Functionality Assessment of Household Tap Connection under National Jal Jeevan Mission - 2022

Har Ghar Jal
Jal Jeevan Mission

STATE REPORT: UTTAR PRADESH

SURVEY DURATION: FEBRUARY TO APRIL 2022

Contents

Abbreviations

AWC	Aanganwadi Centre
FHTC	Functional Household Tap Connection
GoI	Government of India
GP	Gram Panchayat
HF	Health Facility
HH	Household
HGJ	Har Ghar Jal
JJM	Jal Jeevan Mission
LPCD	Litres per Capita per Day
MVS	Multi-village Scheme
NJJM	National Jal Jeevan Mission
RC	Residual Chlorine
O&M	Operation and Maintenance
OHT	Over Head Tank
PSU	Primary Sampling Unit
PWS	Piped Water Supply
SVS	Single Village Scheme
VAP	Village Action Plan
VWSC	Village Water and Sanitation Committee
WQMIS	Water Quality Monitoring and Information System

Glossary

1. **Community** – Group of people living in one particular area or village/habitation
2. **Cross-sectional research** – A cross-sectional study is a type of research design in which data is collected from a relatively large and diverse group of people at a single point in time
3. **Drinking water source** – Groundwater (open well, borewell, tube well, handpump, spring, etc.)/ surface water (river, lake, pond, reservoir, etc.)/rainwater, available for drinking and domestic use
4. **Improved sources** – The following sources as considered improved by the National Family Health Survey definitions: Piped water into dwelling, yard/plot with a tap, piped water connected to public stand-posts, tube well or borewell, Hand pump, dug well–protected, Spring–protected, Rainwater, Water ATM/ Community RO plant/ Community Water Purification Plant (CWPP)
5. **Unimproved sources** – The following sources as considered unimproved by the National Family Health Survey definitions: Unprotected spring, unprotected dug well, cart with small tank / drum, Tanker/ truck, Surface water (river/ dam/ lake/ pond/ canal), and bottled water
6. **Functional Household Tap Connection (FHTC)** – A tap connection to a rural household for providing drinking water in adequate quantity of prescribed quality on regular basis.
7. **Functionality of FHTC** – Functionality of a tap connection is defined as having infrastructure, i.e., household tap connection providing water in adequate quantity, as presented:

Definitions	Fully-functional	Partially-functional	Non-functional
Quantity	>= 55 LPCD	> 40 lpcd - < 55 LPCD	< 40 LPCD
Regularity	12 months or daily basis	9-12 months or < daily basis	< 9 months or < daily basis
Quality	Potable	Potable	Non potable

8. **Quantity (in litres)** of water received by households per person per day should meet the service level of 55 lpcd.
9. **Functionality Assessment** – An assessment of the functionality of rural household tap connections based on a sample survey
10. **Fully Regular –** Regularity of water is considered when a rural household receives water for 12 months on daily basis or as per schedule.
11. **Potability –** Potable water is water that is safe to be used as drinking water. Parameters of potable water are mentioned below:

Parameters for potable water tested in the survey	**Unit**	**Acceptable Limit**	**Permissible Limit** in the absence of alternative sources
i. pH (tested on site)	-	6.5 to 8.5	No relaxation
ii. Free residual chlorine (tested on site)	Mg/litre	0.2	1
iii. Turbidity	NTU	1	5
iv. Total hardness	Mg/litre	200	600
v. Total alkalinity	Mg/litre	200	600
vi. Chloride	Mg/litre	250	1000
vii. Ammonia	Mg/litre	0.5	No relaxation
viii. Phosphate	Mg/litre	0.3	1
ix. Iron (in hotspots only)	Mg/litre	1	No relaxation
x. Nitrate	Mg/litre	45	No relaxation
xi. Sulphate	Mg/litre	200	400
xii. Total dissolved solids	Mg/litre	500	2000

xiii.	Fluoride	Mg/litre	1	1.5
xiv.	Arsenic (in hotspots only)	Mg/litre	0.01	No relaxation
xv.	Bacteriological test for Total coliform bacteria and E. coli or thermotolerant coliform bacteria		Shall not be detectable in any 100 ml sample	

12. **Sampling** – Selection of a subset of individuals from within a statistical population to estimate water service delivery among the population. In the current study, households have been sampled to estimate the representation of the village and subsequently of the district as well as of the state.
13. **Types of schemes**: Following are the piped water supply schemes that were assessed
    a. Mini-solar based piped water supply scheme in isolated/tribal hamlets
    b. Single Village Scheme (SVS) in villages having adequate groundwater that needs treatment
    c. Single village scheme (having adequate groundwater/ spring water/ local or surface water source of prescribed Quality)
    d. Retrofitting of ongoing schemes taken up under erstwhile NRDWP for the last mile connectivity/ retrofitting of completed rural water supply schemes to make it JJM compliant
    e. Multi-village PWS scheme - with water grids/ regional water supply schemes
14. **Village Action Plan (VAP)** – Plan prepared by Gram Panchayat and/ or its sub-committee, i.e., VWSC/ Paani Samiti/ User Group, etc. based on baseline survey, resource mapping and felt needs of the village community to provide FHTC to every rural household, treat the generated greywater and plan its reuse, undertake surveillance activities, etc. VAP also indicates the fund requirement and timelines for completion of work under the Mission and will be approved by the Gram Sabha. Irrespective of the source of funding, all drinking water-related works in the village are taken up based on the VAP.
15. **Source Sustainability** – includes measures such as aquifer recharge, rainwater harvesting, increased storage capacity of water bodies, reservoirs, de-silting, etc. improve the lifespan of water supply systems
16. **Har Ghar Jal (HGJ)** – An administrative unit wherein all HHs are provided with water supply through FHTCs is called “Har Ghar Jal”.
17. **Public Institutions** – The public institutions in the survey include Aanganwadi Centre (AWC), Health Facilities, Schools, Gram Panchayat, and government buildings.
18. **Working tap connection –** A tap connection supplied water at least one day in the week, preceding of survey
19. **Functional Scheme –** A scheme is said to be functional if it was reported to be working for all 12 months in a year.

Note: The detailed analysis of data at the district level has been incorporated in the District Reports presented separately. The State Reports are to be read in concurrence to the District Reports.

Executive Summary

Jal Jeevan Mission (JJM) was launched on the 15th of August 2019 with the objective to provide functional household tap connections (FHTCs) to all rural households. NJJM, GoI engaged HTA Kantar Public to conduct the 'Functionality Assessment' of the tap connection at households as well as public institutions/ buildings such as schools, anganwadis, gram panchayat buildings, public health facilities, and wellness centers in all the rural districts for the financial year 2021-22.

A cross-section research design was adopted for this functionality assessment study. As per the design, all villages having a piped water scheme (PWS) with 20 or more functional household tap connections were included in the sample frame. There after the required number of villages were randomly selected villages such that these are statistically significant at the district level.

In this study, data was collected from the households, and public institutions (i.e., schools, anganwadis, gram panchayat buildings, public health facilities and wellness centers, etc.) in the randomly selected villages. Water quantity and quality were also tested in the sampled households and public institutes. Quality testing was conducted for various parameters, out of which pH and residual chlorine were tested on the ground and for the remaining 12 different quality parameters water sample was collected and sent to the nearest NABL accredited district labs for testing.

The state of Uttar Pradesh lies in the northern part of India and has a population of 2,53,51,462 (Census 2011). It has 75 districts and 97568 villages, and 11295 villages have PWS schemes. The State was declared Har Ghar Jal in 2021. A total of 1338 villages, across all districts, and 30741 households were randomly sampled for the survey, and additionally, water samples from 497 public institutions were tested.

In the assessment among sampled villages, 88% of villages have only one scheme, 11% of villages have 2-3 schemes, and 1% have 4 or more schemes. Mostly all schemes across the state were found functional.

At the state level, 58% of the HHs were satisfied with the regularity of the supply, 59% with the quality of the water supplied, 60% with the colour of the water supplied, and 60% with the taste of the supplied tap water.

Overall functionality status of Uttar Pradesh

At the state level, 59% of HHs received water on the day of the survey. While 58% of the HHs were found to have fully functional tap water connections within the premises. Out of which 88% received an adequate quantity of water, 67% reported receiving a fully regular supply of water, and 92% HHs received potable water.

It was found that 88% of households received water all 7 days a week, 3% of the households received water 3 or 4 days a week, and 5% of the households received water at least once a week. The average duration of water supply across the state was reported to be 3 hours per day.

In Uttar Pradesh, 36% of the villages have reported that water is directly supplied to the households and the remaining 64% reported that water was supplied via an overhead tank, sump, or both.

During the roll-out of the data collection in the state, all-district level NABL accredited laboratories (labs) extended their support in accepting and testing water samples from HHs

and public institutions. One of the challenges identified by the labs was the capacity to test more than 30-40 samples within 24 hours given the shortage of technicians and availability of necessary reagents in the required quantity. In Uttar Pradesh, 18569 samples of water were submitted, and 14019 were tested at the labs. The turnaround time of testing of water sample was more than 48 hours in most cases. Given this feedback, it can be conferred that these labs have limited scope to take up samples from the general public at large on a regular basis. The different quality parameters of the collected water samples that were tested were turbidity, total hardness, total alkalinity, chloride, iron, nitrate, sulphate, total dissolved solids, bacteriological test, arsenic, and fluoride.

Residual chlorine was found within the permissible limit only in 4% of the HHs. The percentage was relatively higher in the public institutions (more than 15%), wherein there is a possibility of additional chlorine being added locally for the purification of water.

Out of the 30723 HHs sampled for the FHTC assessment, a water quality test was carried out in 18072 HHs. pH was found within the acceptable limit in 99% of households. Among the public institution, pH was found in the acceptable limit of more than 98% in schools.

5% of villages in the state reported having available field test kits. And 4% of these reported to have either VWSC/Pani Samiti or pump operators trained to use field test kits for testing the quality of water on-site.

Water quality management in village

It was found that 10% of villages in the state reported having a VWSC or a Pani Samiti out of which 25% of the VWSC/Pani Samitis reported to have more than 50% female members. In the state, less than 1% of the villages reported that VWSC/ Pani Samiti is responsible for the operation and maintenance of pipe water supply.

12% of villages reported having identified skilled manpower for O&M of PWS schemes. 13% of villages in the state reported having faced challenges with respect to O&M of PWS schemes.

34% of HHs reported that they are aware of any grievance redressal mechanism w.r.t. HH tap water through PWS, but only 2% HHs have reported a complaint in the last year and only 0.4% of complaints have been resolved. Among those who reported complaints (i.e., 2% HHs, 604 HHs), 83% of the HHs reported their complaints to pump operators and VWSC/Pani Samiti besides other reporting channels.

Overall, 19% of villages in the state levy charge for water service delivery to households whereas 19% HHs reported paying water service delivery charges.

51% of HHs reported that their daily requirement of water was being met by HH tap connections.

Overall, 100% of HHs reported using an improved source of drinking water, as their primary source.

Overall, 8% HHs reported using booster pumps to maximize the water flow through their piped water connections.

It was found that 10% of the villages have schemes that are based on groundwater sources, while 2% on surface water sources.

Age-wise functionality of the schemes indicates an increase in ‘always functional’ schemes in the state since 2012. 2-% point increase in the fully functional scheme was recorded from 2012 to 2013-18. In 2019 and later the percentage of fully functional schemes increased by 1% and 45% of schemes have been reported to be always functional and 14% as partially functional, and 8% as not functional (i.e., a total of 67% of schemes).

Impact of JJM

Across the state, 1% of the HHs reported having an incidence(s) of water-borne diseases in the last year.

Since having a functional HH tap connection, 12% HHs across the state have reported that there has been a change in the no. of employment days of the adult HH members while 71% HHs reported no change.

Out of the HHs reported (i.e., 13671) that female members used to fetch water before HH tap connection, 56% reported that post-installation of HH tap connection helped reduce time and effort in collection of water.
Across the state, 23% of the HHs reported that since having a functional HH tap connection the attendance of the girls going to schools has increased, and 51% of the HHs reported no change in attendance which could possibly be an impact of shutting down of schools due to COVID-19 related lockdown during the survey period.

Functionality Status of Har Ghar Jal Districts

At the state level for Har Ghar Jal districts, 57% of households received water on the day of the survey. While 62% of the households were found to have fully functional tap connections. Out of which 89% received an adequate quantity of water, 7 out of 10 reported receiving a fully regular supply of water and 94% received potable water.

Since having a functional HH tap connection, 11% reported that there has been a change in no. of employment days. Out of the HHs in which female members used to fetch water before HH tap connection, 56% reported that post-installation of HH tap connection helped reduce time and effort in collecting water. Across the Har Ghar Jal district, 10% HHs reported that since having a functional HH tap connection their income has directly benefitted.

Functionality Status of Aspirational Districts

At the state level for aspirational districts, 58% of households received water on the day of the survey. While 55% of the households were found to have fully functional tap connections. Out of which 92% received an adequate quantity of water, about 6 out of 10 reported receiving a fully regular supply of water and 95% received potable water.

Since having a functional HH tap connection,17% reported that there has been a change in no. of employment days. Out of the HHs in which female members used to fetch water before HH tap connection, 64% reported that post-installation of HH tap connection helped reduce time and effort in collecting water. Across the aspirational district, 10% HHs reported that since having a functional HH tap connection their income has directly benefitted.

Functionality Status of JE-AES Districts

At the state level for JE-AES districts, 53% of households received water on the day of the survey. While 57% of the households were found to have fully functional tap connections. Out of which 91% received an adequate quantity of water, about 6 out of 10 reported receiving a fully regular supply of water and 95% received potable water.

