐ Village Sanitation Committee
- ☐ WASH Forum or any other civil society organisations or their networks
- ☐ Self Help Groups
- ☐ CSR - example funds from different companies
- ☐ Any Other

Comments...

Are you aware if any of the following activities are happening in the village?

Hint: if any other is selected specify in the comment

	select option
household level toilet construction of new families and left out HHs	
retrofitting or upgradation of existing defunct HH toilets	
all institutions in village have adequate functional sanitation facilities Repairing of existing community level sanitation complexes	
construction of new Community Sanitary Complexes	
nigrani or vigilant committees actively monitoring the ODF sustainability	
solid waste management systems in place	
drainage or soak pit facility to dispose waste water	
awareness programmes for behaviour change	
Any Other	

Comments...

Has the operation & maintenance of community facilities (toilet and water points) been affected/disrupted due to COVID-19?

- ◯ yes
- ◯ no

☐ Don't Know

If Has the operation & maintenance of community facilities (toilet and water points) been affected/disrupted due to COVID-19? is yes:

Which facility?

- ◯ community water point
- ◯ community/ public toilets
- ◯ public handwashing station
- ◯ Other (please specify)

Which of the below points do you think need action on priority

- ☐ Waste water management measures eg. Soak pit construction drainage etc.
- ☐ Installation of solid waste collection and disposal systems
- ☐ Promotion of safe disposal of child faeces
- ☐ Activities to promote behaviour change on sanitation
- ☐ Cleaning of streets, drains and public places
- ☐ Support services for emptying pits and safe disposal of sludge
- ☐ Any other specify
- ☐ None of the Above

☐ Not Applicable

If 1.2 Do I have permission to start the survey? is Yes:

WASH in Schools (WinS)

How many schools are there in your area?

Whether any school from your area, were used for following purpose during COVID 19 in the recent few months' time?

- ☐ Quarantine facility
- ☐ Isolation Facility
- ☐ Shelter (during the lockdown period for migrant people)

☐ Not Applicable

Do you feel schools are prepared enough (ready with appropriate protocols, clear roles, guidelines) to ensure safe operation of water, sanitation, hygiene & infection control in the current COVID 19 Context, please provide numbers in the following table ?

	Mention Number
Fully prepared	
Partially prepared	
Not adequately prepared	
Not know	

How many schools in your area does not have functional pipes water supply in the school campus?

How many schools have mechanism for the daily cleaning of toilet with appropriate disinfectant?

Whether upper primary & higher standards schools have facility for safe disposal of sanitary waste
Hint: Hint: incinerator, temperature or deep burial of waste with adequate precautions

- ◯ yes, all schools have this facility
- ◯ no, some schools have this facility
- ◯ No, none school has this facility

How many schools not have adequate handwash points (1 for every 10 children), with safe physical distance (2 gaj (6 feet)) for the COVID 19 context?
Hint: Hint: handwash point: such as a sink with tap, water tank with tap, bucket with tap, tippy tap, or another similar device

How many schools have handwashing facility either inside or attached to toilet block?

If 1.2 Do I have permission to start the survey? is Yes:

Sanitation services

Do you have functional toilet in your house?

- ◯ yes, functional toilet
- ◯ yes, toilet not functional
- ◯ no toilet

If Do you have functional toilet in your house? is one of yes, toilet not functional , no toilet:
Where do you defecate?

- ◯ community toilet
- ◯ neighbour toilet
- ◯ open defecation

Do all members in your household use the toilet?

- ◯ yes, all
- ◯ no, only some
- ◯ no, none

☐ Don't Know

If 1.2 Do I have permission to start the survey? is Yes:

Environmental Sanitation

How/where do you dispose your household garbage or solid waste

- ◯ throw it in the open
- ◯ give it to the garbage collector
- ◯ manage it as household compost or other recycling
- ◯ Other (please specify)

If 1.2 Do I have permission to start the survey? is Yes:

Water Services

What is the current water supply source you use for drinking purpose?
Hint: (tick all relevant ones)

- ☐ household level piped water supply
- ☐ public stand post
- ☐ hand pump
- ☐ bore well
- ☐ tap
- ☐ tanker
- ☐ RO plastic bottles
- ☐ dug well
- ☐ Other (please specify)

If What is the current water supply source you use for drinking purpose? is one of household level piped water supply, public stand post :
For how many hours/day water is accessible?

- ◯ not on daily basis/irregular supply
- ◯ less than 1 hour a day
- ◯ more than 1hour
- ◯ 24X7

Is water source available in the premises of your house?

- ○ yes
- ○ no

If Is water source available in the premises of your house? is no:

Are all the water points used by you and your family disinfected regularly?

- ○ always
- ○ most of the times
- ○ sometimes
- ○ never

☐ Don't Know

Has sanitary surveillance done for all public water points done?

Hint: Hint: stagnation of dirty water around the source, broken or no platform, source located close to open or unlined drains, source without any protective lining, waste dumps close to water source etc)

- ○ Yes all sources
- ○ Yes some of the sources
- ○ no none of the sources

Have you taken part in any such sanitary surveillance exercise?