Since having a functional HH tap connection,10% reported that there has been a change in no. of employment days. Out of the HHs in which female members used to fetch water before HH tap connection, 54% reported that post-installation of HH tap connection helped reduce time and effort in collecting water. Across the JE-AES district, 9% HHs reported that since having a functional HH tap connection their income has directly benefitted.

1. State Factsheet

Functionality status of tap connection at households	India	Uttar Pradesh
Working tap connections- HHs which received water through tap connection at least once in last 7 days (%)	86	59
Quantity[1] of water received by households		
Adequate quantity (>55 LPCD) (%)	85	88
Partially adequate quantity (> 40 LPCD - < 55 LPCD) (%)	5	5
Inadequate quantity (<40 LPCD) (%)	10	7
Regularity[2] of water received by households		
Fully Regular Supply (as per schedule) (%)	80	67
Partially Regular Supply (not as per schedule) (%)	14	25
Irregular Supply (less than 9 months' supply) (%)	6	8
Potable[3] (Quality) water received by households (%)	87	91
Overall functionality[4] (%)	62	57

Service delivery parameters	India	Uttar Pradesh
Overall user satisfaction on regularity at the household level (%)	83	58
Overall user satisfaction on quality at the household level (%)	82	59
Households receiving water supply daily-7 days a week (%)	74	88
Daily HH requirement of water being met by FHTC (%)	80	51
Households paying water service delivery charges (%)	35	19
Households aware of grievance redressal mechanism (%)	71	34
Households reported a reduction in time and effort in collecting water (%)	79	56
Average no. of times water is supplied in a day	1	2
Households reported incidence of water-borne diseases in the last year (%)	2	1
Households purifying water before drinking (%)	57	6
Residual Chlorine (RCL) detected with in permissible limits (%)	24	4
Villages with Field Test Kits (%)	30	5
Villages in which bacteriological test was done in last 1 year by VWSC/ Pani Samiti (%)	29	4
Villages reported to have a mechanism for chlorination (%)	21	13

Institutional arrangement	India	Uttar Pradesh
Village reported having presence of VWSC/ Pani Samiti (%)	38	10
Villages in which VWSC/ Pani Samiti is responsible for Operation & Maintenance of PWS schemes (%)	14	0
Villages in which persons are trained to use Field Test Kits (%)	31	4
Villages levying water service delivery to households (%)	34	19
Villages having skilled manpower for Operation & Maintenance of PWS schemes (%)	31	12
Community monitoring of water wastage in villages (%)	19	2
Villages in which signages about JJM were observed (%)	15	7

[1] Quantity (in litres) of water received by households per person per day should meet the service level of 55 lpcd
[2] Regularity is receiving water for 12 months or daily basis as per schedule
[3] Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical, and bacteriological parameters (within acceptable/ permissible range) and onsite testing of pH.
[4] Overall functionality has been computed as the intersection of Adequate Quantity, Fully Regular Supply and Potable (Quality) for households wherein water supply was available at the time of survey

Functionality status of tap connection at households in Har Ghar Jal Districts	India	Uttar Pradesh
Working tap connections- HHs which received water through tap connection at least once in last 7 days (%)	91	57
Quantity of water received by households		
Adequate quantity (>55 LPCD) (%)	88	89
Partially adequate quantity (> 40 LPCD - < 55 LPCD) (%)	4	5
Inadequate quantity (<40 LPCD) (%)	8	6
Regularity of water received by households		
Fully Regular Supply (as per schedule) (%)	84	70
Partially Regular Supply (not as per schedule) (%)	11	22
Irregular Supply (less than 9 months' supply) (%)	5	8
Potable (Quality) water received by households	90	92
Overall functionality (%)	69	61

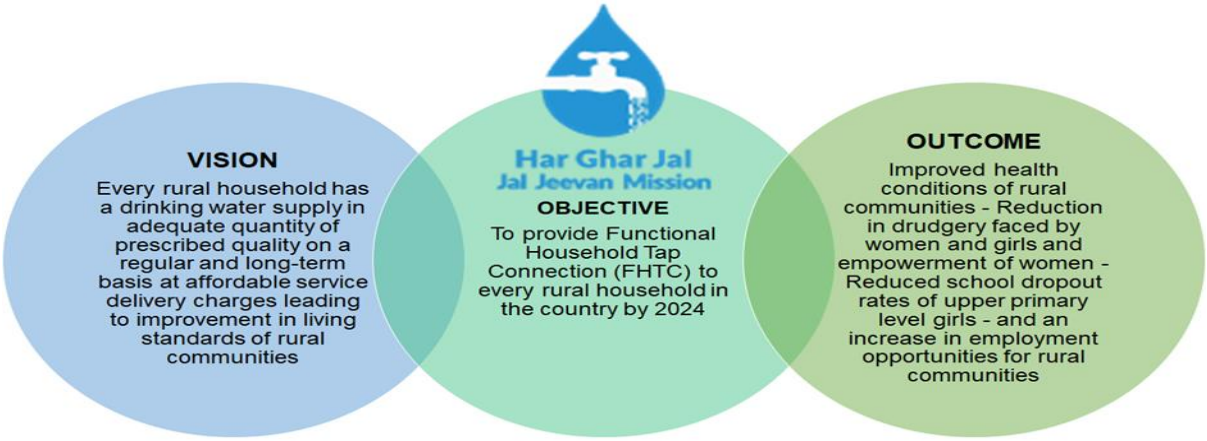
Functionality status of tap connection at households in Aspirational Districts	India	Uttar Pradesh
Working tap connections- HHs which received water through tap connection at least once in last 7 days (%)	78	58
Quantity of water received by households		
Adequate quantity (>55 LPCD) (%)	85	92
Partially adequate quantity (> 40 LPCD - < 55 LPCD) (%)	5	3
Inadequate quantity (<40 LPCD) (%)	10	5
Regularity of water received by households		
Fully Regular Supply (as per schedule) (%)	77	59
Partially Regular Supply (not as per schedule) (%)	14	28
Irregular Supply (less than 9 months' supply) (%)	9	13
Potable (Quality) water received by households (%)	88	94
Overall functionality (%)	62	55

Functionality status of tap connection at households in JE-AES Districts	India	Uttar Pradesh
Working tap connections- HHs which received water through tap connection at least once in last 7 days (%)	79	53
Quantity of water received by households		
Adequate quantity (>55 LPCD) (%)	95	91
Partially adequate quantity (> 40 LPCD - < 55 LPCD) (%)	2	4
Inadequate quantity (<40 LPCD) (%)	3	5
Regularity of water received by households		
Fully Regular Supply (as per schedule) (%)	80	61
Partially Regular Supply (not as per schedule) (%)	13	26
Irregular Supply (less than 9 months' supply) (%)	7	13
Potable (Quality) water received by households (%)	89	95
Overall functionality (%)	69	57

2. Context

Jal Jeevan Mission (JJM) was launched on the 15th of August 2019 with the objective to provide functional household tap connections (FHTCs) to all rural households.

Figure 1: Har Ghar Jal - Objective, Vision, & Outcome



In accordance with the overall objectives as specified in the Operational Guidelines for the implementation of the NJJM, GoI carried out a sample survey to assess the functionality of household tap connections. As part of this endeavour, NJJM, GoI engaged HTA Kantar Public to conduct the 'Functionality Assessment' of the household as well as public institution/ buildings such as schools, anganwadis, gram panchayat buildings, public health facilities, and wellness centers in all the rural districts for the fiscal year 2021-22.

2.1. State snapshot: Uttar Pradesh

The state of Uttar Pradesh lies on the northern part of India and has a population of 19,98,12,341. It has 75 districts and 97,568 villages where 11,295 villages have PWS schemes. The state lies on the Upper Gangetic Plains region, Middle Gangetic Plains region, Central Plateau and Hills region and receives an average annual rainfall of about 784.1mm. Among the villages with PWS schemes, 9866 villages (10.11%) have more than 20 households with functional tap connections. The state is yet to achieve the Har Ghar Jal status.

Presented here are state level information collated from the DDWS-IMIS:

Figure 2: State IMIS Status & Map

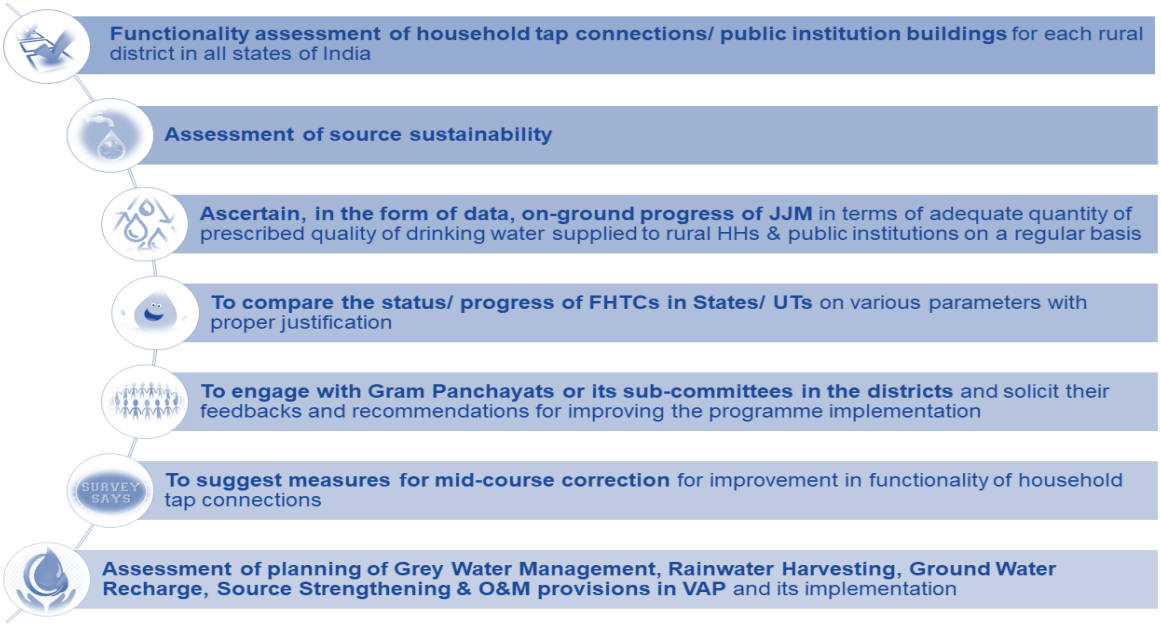
IMIS status:

- Not a Har Ghar Jal state
- 22 districts are Iron and 36 are fluoride affected
- 9866 (10.11% of all) villages with PWS more than 20 FHTC
- 4.01% villages covered under HH tap connections under HGJ

2.2. FHTC Assessment Objectives

The overall objectives of the FHTC assessment are as presented:

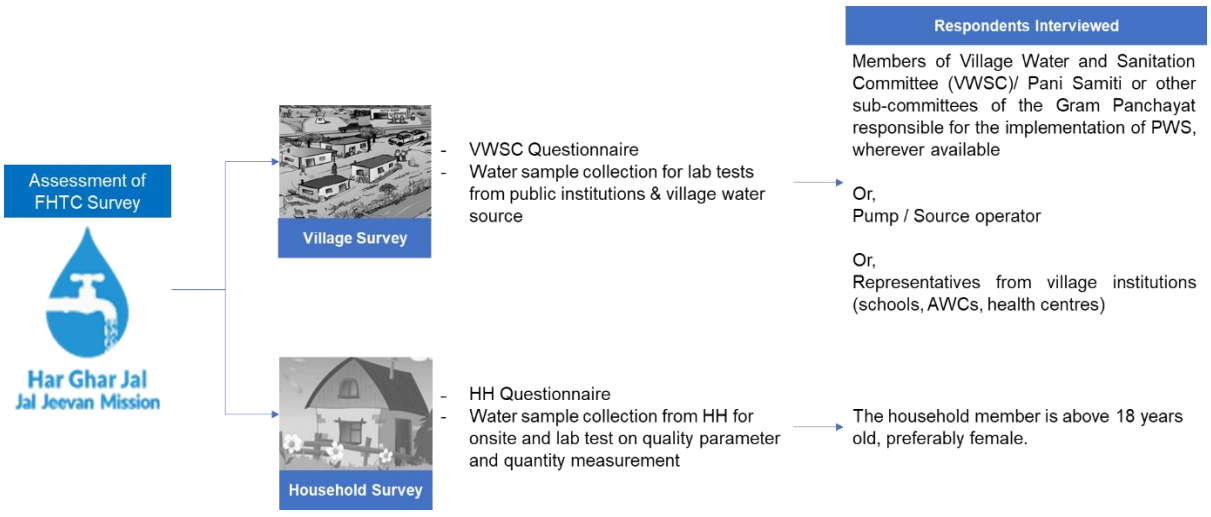
Figure 4: FHTC Assessment Objectives



2.3. Assessment Methodology

A cross-section research design has been used for this functionality assessment study. Quantitative data were collected from villages and households across all states/UTs using the CAPI (Computer Assisted Personal Interviewing) mode. The survey includes two components, village, and household.

Figure 5: Survey Components & Respondents



2.4. Sample Size

The sample size was calculated to provide estimates with a 95% confidence interval (CI) and 5% margin of error (MoE) after incorporating the correction factor for a finite population considering the total number of geographic units having FHTCs.

- Village sample is estimated to be representative at the state level
- HH sample estimated to be representative at the district level
- Number of Har Ghar Jal (HGJ) villages were proportionately sampled at the district level
- All PWS schemes (up to 4) were covered per village. Per scheme approximately 9 (3 each from the head, middle, and tail HHs) or 18 households (6 each from head, middle, and tail HHs) were sampled to achieve the desired sample at the district level.

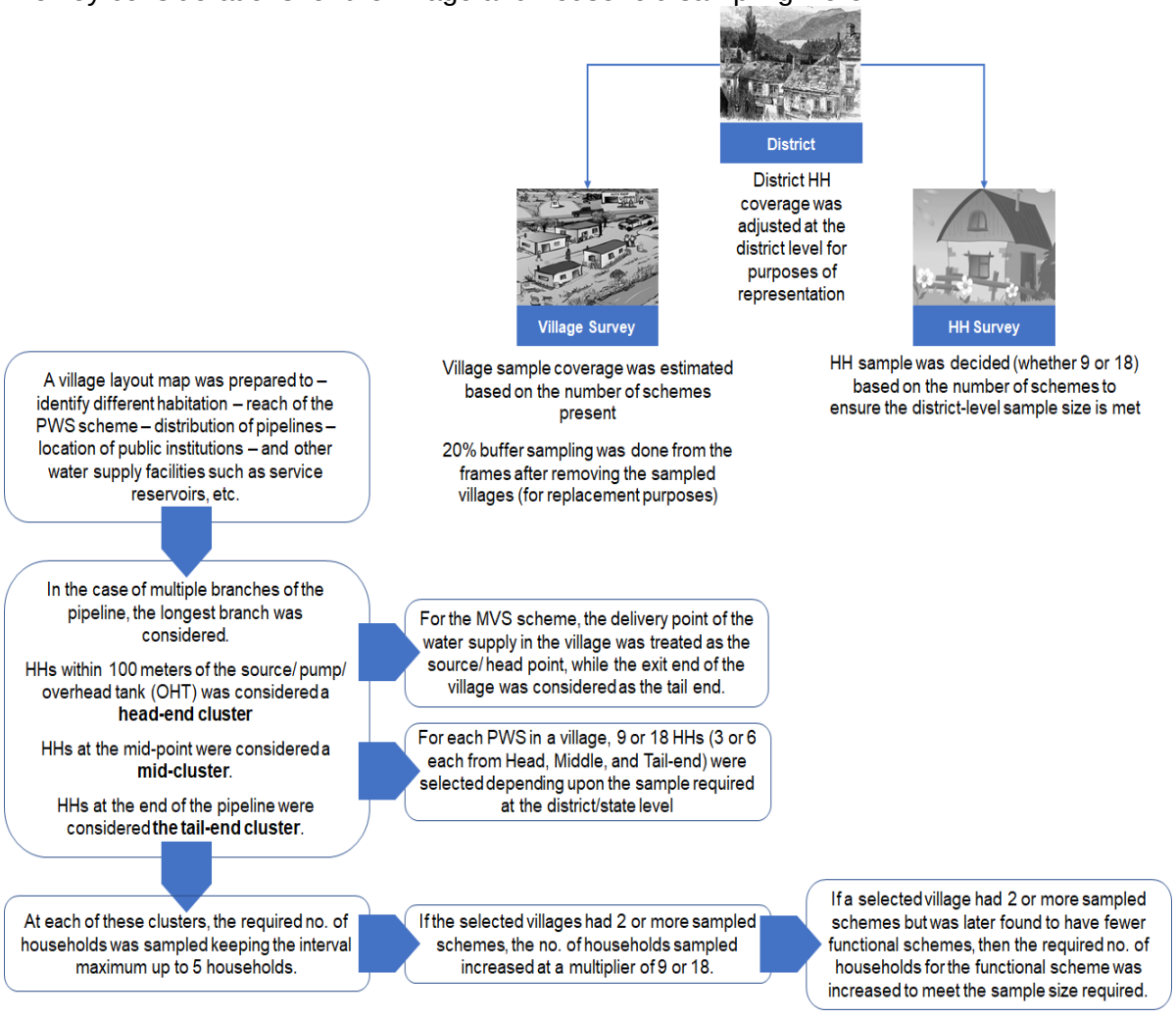
2.5. Sampling Methodology

As per the design, all villages having a PWS scheme with 20 or more functional household tap connections were included in the sample frame. The probability proportionate to size (PPS) method was used for village selection in each district. The steps for random selection of villages using PPS are presented below:

Figure 6: Steps for Random Sampling of Villages

Figure 7: Household Selection

The key considerations for the village and household sampling were:

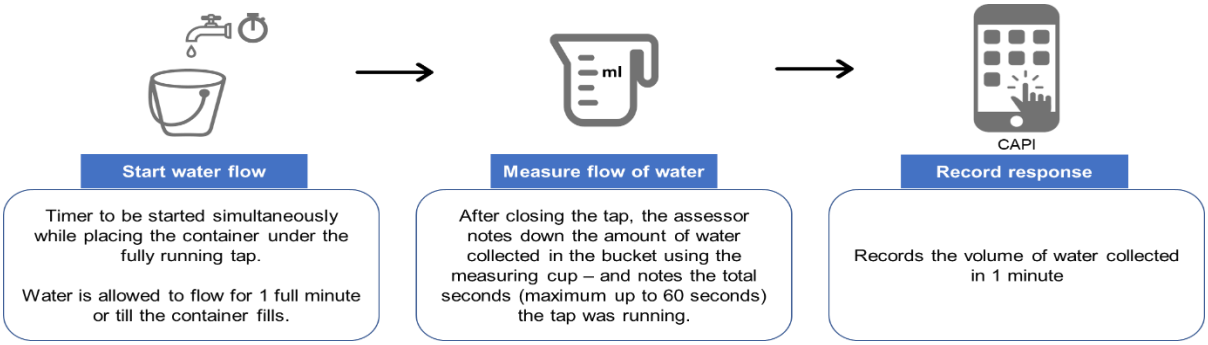


The record of all district-wise village replacements is maintained and reported as part of the annexure.

2.6. Methodology for Water Quantity Measurement at Households

The flow rate of the water supply was measured using a container with gradual markings (either 5 litres or 1 litre, based on the flow of the tap) and a stopwatch/timer-watch. The process followed is as described in Figure 6.

Figure 8: Steps for Measuring Flowrate from Supply-tap at HHs



In the case of households where the FHTC is connected directly with the storage tank, the following steps were adopted to measure the quantity:

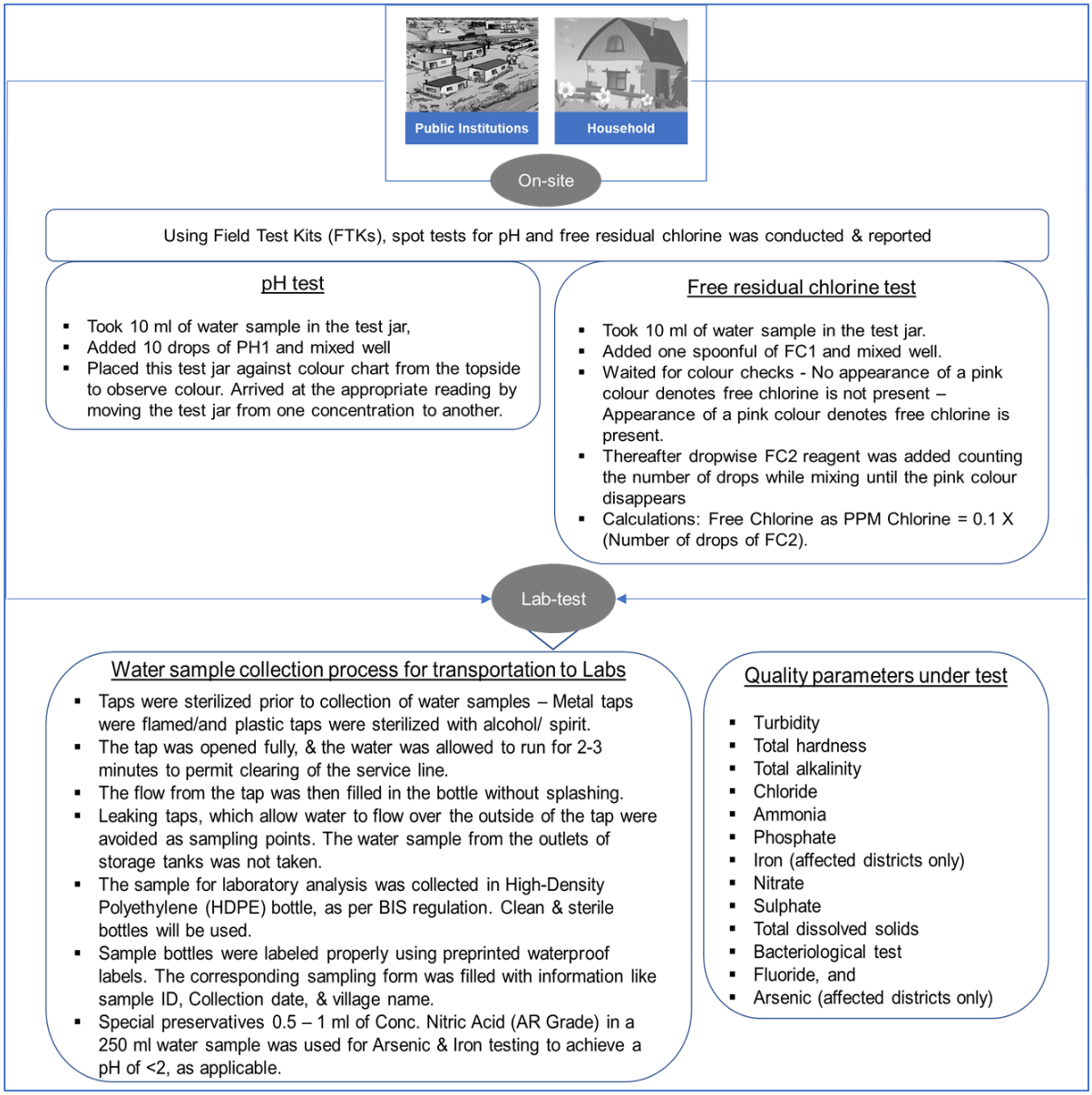
- Assessor first asked and recorded length, breadth, and height.
- Assessor dipped a 5 feet long rod, marked the level of the water table, and calculated the volume – length x breadth x-height of water.
- Next the assessor opened the valve of the connection and allowed the water to flow inside the storage for 10 minutes.
- After 10 mins, the valve was closed, and the assessor again dipped the rod and recorded the new height of the water inside the tank. Based on this new 'height' and the CAPI calculated the changed volume.
- The difference in the volume of water in 10 minutes divided by 10 provided the flow rate of the water supply per minute.

The water flow rate was not measured for village-level public institutions.

2.7. Methodology for Water Quality Measurement

Water quality was tested for all public institutions available in the villages, including schools, AWCs, gram panchayat buildings, public health facilities, and wellness centers, and at the selected households. Two types of quality tests were carried out – a) spot test for pH and free residual chlorine, and b) water sample was collected and transported to labs for testing against 13 quality parameters (total 15) as specified in Figure 7.

Figure 9: On-site & Laboratory-Based Quality Test

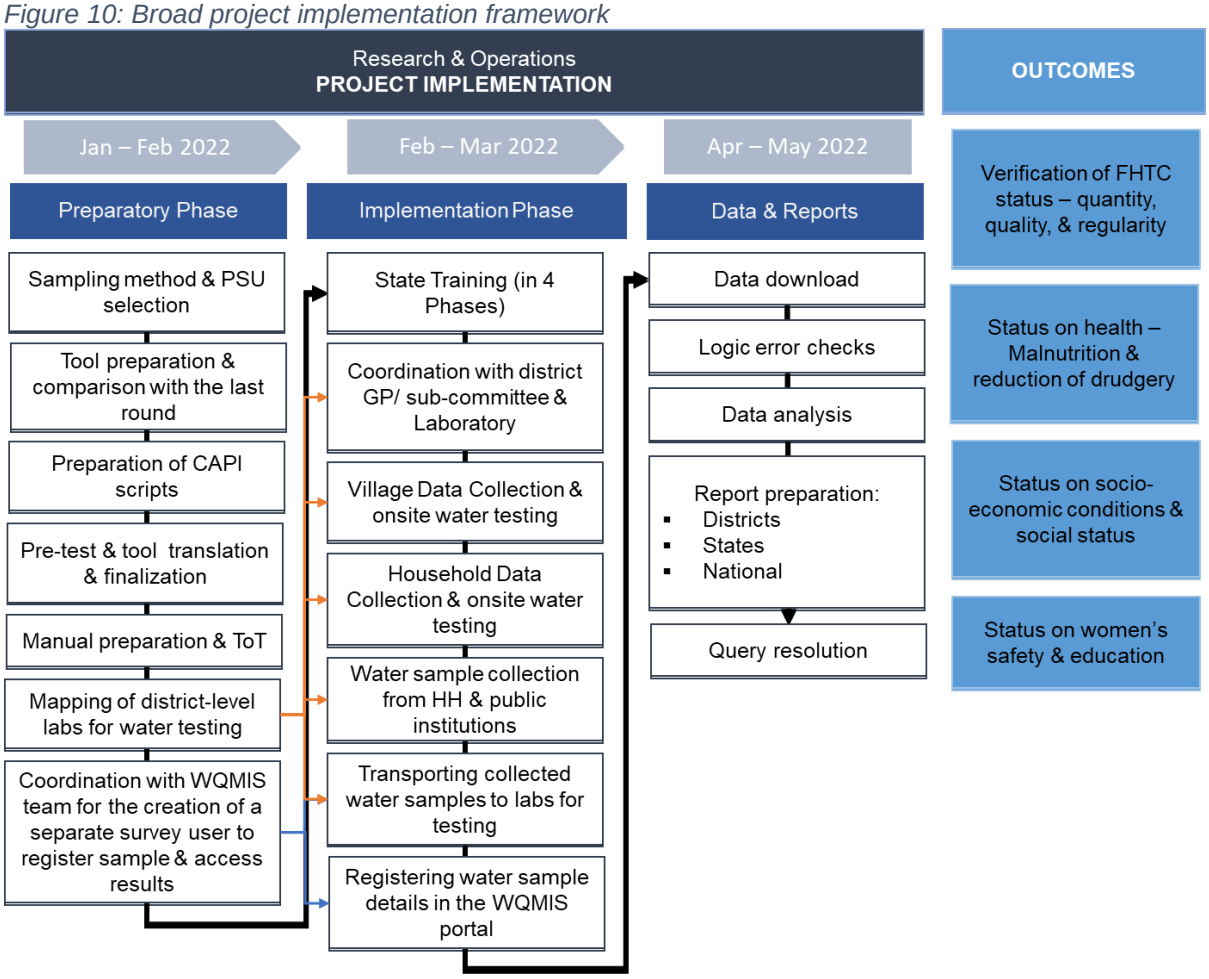


JJM, with the support of the BMI Division of ICMR, enabled a new interface on the WQMIS portal for “Functionality Assessment (FA) User” to enable seamless harmonization of water sample registration, and sample submission for testing, and sharing of results as per the applicable quality parameters.