- ○ yes
- ○ no

If 1.2 Do I have permission to start the survey? is Yes:

Hygiene services and supply

Do you have handwashing facility in your household?

- ○ yes
- ○ no

What are the critical times you are practicing handwashing with soap and water?

Hint: Hint: tick all relevant ones

- ☐ before cooking
- ☐ after use of toilet
- ☐ before eating
- ☐ before serving food
- ☐ after touching anything
- ☐ after returning from outdoor activities
- ☐ Other (please specify)

Do women in your village have access to sanitary absorbents?

Hint: Hint sanitary napkin, cloth napkin, old cotton cloth

- ○ yes
- ○ no
- ○ don't know

In your opinion has hand washing practice affected in your household because of COVID -19?

- ○ increased
- ○ decreased
- ○ no effect

If 1.2 Do I have permission to start the survey? is Yes:

Operations, Management and Discrimination

Have you heard of Nigrani / Good Morning committee formed under Swachh Bharat programme working in your GP/community?

- ○ yes
- ○ no
- ○ don't know

Have you heard of any discrimination or stigmatised incident related to COVID-19 around WASH services in your GP/community?

- ○ yes
- ○ no
- ○ don't know

If 1.2 Do I have permission to start the survey? is Yes:

Finish

8.1 Any significant observation of Enumerator at the end?

Appendix III:

Table A: Sociodemographic Characteristics at the Household Level

		State																					
		Andhra Pradesh		Bihar		Chhattis-garh		Karnataka		Kerala		Madhya Pradesh		Maha-rashtra		Odisha		Uttar Pradesh		West Bengal		Total	
		n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	N	(%)
Gender	Female	130	(43)	268	(45)	455	(51)	513	(57)	122	(41)	957	(45)	303	(51)	808	(67)	564	(38)	316	(52)	4436	(49)
	Male	169	(57)	332	(55)	443	(49)	387	(43)	178	(59)	1147	(55)	297	(50)	395	(33)	936	(62)	295	(48)	4579	(51)
Age	18 – 25 years	64	(21)	35	(6)	90	(10)	103	(11)	4	(1)	416	(20)	89	(15)	92	(8)	428	(29)	56	(9)	1377	(15)
	26 – 45 years	195	(65)	358	(60)	659	(73)	675	(75)	85	(28)	1329	(63)	419	(70)	828	(69)	771	(51)	358	(59)	5677	(63)
	46 – 60 years	37	(12)	197	(33)	141	(16)	114	(13)	135	(45)	326	(15)	85	(14)	274	(23)	256	(17)	151	(25)	1716	(19)
	Over 60 years	3	(1)	10	(2)	8	(1)	8	(1)	76	(25)	33	(2)	7	(1)	9	(1)	45	(3)	46	(8)	245	(3)
Caste	General	55	(18)	138	(23)	42	(5)	245	(27)	55	(18)	312	(15)	15	(3)	259	(22)	243	(16)	256	(42)	1620	(18)
	Other backward caste	195	(65)	270	(45)	409	(46)	311	(35)	219	(73)	853	(41)	246	(41)	592	(49)	480	(32)	173	(28)	3748	(42)
	Scheduled caste	42	(14)	159	(27)	128	(14)	269	(30)	25	(8)	529	(25)	136	(23)	182	(15)	667	(44)	100	(16)	2237	(25)
	Scheduled tribe	7	(2)	33	(6)	319	(36)	75	(8)	1	(0)	410	(19)	203	(34)	170	(14)	110	(7)	82	(13)	1410	(16)
What ration card do you have?	Above Poverty Line	2	(1)	52	(9)	116	(13)	68	(8)	208	(69)	661	(31)	318	(53)	169	(14)	500	(33)	143	(23)	2237	(25)
	Antodaya	0	(0)	28	(5)	23	(3)	23	(3)	4	(1)	47	(2)	71	(12)	27	(2)	152	(10)	282	(46)	657	(7)
	Below Poverty Line	283	(95)	314	(52)	741	(83)	780	(87)	84	(28)	1008	(48)	185	(31)	841	(70)	672	(45)	172	(28)	5080	(56)
	No Ration Card	14	(5)	206	(34)	18	(2)	29	(3)	4	(1)	388	(18)	26	(4)	166	(14)	176	(12)	14	(2)	1041	(12)
Are you holding any of the positions?	Citizen group member	0	(0)	89	(15)	446	(50)	55	(6)	0	(0)	514	(24)	152	(25)	3	(0)	44	(3)	28	(5)	1331	(15)
	Frontline workers	9	(3)	128	(21)	48	(5)	137	(15)	39	(13)	180	(9)	120	(20)	65	(5)	103	(7)	39	(6)	868	(10)
	Government representative	2	(1)	7	(1)	28	(3)	84	(9)	14	(5)	29	(1)	15	(3)	29	(2)	23	(2)	13	(2)	244	(3)
	Jalsurakshaks	0	(0)	0	(0)	0	(0)	24	(3)	2	(1)	141	(7)	25	(4)	3	(0)	7	(0)	0	(0)	202	(2)
	None	285	(95)	181	(30)	172	(19)	560	(62)	231	(77)	577	(27)	98	(16)	983	(82)	1220	(81)	475	(78)	4782	(53)
	PRI members	2	(1)	64	(11)	99	(11)	6	(1)	0	(0)	346	(16)	181	(30)	38	(3)	12	(1)	31	(5)	779	(9)
	Sanitation Worker	1	(0)	9	(2)	12	(1)	1	(0)	9	(3)	67	(3)	3	(1)	3	(0)	55	(4)	2	(0)	162	(2)
	Swachhagrahis	0	(0)	27	(5)	86	(10)	1	(0)	1	(0)	217	(10)	2	(0)	65	(5)	14	(1)	2	(0)	415	(5)
	Teacher	0	(0)	95	(16)	7	(1)	32	(4)	4	(1)	33	(2)	4	(1)	14	(1)	22	(1)	21	(3)	232	(3)