2.8. Project Implementation

An overview of the project implementation is as presented:

Figure 10: Broad project implementation framework



A total of 16 teams (comprising 16 supervisors, 112 assessors, and 16 water collection assistants) were recruited, trained, and deployed to complete the survey across the states of Uttar Pradesh. One survey team covered approximately 2 – 3 districts. The state-wise team deployment and fieldwork dates were as presented:

Table No. 1: Team deployment and data collection start & end dates

States	Teams deployed	Start date	End date	Total data collection days
Uttar Pradesh	16 Teams	13th February	10th April	55 Days

A four-tier quality control (QC) system was put in place. At the ground level, the data collection exercise was done using a computer-aided Personal Interview (CAPI) application which contained all logic and skip-checks inbuilt. Also, 5% of the total samples were accompanied by the supervisors. Sub-targeted QC was done by the state field managers (5%) and the central project management team (5%). Apart from this, the central research team monitored the data trend and as per requirement debriefed data collection teams to improve quality.

2.9. Sample coverage

Table No. 2: Sample covered

State	Targeted sample			Achieved sample			
	District	Village	HH	District	Village	HHs	PIs
India	**712**	**13,300**	**3,00,000**	**712**	**13,299**	**3,01,389**	**16,148**
Uttar Pradesh	**75**	1,321	30,204	**75**	1,338	30,741	497

2.10. Sampled village and household profile

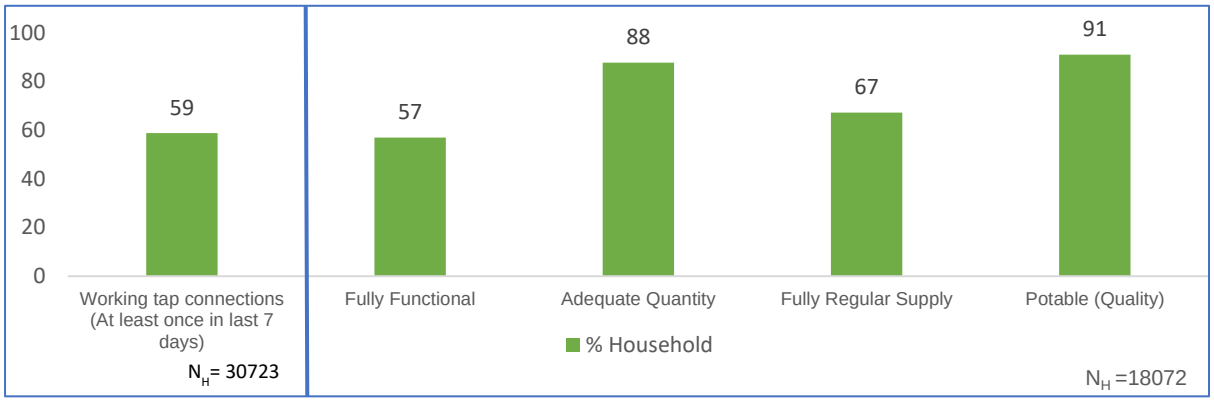
SAMPLED VILLAGES	SAMPLED HOUSEHOLDS
• Total no. of villages covered in the state **– 1338** • Percentage of SC dominated villages covered in the State is **17.5%** (while at national level the average is 12.6%) • Percentage of ST dominated villages covered in the State is **0.2%** (while at national level the average is **20.2%)** • Higher proportion of **pump operator** interviewed at the village level • **0.7%** of the villages reported to have any historical incidence of water contamination	• Total no. of households covered in the state – 30,741 (Respondents: Male 5,364, Female 25,377) • Proportion of General – 18.5%, SC 26.6%, ST 2.1%, OBC 52.9% households • 82.6% of the FHTC connections are under the name of a female member • Average household size – 6.2 • 100% positive user experience in 0/5 measures

3. Findings

3.1. Functionality status of FHTC at household level

A. Quantity, Regularity, and Quality of water of HH tap connection (in%) – overall

Figure 11: Functionality of HH tap connection



** Fully Functional has been computed as = Adequate Quantity ∩ Fully Regular Supply ∩ Potable (Quality)*

Please note: Henceforth, N_H=18072 implies all HHs where water was found on the day of the survey.

It has been found that 59% of the sampled HHs (N=30723) had working tap connections. Moreover, more than 4 out of 5 households (88%) received adequate (>=55 LPCD) water supply and two-third received regular supply (67%) of water. The on-site testing and lab test results of the water indicates that 91% of the sampled households in the state receive potable water.

Out of the 30723 HHs sampled for the FHTC assessment, water quantity and quality test was carried out in 18072 due to non-availability of water in 41% HHs on the day of survey.

Table No. 3: Quantity, Regularity, and Quality of FHTC at the district level (%HH)

S. No.	District	Working tap connections for 7 days preceding the survey (%HH)	Fully functional (%HH)	Quantity >=55 LPCD (% HH)	Regularity (% HH)	Potability# (% HH)
1.	Jalaun	96	7	98	50	17
2.	Banda	95	76	96	77	100
3.	Kaushambi	95	78	100	78	100
4.	Lucknow	87	33	93	36	84
5.	Ayodhya	87	41	62	42	98
6.	Mirzapur	86	66	94	73	94
7.	Mau	82	74	100	75	99
8.	Lakhimpur Kheri	81	17	79	24	94
9.	Unnao	81	36	95	76	51
10.	Kanpur Nagar	81	68	89	75	93
11.	Barabanki	79	59	92	60	99
12.	Hardoi	77	36	63	42	99
13.	Mathura	77	20	66	91	36
14.	Pratapgarh-Up	76	38	84	39	87
15.	Sambhal	75	49	83	59	100
16.	Kasganj	74	64	80	70	100
17.	Fatehpur	73	54	100	54	100
18.	Etawah	70	59	71	85	97

Table No. 3: Quantity, Regularity, and Quality of FHTC at the district level (%HH)						
S. No.	District	Working tap connections for 7 days preceding the survey (%HH)	Fully functional (%HH)	Quantity >=55 LPCD (% HH)	Regularity (% HH)	Potability# (% HH)
19.	Bareilly	68	55	84	60	99
20.	Bijnor	67	85	92	86	100
21.	Moradabad	67	57	94	58	100
22.	Amroha	67	71	87	85	95
23.	Chandauli	67	76	98	78	100
24.	Sitapur	64	72	99	72	99
25.	Rae Bareli	64	56	93	62	89
26.	Ghazipur	64	74	100	74	100
27.	Saharanpur	62	89	90	99	100
28.	Aligarh	62	80	80	100	100
29.	Hamirpur-Up	62	85	88	92	100
30.	Chitrakoot	62	78	96	82	99
31.	Shamli	61	66	92	71	100
32.	Prayagraj	61	69	97	72	100
33.	Ambedkar Nagar	61	84	100	86	98
34.	Rampur	60	37	75	42	100
35.	Etah	60	17	64	41	71
36.	Shahjahanpur	60	16	57	22	96
37.	Balrampur-Up	59	32	83	37	98
38.	**UTTAR PRADESH**	**59**	**57**	**88**	**67**	**91**
39.	Firozabad	57	59	63	93	100
40.	Kanpur Dehat	57	86	100	87	100
41.	Mahoba	57	72	96	76	100
42.	Gorakhpur	57	66	95	67	100
43.	Deoria	57	58	100	66	84
44.	Sonbhadra	57	46	77	48	94
45.	Agra	56	58	63	83	98
46.	Shravasti	55	56	100	56	100
47.	Sant Ravidas Nagar	55	71	94	71	100
48.	Amethi	54	75	99	76	100
49.	Sultanpur	54	67	99	67	100
50.	Bahraich	54	68	94	84	73
51.	Baghpat	50	89	99	100	89
52.	Hapur	50	74	100	74	100
53.	Budaun	50	56	76	66	100
54.	Kannauj	50	69	90	72	99
55.	Jhansi	49	77	77	99	100
56.	Jaunpur	48	86	98	88	100
57.	Muzaffarnagar	47	100	100	100	100
58.	Ghaziabad	47	16	96	62	17
59.	Pilibhit	45	23	80	24	100
60.	Lalitpur	46	78	89	83	99
61.	Ballia	45	98	100	98	100
62.	Maharajganj	44	84	100	85	99
63.	Meerut	43	77	97	81	96
64.	Mainpuri	44	27	50	45	100
65.	Basti	43	61	86	64	94
66.	Bulandshahr	42	61	100	99	62
67.	Hathras	39	47	69	61	99

Table No. 3: Quantity, Regularity, and Quality of FHTC at the district level (%HH)						
S. No.	**District**	**Working tap connections for 7 days preceding the survey (%HH)**	**Fully functional (%HH)**	**Quantity >=55 LPCD (% HH)**	**Regularity (% HH)**	**Potability# (% HH)**
68.	Varanasi	39	98	99	100	99
69.	Siddharth Nagar	36	19	78	19	94
70.	Azamgarh	36	18	87	20	96
71.	Auraiya	33	38	96	40	100
72.	Gonda	31	1	88	2	94
73.	Kushi Nagar	31	71	99	72	99
74.	Farrukhabad	28	16	46	16	99
75.	Sant Kabeer Nagar	24	31	97	31	100
76.	Gautam Buddha Nagar	13	0	100	97	0

* 'Functionality' has been computed as the intersection of Adequate Quantity, Fully Regular Supply and Potable (Quality) for households wherein water supply was available at the time of survey, i.e., 18072 HHs.
# Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical, and bacteriological as given in Table 6 parameters (within acceptable/ permissible range) and onsite testing of pH. The details of laboratory test are mentioned in the table given above in the glossary.

JE-AES Affected | Aspirational Districts | Aspirational & JE-AES Affected

District level comparison across the districts indicate that Gautam Budh Nagar, Sant Kabeer Nagar and Farrukhabad reported that less than 30% of the households had working tap connections for 7 days preceding the survey. In the district of Muzaffarnagar, 100% of the HHs were having fully functional tap water connections, followed by Varanasi and Ballia (98% each). On the other hand, Gautam Buddha Nagar has no households with fully functional tap water connections.

The districts of Kanpur Dehat, Ghazipur, Gautam Budh Nagar, Buland Shahar, Balia, Maharaj Ganj, Muzzafarnagar, Haur, Ambedkar Nagar, Mau and Kaushambi FHTC provide more than 55 LPCD of water in more than 99% HHs.

More than 99% HHs in the districts of Aligarh, Baghat, Varanasi, and Muzaffarnagar reported to regularly receive water through FHTC. Regular supply of water is less than 20% in the districts of Gonda, Farrukhabad and Siddharth Nagar.

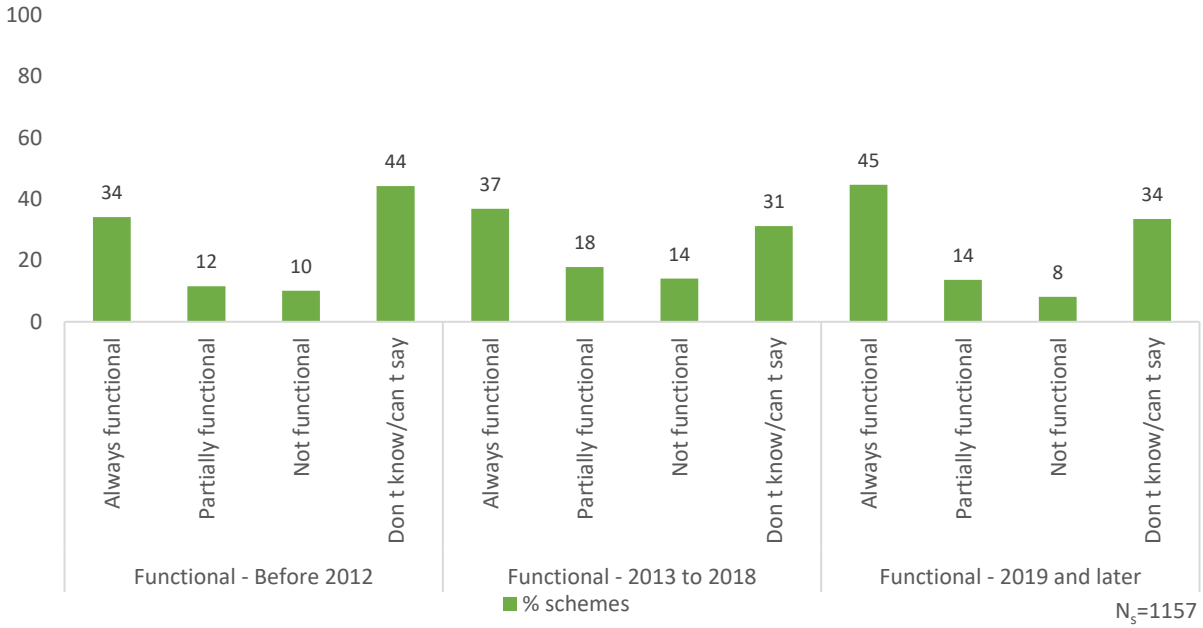
Potability of water was found to be 100% in more than two-fifth of the districts. In the districts of Jalaun, Ghaziabad, and Gautam Buddha Nagar the potability was found to be less than one-fifth.

57% HHs in the state were found to have functional HH tap water connection. Muzzaffarnagar district reported 100% functional households in the state, followed by Varanasi, Bulandshahr, Baghpat, Ballia, and Gautam Buddh Nagar with more than 95% functionality. In the districts of Gonda, Azamgarh, Lakhimpur Kheri, Farrukhabad, Siddharth Nagar, and Shahjahanpur, less than two-fifth of the households have functional HH tap water connection highlighting scope for improved service delivery.

B. Age vs functionality of schemes in the villages

Less than half of the schemes are functional since 2019 which reflects a 11-point increase from 2012 and 8-point decrease from 2013 to 2018 time period.

Figure 12: Age vs functionality of schemes in the villages



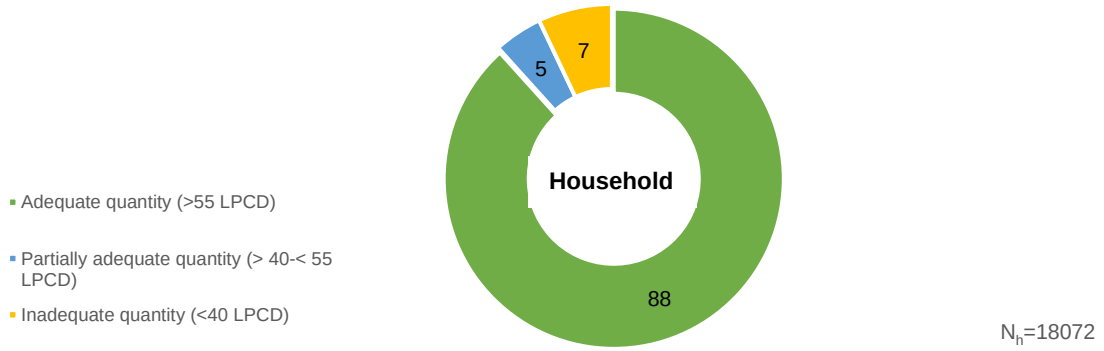
3.2. Quantity, Regularity, and Quality of Water

Under JJM, functionality is defined as having infrastructure, i.e., household tap connection providing water in adequate quantity (55 LPCD or more) of prescribed quality on regular basis (every day or as decided by GP and/ or its sub-committee) with adequate pressure. It also includes long-term source and system sustainability. For the purposes of this survey, the quality parameters are defined and measured on a set of 15 indicators (of which 2 indicators are tested on-site and for 13 indicators water samples have been sent to the laboratories), as mentioned in the glossary section.

A. Water quantity measured as LPCD (Litres per Capita per Day)

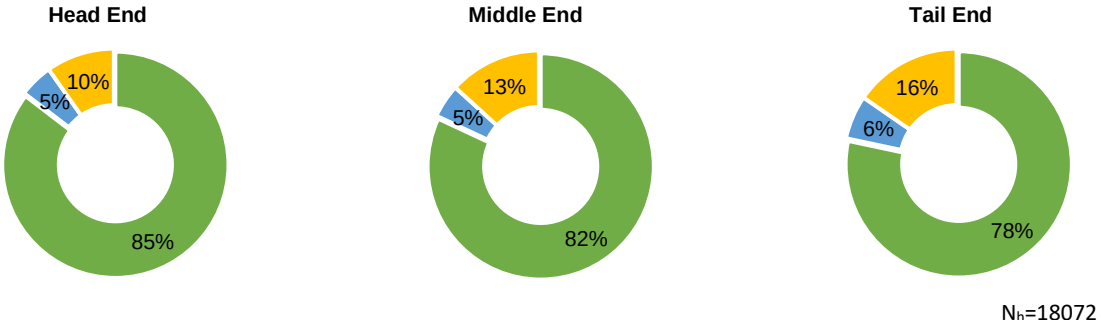
88% HHs reported receiving more than 55 LPCD of water.

Figure 13: Quantity of water received by households



Quantity of water received across head, mid, and tail end HHs

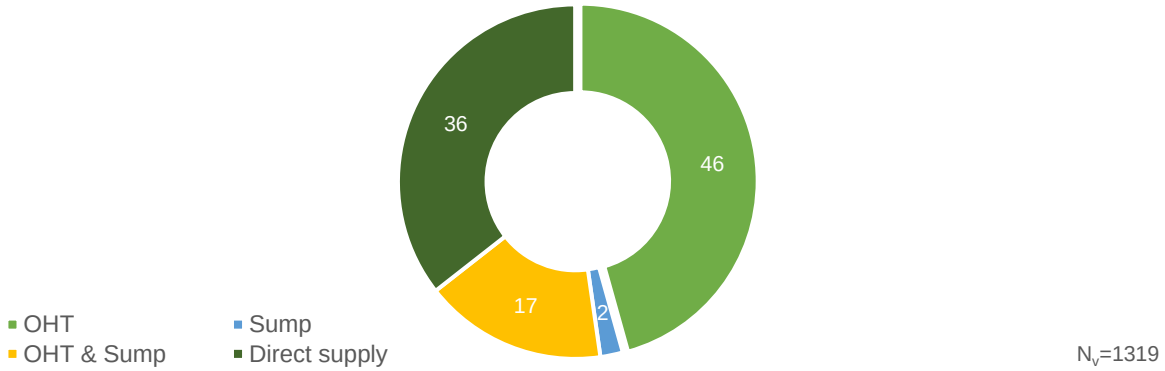
Figure 14: Quantity of water received across head, middle and tail end households



The quantity of water received across the head, middle, and the tail end was observed to have declined, and almost 9 out of 10 (88%) of the sampled households received water in adequate quantity, i.e., greater than or equal to 55 LPCD.

Types of water storage arrangements at village level (in%)

Figure 15: Pipe water supply storage available in village



More one-third of the respondents in the state reported water being directly supplied. And in 46% reported water being stored in overhead tanks.

Table No. 4:	District wise types of water storage arrangements at village level (in%)	
Sl. No	**Districts (Base = 1,319)**	**OHT or Sump (in %)**
1.	Baghpat	100
2.	Bulandshahr	100
3.	Mau	100
4.	Ballia	100
5.	Kaushambi	95
6.	Shravasti	95
7.	Gorakhpur	95
8.	Mirzapur	95
9.	Muzaffarnagar	94
10.	Amroha	94
11.	Meerut	92
12.	Chandauli	90
13.	Bijnor	89
14.	Varanasi	88
15.	Jalaun	85
16.	Bahraich	85
17.	Deoria	85
18.	Kushi Nagar	84
19.	Sonbhadra	83
20.	Ayodhya	82
21.	Jaunpur	82
22.	Sambhal	81
23.	Fatehpur	81
24.	Moradabad	79
25.	Hardoi	79
26.	Rae Bareli	79
27.	Ghazipur	79
28.	Sitapur	78
29.	Barabanki	78
30.	Maharajganj	78
31.	Kanpur Nagar	77
32.	Amethi	76
33.	Hapur	75
34.	Prayagraj	75
35.	Azamgarh	75
36.	Sant Ravidas Nagar	75
37.	Pratapgarh-Up	73
38.	Mathura	71
39.	Bareilly	71
40.	Lucknow	71

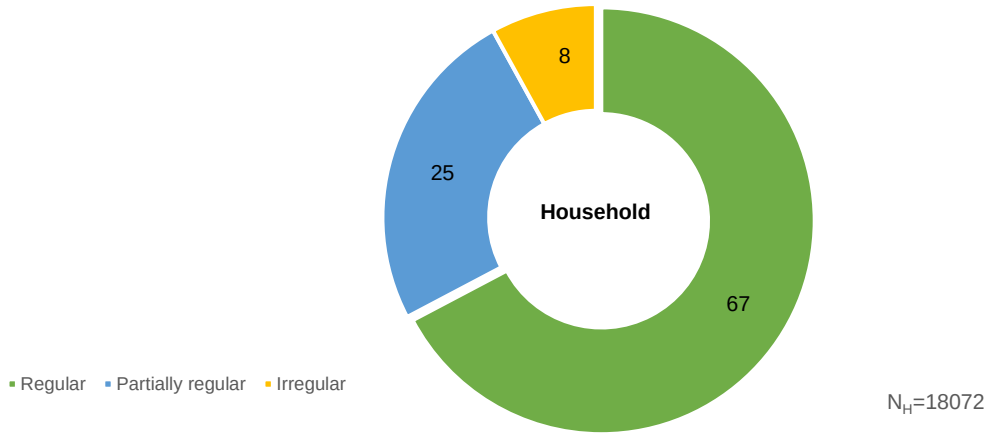
Table No. 4: District wise types of water storage arrangements at village level (in%)		
Sl. No	**Districts (Base = 1,319)**	**OHT or Sump (in %)**
41.	Kanpur Dehat	71
42.	Rampur	70
43.	Kasganj	70
44.	Basti	69
45.	Lakhimpur Kheri	68
46.	Kannauj	65
47.	**Uttar Pradesh**	**64**
48.	Unnao	61
49.	Banda	61
50.	Auraiya	59
51.	Sultanpur	59
52.	Farrukhabad	58
53.	Jhansi	58
54.	Chitrakoot	57
55.	Agra	56
56.	Mainpuri	56
57.	Hathras	55
58.	Budaun	53
59.	Hamirpur-Up	52
60.	Mahoba	47
61.	Lalitpur	45
62.	Ghaziabad	40
63.	Shahjahanpur	40
64.	Shamli	38
65.	Sant Kabeer Nagar	38
66.	Pilibhit	35
67.	Siddharth Nagar	35
68.	Gonda	12
69.	Ambedkar Nagar	7
70.	Saharanpur	5
71.	Etah	5
72.	Gautam Buddha Nagar	0
73.	Aligarh	0
74.	Firozabad	0
75.	Etawah	0
76.	Balrampur-Up	0

64% villages in the state have either an OHT or a sump for storing water for supplying to the households. Baghpat, Mau, Balia and Bulandshahr aret the districts where all the villages have either an OHT or a sump, followed Mirzapur, Gorakhpur, Kaushambi and Shravasti where more than 95% of the villages have facilities to store water for supplying to the households.

B. Regularity of water supply households

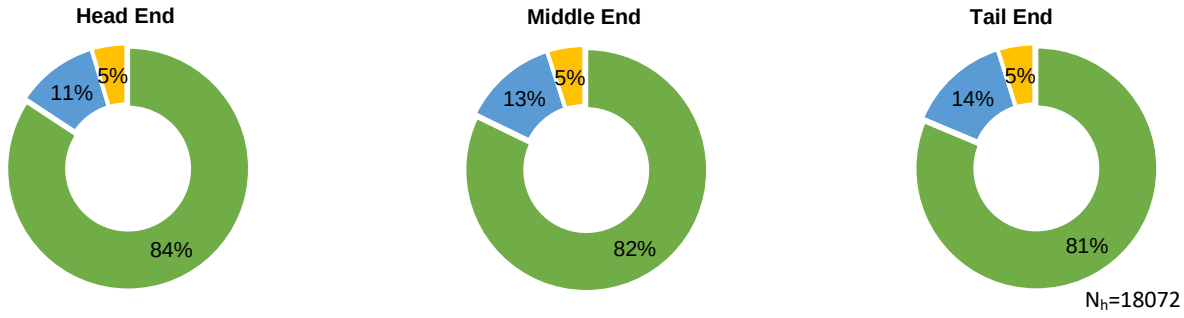
67% HHs receive a regular supply of water (as per agreed schedule).

Figure 16: Pipe water supply storage available in village



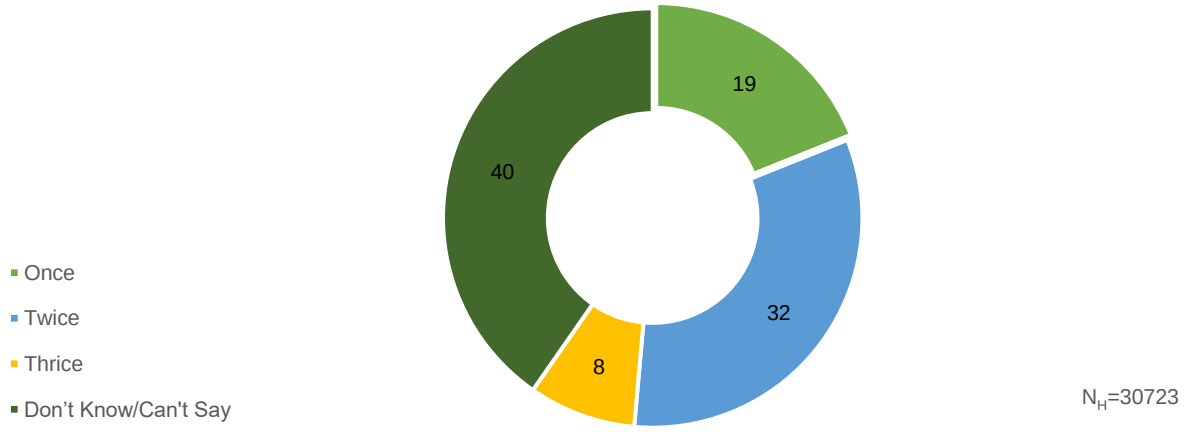
Regularity of water received across head, mid, and tail end

Figure 17: Regularity of water received across head, middle and tail end households



Water is more regularly available at the tail-end households of the PWS in comparison to the head-end.