Table B: Sociodemographic Characteristics at the Intermediary Level

		State																					
		Andhra Pradesh		Bihar		Chhattis-garh		Karnataka		Kerala		Madhya Pradesh		Maha-rashtra		Odisha		Uttar Pradesh		West Bengal		Total	
		n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	N	(%)
Gender	Female	5	(25)	16	(38)	25	(42)	42	(53)	20	(80)	48	(34)	21	(51)	47	(62)	53	(50)	20	(56)	297	(47)
	Male	15	(75)	26	(62)	35	(58)	37	(47)	5	(20)	94	(66)	20	(49)	29	(38)	54	(50)	16	(44)	331	(53)
Age	18 – 25 years	2	(10)	2	(5)	2	(3)	0	(0)	0	(0)	10	(7)	1	(2)	2	(3)	2	(2)	0	(0)	21	(3)
	26 – 45 years	11	(55)	16	(38)	43	(72)	53	(67)	4	(16)	108	(76)	31	(76)	43	(57)	83	(78)	21	(58)	413	(66)
	46 – 60 years	5	(25)	24	(57)	14	(23)	26	(33)	20	(80)	24	(17)	9	(22)	29	(38)	19	(18)	12	(33)	182	(29)
	Over 60 years	2	(10)	0	(0)	1	(2)	0	(0)	1	(4)	0	(0)	0	(0)	2	(3)	3	(3)	3	(8)	12	(2)
Caste	General	5	(25)	13	(31)	5	(8)	19	(24)	0	(0)	16	(11)	5	(12)	19	(25)	27	(25)	27	(75)	136	(22)
	Other backward caste	15	(75)	18	(43)	26	(43)	34	(43)	24	(96)	58	(41)	20	(49)	43	(57)	37	(35)	6	(17)	281	(45)
	Scheduled caste	0	(0)	8	(19)	14	(23)	24	(30)	1	(4)	34	(24)	7	(17)	12	(16)	34	(32)	0	(0)	134	(21)
	Scheduled tribe	0	(0)	2	(5)	15	(25)	2	(3)	0	(0)	34	(24)	9	(22)	2	(3)	9	(8)	3	(8)	76	(12)
Target Audi-ence?	Citizen group member	0	(0)	1	(2)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0)
	Frontline workers	3	(15)	9	(21)	9	(15)	10	(13)	0	(0)	2	(1)	5	(12)	0	(0)	4	(4)	0	(0)	42	(7)
	Government representative	4	(20)	7	(17)	4	(7)	30	(38)	3	(12)	25	(18)	6	(15)	31	(41)	36	(34)	17	(47)	163	(26)
	Jalsurakshaks	4	(20)	6	(14)	0	(0)	12	(15)	7	(28)	27	(19)	3	(7)	4	(5)	17	(16)	0	(0)	80	(13)
	None	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	23	(16)	0	(0)	0	(0)	0	(0)	0	(0)	23	(4)
	PRI members	0	(0)	0	(0)	0	(0)	2	(3)	0	(0)	1	(1)	2	(5)	0	(0)	0	(0)	2	(6)	7	(1)
	Sanitation Worker	0	(0)	5	(12)	44	(73)	4	(5)	4	(16)	41	(29)	24	(59)	20	(26)	17	(16)	7	(19)	166	(26)
	Swachhagrahis	4	(20)	4	(10)	2	(3)	7	(9)	4	(16)	7	(5)	0	(0)	3	(4)	12	(11)	0	(0)	43	(7)
	Teacher	1	(5)	2	(5)	1	(2)	1	(1)	0	(0)	12	(8)	0	(0)	0	(0)	4	(4)	0	(0)	21	(3)
		4	(20)	9	(21)	0	(0)	13	(16)	7	(28)	4	(3)	1	(2)	18	(24)	17	(16)	10	(28)	83	(13)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