Figure 18: Average no. of times water is supplied in a day



HHs in **32% of districts** receive water twice a day. The average duration of water supply across the state was reported to be 3 **hours per day.**

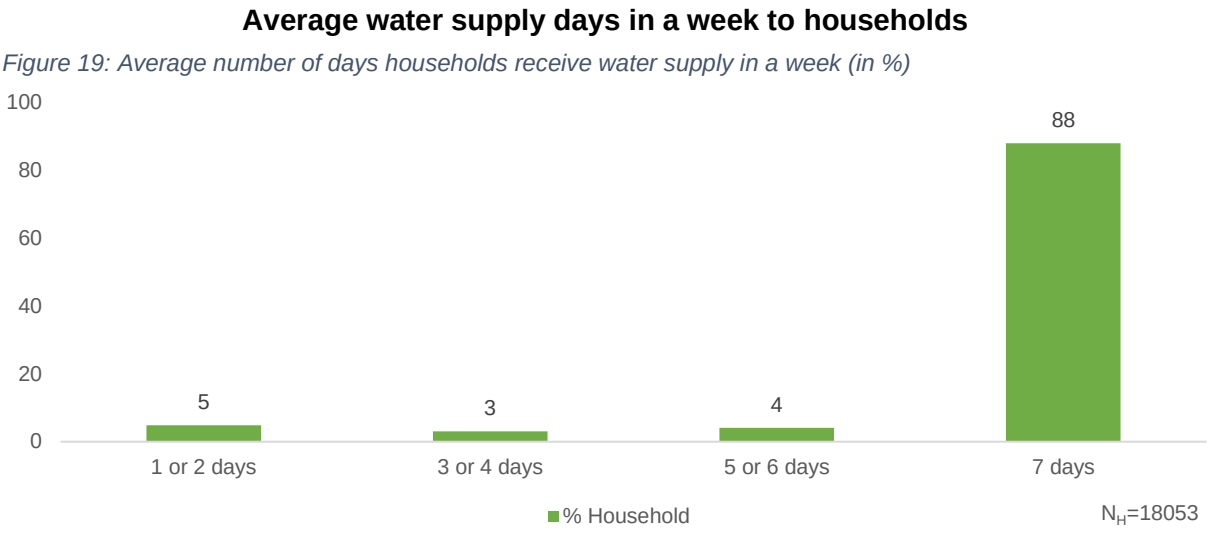
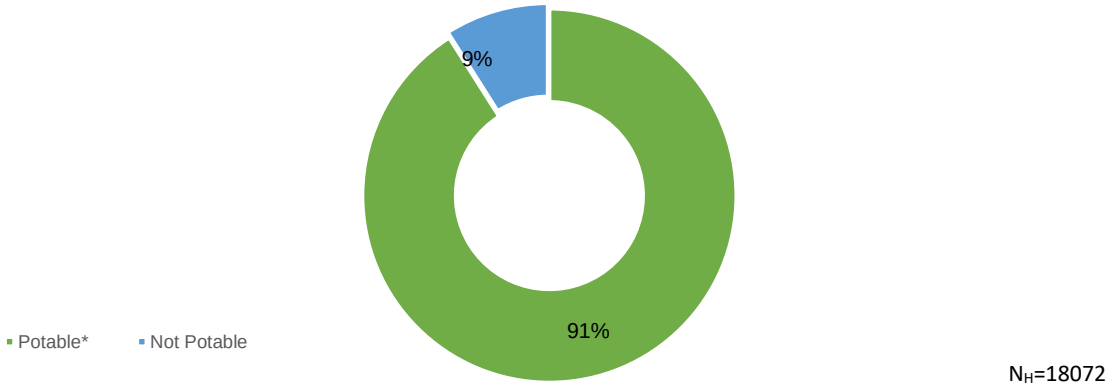


Figure 19: Average number of days households receive water supply in a week (in %)

88% of HHs reported receiving water for all 7 days in a week (daily).

C. Potability Water – Quality

Figure 20: Potable water received by households



**Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical and bacteriological as given in Table 6 parameters (within acceptable/ permissible range) and onsite testing of pH. The details of laboratory test are mentioned in the table given above in the glossary.*

Among the sampled households in Haryana where water was found on the day of the survey, the potability of water was found to be 91%.

Table No. 5: Village quality parameters reported within permissible range (% sample within permissible range)

Quality Parameters (N_V=1319)	Water Samples Tested from Public Institutes			
	Anganwadi Centre	Health Facility	Schools	Others
pH (on-site)	97	98	99	100
Turbidity	97	100	97	100
Total Hardness	100	100	100	100
Total Alkalinity	95	94	94	92
Chloride	100	100	100	100
Ammonia	Not Tested			
Iron	93	100	96	80
Nitrate	94	86	95	86
Sulphate	100	100	100	100
Total Dissolved Solids	100	100	99	100
Bacteriological Test (Absence)	Not Tested			
Fluoride	94	100	95	100
Arsenic	100	100	96	100

Table No. 6: Household water quality parameters reported within permissible range (in % sample within permissible range)

The number of water samples submitted to the laboratory for the calculation of the different parameters was the same as mentioned in the rest of the report (sample size for HH water submitted to labs=18072). However, the below data are presented based on the results received from the laboratories and the respective base sizes are mentioned for each of the parameters separately.

Quality Parameters	No of water samples tested	% Samples within permissible range
pH (on-site)	18072	99
Turbidity	12150	97
Total Hardness	13312	99
Total Alkalinity	12570	96
Chloride	12278	99
Ammonia	Not Tested	
Iron	1561	92
Nitrate	6284	94
Sulphate	5736	100
Total Dissolved Solids	10289	99
Bacteriological Test (Absence)	Not Tested	
Fluoride	4186	98
Arsenic	689	95

Safeguarding piped water supply for unforeseen bacteriological contamination- Presence of Residual Chlorine (RC)

The Residual Chlorine (RC) in the state of Uttar Pradesh was found in 4% samples. The rest 96% samples had no RC.

The Residual Chlorine in piped water supply is one of the most important preventive actions to assure quality of water against bacteriological contamination from source to consumption. The presence of residual chlorine within permissible limits is indicator of well-maintained and healthy piped water supply system.

It is advised that behavioural change communication campaigns on appropriate dosage of residual chlorine is held in all villages and monitoring system for chlorine dosing is established. The FTK must have residual chlorine testing facility for effective WQM&S.

Comment on functioning of District Lab:

The district lab tested water samples for 10 water quality parameters. 18569 water samples were submitted, and 14019 water samples were tested, and reports made available. The turnaround time for testing was more than 48 hours in most cases. Given this feedback, it can be conferred that these labs have limited scope to take up samples from the general public at large on a regular basis.

Table No. 7: Performance of Labs

Sl. No	District	Lab available	HH surveyed	Samples submitted	Report received	Overall lab experience
1	Saharanpur	Yes	451	289	284	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However, the only concern was the lab did not accept any samples during weekends and public holidays.
2	Shamli	Yes	416	254	222	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However, the only concern was the lab did not accept any samples during weekends and public holidays.
3	Muzaffarnagar	Yes	391	187	186	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However, the only concern was the lab did not accept any samples during weekends and public holidays.
4	Bijnor	Yes	396	266	242	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However, the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	**District**	**Lab available**	**HH surveyed**	**Samples submitted**	**Report received**	**Overall lab experience**
5	Moradabad	Yes	389	264	224	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
6	Sambhal	Yes	460	352	8	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
7	Rampur	Yes	410	250	244	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
8	Amroha	Yes	449	307	305	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
9	Meerut	Yes	423	186	186	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
10	Baghpat	Yes	442	222	116	The labs did not have the capacity to test any samples as they had issues of human resource, regents etc. the samples have been submitted in adjoining district.
11	Ghaziabad	Yes	409	202	187	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
12	Hapur	Yes	432	220	217	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	**District**	**Lab available**	**HH surveyed**	**Samples submitted**	**Report received**	**Overall lab experience**
13	Gautam Buddha Nagar	Yes	281	38	38	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
14	Bulandshahr	Yes	389	169	167	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
15	Aligarh	Yes	445	282	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
16	Hathras	Yes	433	173	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
17	Mathura	Yes	392	303	299	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
18	Agra	Yes	431	244	240	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
19	Firozabad	No	392	225	0	Sample was submitted in Agra district laboratory
20	Kasganj	Yes	379	296	286	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	**District**	**Lab available**	**HH surveyed**	**Samples submitted**	**Report received**	**Overall lab experience**
21	Etah	Yes	456	297	275	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
22	Mainpuri	Yes	417	182	177	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
23	Budaun	Yes	436	221	0	The labs did not have the capacity to test any samples as they had issues of human resource, regents etc. the samples have been submitted in adjoining district.
24	Bareilly	Yes	396	283	282	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
25	Pilibhit	Yes	396	183	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
26	Shahjahanpur	Yes	426	255	252	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
27	Lakhimpur Kheri	Yes	381	320	302	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
28	Sitapur	Yes	396	266	251	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	District	Lab available	HH surveyed	Samples submitted	Report received	Overall lab experience
29	Hardoi	Yes	401	309	304	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
30	Unnao	Yes	423	354	346	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
31	Lucknow	Yes	434	391	337	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
32	Rae Bareli	Yes	399	259	214	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
33	Amethi	Yes	386	213	212	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
34	Farrukhabad	Yes	381	108	106	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
35	Kannauj	Yes	405	207	207	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
36	Etawah	Yes	432	316	307	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	District	Lab available	HH surveyed	Samples submitted	Report received	Overall lab experience
37	Auraiya	Yes	380	126	123	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
38	Kanpur Dehat	Yes	380	222	219	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
39	Kanpur Nagar	Yes	403	332	310	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
40	Jalaun	Yes	400	396	395	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
41	Jhansi	Yes	405	202	200	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
42	Lalitpur	Yes	387	178	171	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
43	Hamirpur-Up	Yes	379	234	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
44	Mahoba	Yes	399	230	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	District	Lab available	HH surveyed	Samples submitted	Report received	Overall lab experience
45	Banda	Yes	399	389	387	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
46	Chitrakoot	Yes	383	242	242	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
47	Fatehpur	Yes	398	302	298	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
48	Pratapgarh-Up	Yes	455	348	1	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
49	Kaushambi	Yes	406	388	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
50	Prayagraj	Yes	390	237	234	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
51	Barabanki	Yes	424	367	336	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
52	Ayodhya	Yes	417	383	261	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	**District**	**Lab available**	**HH surveyed**	**Samples submitted**	**Report received**	**Overall lab experience**
53	Ambedkar Nagar	Yes	431	281	229	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
54	Sultanpur	Yes	444	250	135	The labs did not have the capacity to test any samples as they had issues of human resource, regents etc. the samples have been submitted in adjoining district.
55	Bahraich	Yes	414	240	219	The labs did not have the capacity to test any samples as they had issues of human resource, regents etc. the samples have been submitted in adjoining district.
56	Shravasti	Yes	360	215	73	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
57	Balrampur-Up	Yes	466	292	273	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
58	Gonda	Yes	378	123	116	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
59	Siddharth Nagar	Yes	396	155	130	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
60	Basti	Yes	451	201	193	The labs did not have the capacity to test any samples as they had issues of human resource, regents etc. the samples have been submitted in adjoining district.

Table No. 7: Performance of Labs						
Sl. No	District	Lab available	HH surveyed	Samples submitted	Report received	Overall lab experience
61	Sant Kabeer Nagar	Yes	378	101	97	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
62	Maharajganj	Yes	458	210	202	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
63	Gorakhpur	Yes	378	219	0	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
64	Kushi Nagar	Yes	427	132	131	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
65	Deoria	Yes	384	227	35	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
66	Azamgarh	Yes	399	146	140	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
67	Mau	Yes	399	336	325	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
68	Ballia	Yes	459	213	206	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Table No. 7: Performance of Labs						
Sl. No	**District**	**Lab available**	**HH surveyed**	**Samples submitted**	**Report received**	**Overall lab experience**
69	Jaunpur	Yes	425	216	75	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
70	Ghazipur	Yes	409	262	10	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
71	Chandauli	Yes	389	267	258	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
72	Varanasi	Yes	459	187	180	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
73	Sant Ravidas Nagar	Yes	429	242	242	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
74	Mirzapur	Yes	405	352	344	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.
75	Sonbhadra	Yes	405	233	206	The labs did not have any issue with testing the number of water samples submitted nor had any issues with human resources, reagents, etc. However the only concern was the lab did not accept any samples during weekends and public holidays.

Households reported that their HH tap-water was collected and tested in the last one year

4% of HHs reported that their HH tap-water was collected and tested in the last one year.

Table No. 8: District wise distribution of households reported that their HH tap-water was collected and tested in the last one year

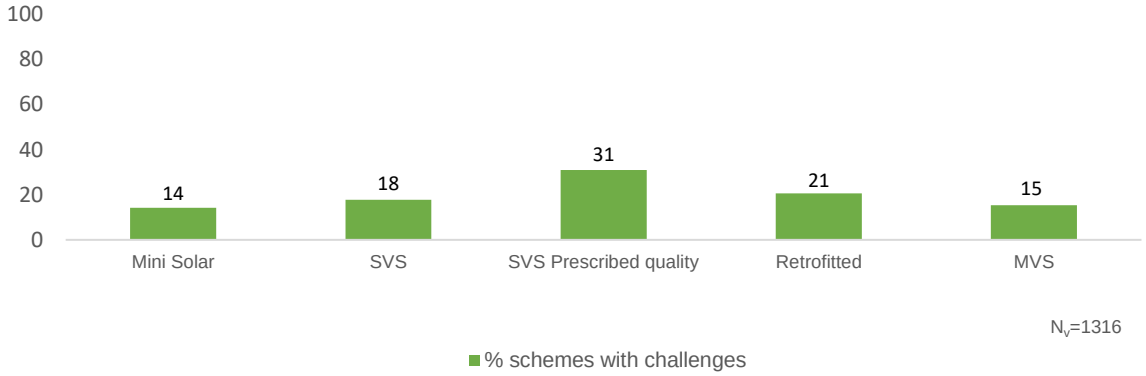
Sl. No	Districts (Base = 30,723)	Tested in last 1 year (in %)
1.	Ambedkar Nagar	27
2.	Etah	20
3.	Ayodhya	17
4.	Gorakhpur	17
5.	Lakhimpur Kheri	16
6.	Etawah	16
7.	Hamirpur-Up	14
8.	Banda	14
9.	Barabanki	13
10.	Basti	13
11.	Mahoba	12
12.	Firozabad	11
13.	Fatehpur	11
14.	Balrampur-Up	11
15.	Lucknow	10
16.	Shahjahanpur	9
17.	Hardoi	9
18.	Farrukhabad	9
19.	Saharanpur	6
20.	Aligarh	6
21.	Chitrakoot	6
22.	Pilibhit	4
23.	Rae Bareli	4
24.	**Uttar Pradesh**	**4**
25.	Shamli	3
26.	Hapur	3
27.	Ghazipur	3
28.	Mainpuri	2
29.	Budaun	2
30.	Unnao	2
31.	Auraiya	2
32.	Maharajganj	2
33.	Deoria	2
34.	Azamgarh	2
35.	Moradabad	1
36.	Ghaziabad	1
37.	Gautam Buddha Nagar	1
38.	Mathura	1
39.	Kasganj	1
40.	Bareilly	1
41.	Sitapur	1
42.	Amethi	1
43.	Kaushambi	1
44.	Gonda	1
45.	Sant Kabeer Nagar	1
46.	Kushi Nagar	1
47.	Chandauli	1
48.	Sant Ravidas Nagar	1
49.	Muzaffarnagar	0
50.	Bijnor	0
51.	Sambhal	0
52.	Rampur	0
53.	Amroha	0
54.	Meerut	0
55.	Baghpat	0

Table No. 8: District wise distribution of households reported that their HH tap-water was collected and tested in the last one year		
Sl. No	**Districts (Base = 30,723)**	**Tested in last 1 year (in %)**
56.	Bulandshahr	0
57.	Hathras	0
58.	Agra	0
59.	Kannauj	0
60.	Kanpur Dehat	0
61.	Kanpur Nagar	0
62.	Jalaun	0
63.	Jhansi	0
64.	Lalitpur	0
65.	Pratapgarh-Up	0
66.	Prayagraj	0
67.	Sultanpur	0
68.	Bahraich	0
69.	Shravasti	0
70.	Siddharth Nagar	0
71.	Mau	0
72.	Ballia	0
73.	Jaunpur	0
74.	Varanasi	0
75.	Mirzapur	0
76.	Sonbhadra	0

3.3. Operation and Maintenance (O&M) of schemes at village level

The SVS prescribed quality faced the most challenges (31%) in comparison to the other schemes in the state.

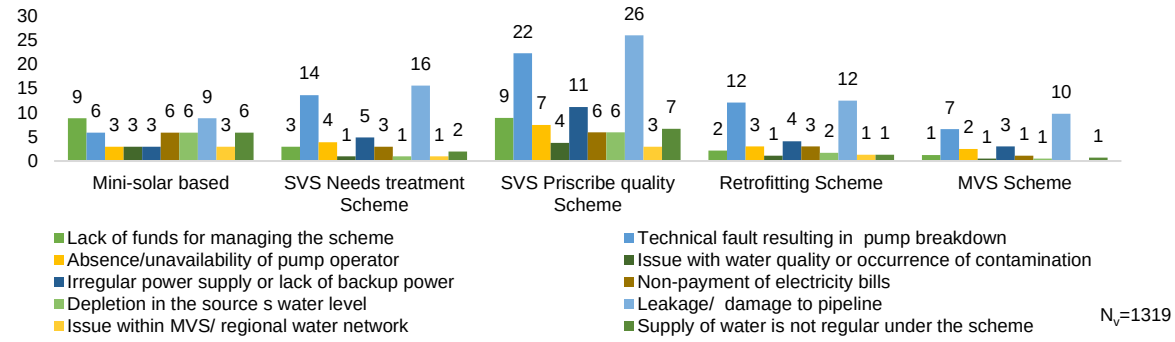
Figure 21: Schemes reported to have faced challenge in village



Type of challenge faced by the schemes

The most faced problem varied from one scheme to another. However, 'leakage/damage to pipeline' and 'Technical fault resulting in pump breakdown' is a problem that was found unanimously in all the schemes.

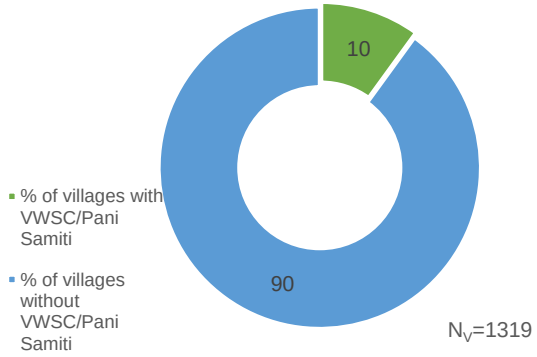
Figure 22: Type of challenge faced by the schemes



A. Presence of VWSC/Pani Samiti

10% of villages in the state reported to have a VWSC or a Pani Samiti.

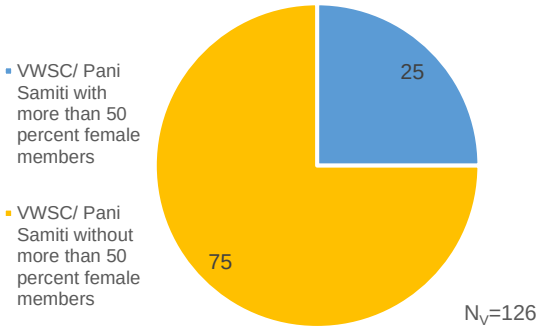
Figure 24: Villages where VWSC/ Pani Samiti is present



B. Villages with more VWSC with more than 50% females

25% of villages in the state reported to have a VWSC or a Pani Samiti with more than 50% female members.

Figure 23: VWSC/ Pani Samiti with more than 50 percent female members



C. Frequency of VWSC/Pani Samiti meetings

Figure 25: VWSC meetings held in last one year

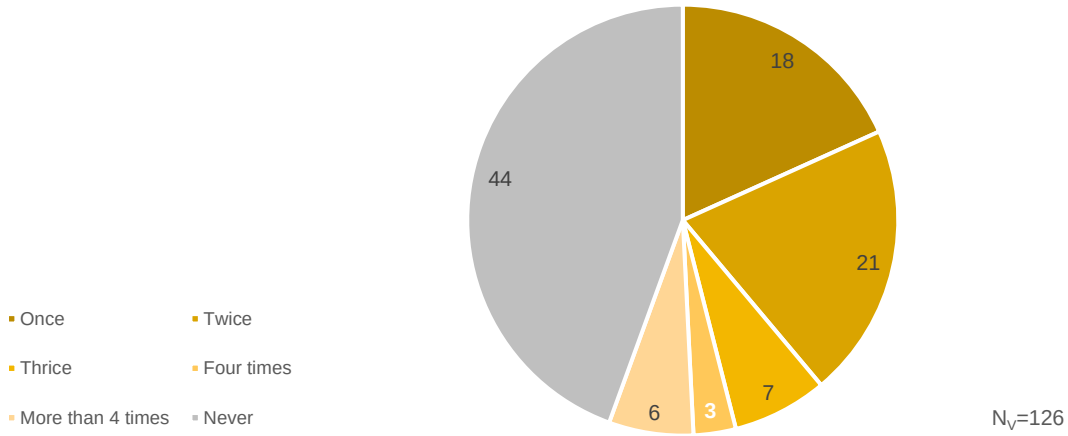


Table No. 9: Villages where VWSC/ Pani Samiti is present									
Sl. No.	District (Base = 1,319)	Presence of VWSC/ Pani Samiti (in %)	VWSC/Pani Samiti with more than 50% females	Frequency of VWSC/Pani Samiti meetings					
				Once	Twice	Thrice	Four times	More than 4 times	Never
1.	Saharanpur								
2.	Shamli								
3.	Muzaffarnagar								
4.	Bijnor								
5.	Moradabad	16	67	33	0	0	0	33	33
6.	Sambhal	6	100	0	100	0	0	0	0
7.	Rampur	5	0	100	0	0	0	0	0
8.	Amroha	11	50	50	50	0	0	0	0
9.	Meerut								
10.	Baghpat								
11.	Ghaziabad	20	0	0	0	67	0	0	33
12.	Hapur	5	0	100	0	0	0	0	0
13.	Gautam Buddha Nagar	22	0	50	0	50	0	0	0
14.	Bulandshahr								
15.	Aligarh								
16.	Hathras	50	20	30	10	0	10	0	50
17.	Mathura	24	40	0	20	20	0	0	60
18.	Agra	33	0	33	17	17	0	0	33
19.	Firozabad								
20.	Kasganj	60	17	42	0	0	8	8	42
21.	Etah	5	0	0	0	0	0	0	100
22.	Mainpuri	6	0	0	0	100	0	0	0
23.	Budaun	20	67	0	100	0	0	0	0
24.	Bareilly	18	33	33	33	0	0	33	0
25.	Pilibhit	20	25	50	50	0	0	0	0
26.	Shahjahanpur	7	0	0	0	0	0	0	100
27.	Lakhimpur Kheri	16	67	33	33	0	0	0	33
28.	Sitapur	28	20	0	20	0	0	20	60
29.	Hardoi	14	0	50	50	0	0	0	0
30.	Unnao	11	0	0	0	0	0	0	100
31.	Lucknow	21	33	0	0	0	0	0	100
32.	Rae Bareli	11	50	0	0	0	0	0	100
33.	Amethi	18	0	33	67	0	0	0	0
34.	Farrukhabad								
35.	Kannauj	5	0	0	0	0	0	0	100
36.	Etawah								
37.	Auraiya								
38.	Kanpur Dehat	6	0	0	0	0	0	0	100
39.	Kanpur Nagar	15	0	0	0	0	0	0	100
40.	Jalaun	20	50	25	0	25	0	25	25
41.	Jhansi	11	0	0	50	0	0	0	50
42.	Lalitpur	20	50	0	75	0	25	0	0
43.	Hamirpur-Up								
44.	Mahoba								
45.	Banda								
46.	Chitrakoot	5	100	0	100	0	0	0	0
47.	Fatehpur								
48.	Pratapgarh-Up	7	0	0	0	0	0	0	100
49.	Kaushambi	15	0	0	0	0	0	0	100
50.	Prayagraj	6	0	0	0	0	0	0	100
51.	Barabanki	22	0	0	0	0	0	25	75
52.	Ayodhya								
53.	Ambedkar Nagar								
54.	Sultanpur	24	25	0	25	25	0	0	50
55.	Bahraich	20	25	0	25	25	0	25	25
56.	Shravasti	5	0	0	0	0	0	0	100
57.	Balrampur-Up								

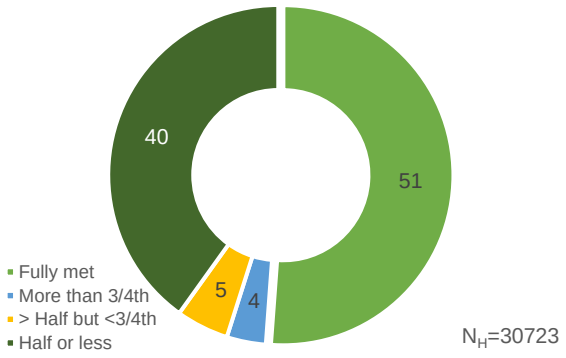
Table No. 9: Villages where VWSC/ Pani Samiti is present									
Sl. No.	District (Base = 1,319)	Presence of VWSC/ Pani Samiti (in %)	VWSC/Pani Samiti with more than 50% females	Frequency of VWSC/Pani Samiti meetings					
				Once	Twice	Thrice	Four times	More than 4 times	Never
58.	Gonda	6	100	0	0	0	0	100	0
59.	Siddharth Nagar								
60.	Basti								
61.	Sant Kabeer Nagar	10	50	0	50	0	0	0	50
62.	Maharajganj								
63.	Gorakhpur	5	0	0	0	0	0	0	100
64.	Kushi Nagar								
65.	Deoria	5	100	0	0	0	0	0	100
66.	Azamgarh	15	0	0	33	0	0	0	67
67.	Mau								
68.	Ballia								
69.	Jaunpur								
70.	Ghazipur								
71.	Chandauli	5	100	100	0	0	0	0	0
72.	Varanasi								
73.	Sant Ravidas Nagar								
74.	Mirzapur	5	0	0	0	0	0	0	100
75.	Sonbhadra	22	50	0	25	0	25	0	50
76.	**Uttar Pradesh**	**10**	**25**	**18**	**21**	**7**	**3**	**6**	**44**

10% of villages in the state reported to have a VWSC or a Pani Samiti and 25% of the villages have VWSC/Pani Samiti with more than 50% female members. Across the villages in the state, that reported to have VWSC/Pani Samitis (126 villages), 2 meetings in last one year was reported the most (21%).

3.4. Utilization of water at HHs for drinking and other activities

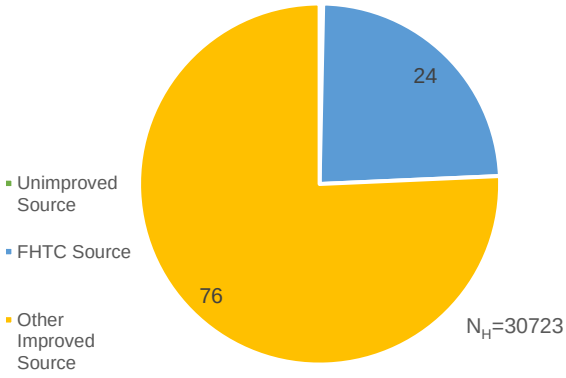
51% of HHs reported that their daily requirement of water was being met by HH tap connections

Figure 27: Daily household's requirement of water being met by FHTC



24% HHs reported HH tap connections as their primary source of drinking water

Figure 26: Households reported FHTC as primary source of drinking water

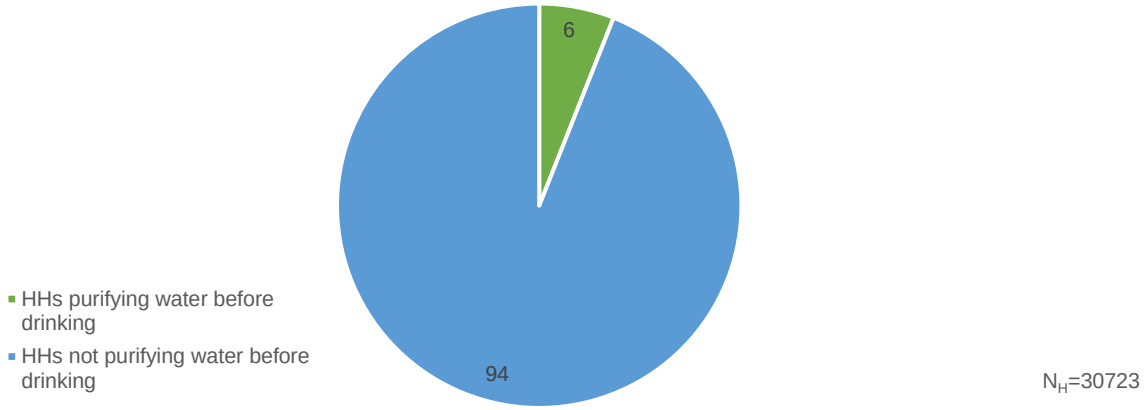


More than 1 out of 2 (51%) HHs reported their daily requirement of water being fully met by the HH tap connections. And 24% HHs reported used household tap connection for drinking water (primary source). About 76% of the HHs even though have reported household tap connections to fully meet their requirements, were not found using the same for drinking purposes.

Overall, **100% of HHs** reported using improved primary source of drinking water, out of which **24% of HHs** reported HH tap water as their primary source.

A. Households who practice purifying of water before drinking

Figure 28: Households who practice purifying of water before drinking

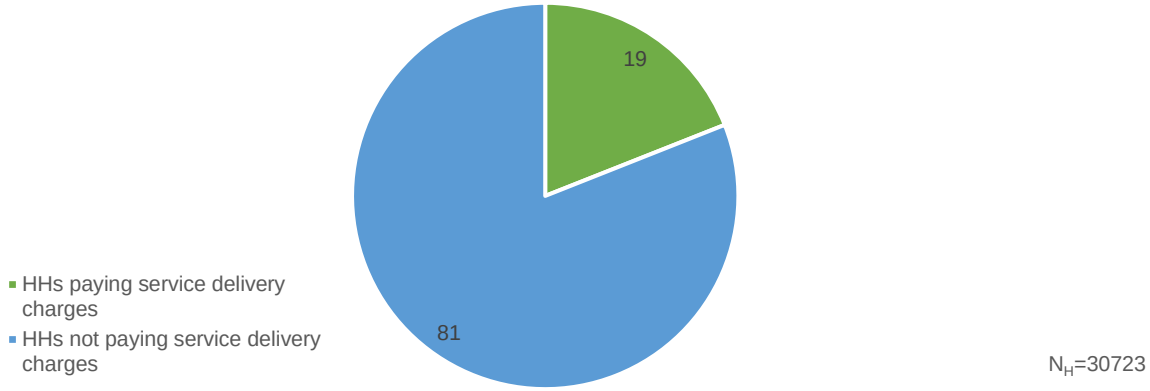


Practice of purifying water before drinking was reported the most in Hapur (39%) where 8% HHs reported using HH tap water as primary drinking water source, while the least was reported in Saharanpur (0%) where 6% HHs reported using HH tap water as a primary drinking water source.

B. Households paying water service delivery charges

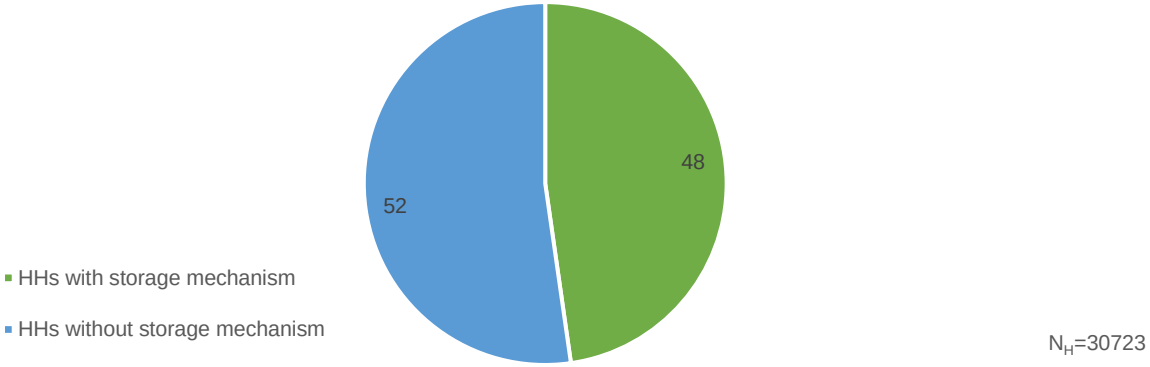
In Uttar Pradesh, around 19% of the sampled households were found to be paying service delivery charges, Chitrakoot being the district with the highest percentage of such households (69%).

Figure 29: Households reported to pay service delivery charges



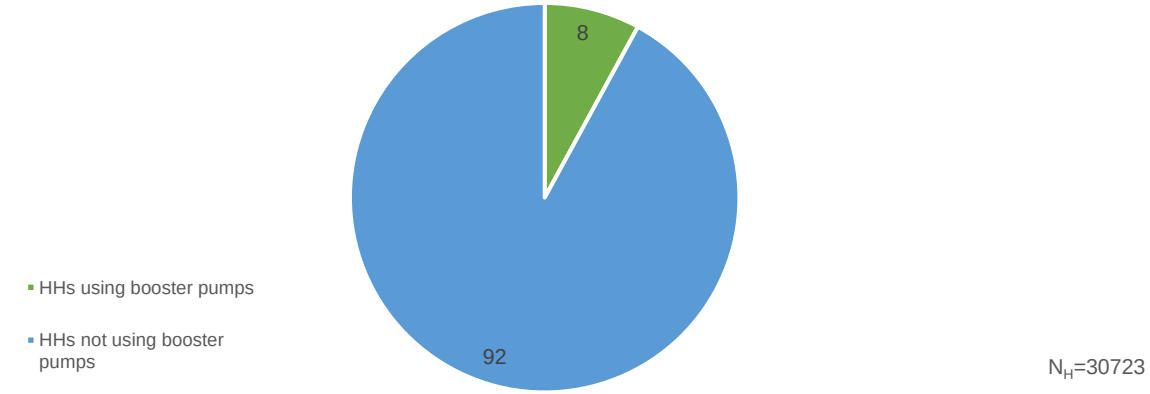
C. Storage mechanism used by households

Figure 30: Households with storage mechanism



D. Households using booster pumps

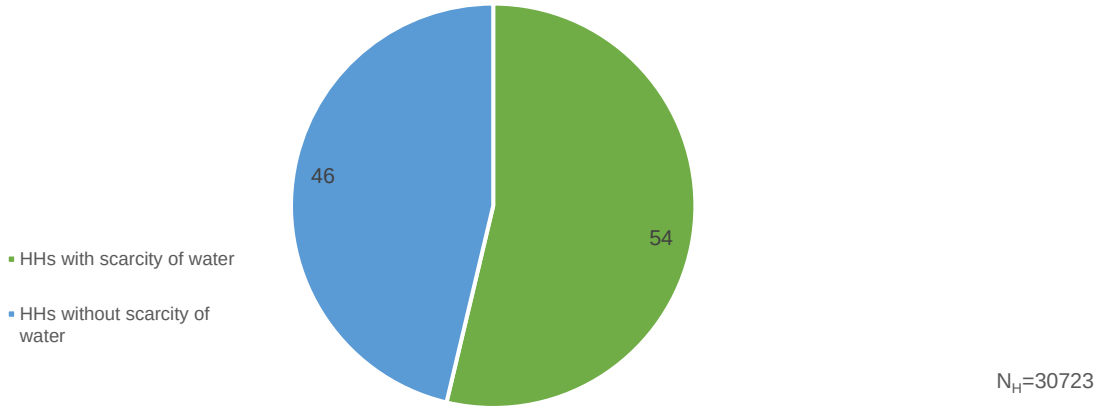
Figure 31: Households reported to use of booster pumps



Overall, **8% HHs** reported using booster pumps to maximize the water flow through their piped water connections. Ambedkar Nagar reported 84% of HHs using booster pump in the state.

E. Households facing shortage of water

Figure 32: Households who faced water scarcity

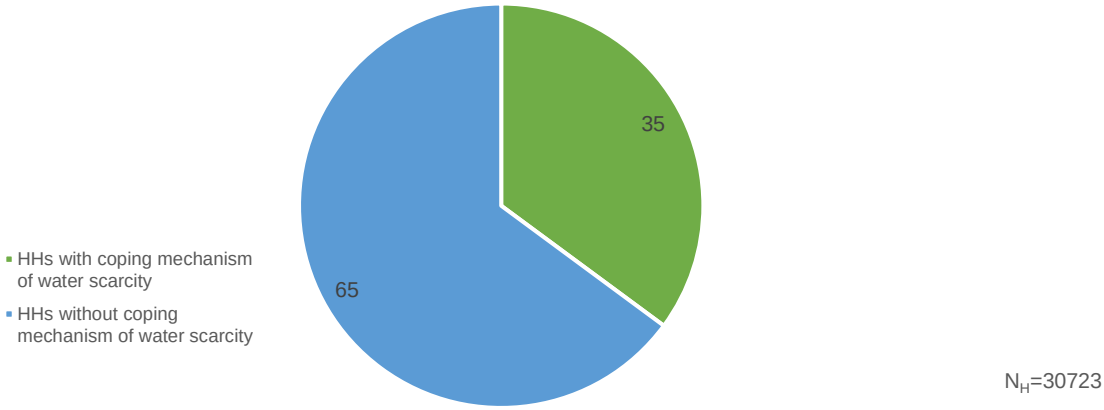


N_H=30723

In the state, **54% HHs** faced shortage of water during any time of the year, while **35% HHs** reported having some mechanism to cope with scarcity of water.

F. Households with a mechanism to cope scarcity of water

Figure 33: Households reported to have some mechanism to cope with scarcity of water



N_H=30723

35% HHs reported having some mechanism to cope with scarcity of water.

Table No. 10: Utilization of water at HHs for drinking and other activities

Sl. No.	Districts	Primary source of drinking water			Purifying water		Storage mechanism in households		Households paying water service delivery charges	HHs using booster pumps	HHs who faced water scarcity	HHs having coping mechanism
		FHTC Source	Other Improved Source	Unimproved Source	HHs purifying water before drinking	HHs not purifying water before drinking	Present	Not present				
1.	Saharanpur	6	93	1	0	0	52	48	17	**55**	38	25
2.	Shamli	56	44	0	0	0	80	20	5	69	52	52
3.	Muzaffarnagar	14	86	0	4	4	60	40	0	40	52	8
4.	Bijnor	43	57	0	10	10	66	34	56	71	39	7
5.	Moradabad	41	59	0	10	10	58	42	39	61	48	5
6.	Sambhal	52	48	0	13	13	70	30	18	66	47	6
7.	Rampur	31	69	0	11	11	40	60	13	41	63	8
8.	Amroha	40	60	0	16	16	58	42	22	81	22	2
9.	Meerut	10	90	0	12	12	56	44	18	53	51	6
10.	Baghpat	20	80	0	11	11	54	46	0	67	37	6
11.	Ghaziabad	22	78	0	3	3	60	40	25	60	69	62
12.	Hapur	8	92	0	39	39	23	77	14	72	41	10
13.	Gautam Buddha Nagar	1	99	0	0	0	59	41	1	79	87	83
14.	Bulandshahr	7	93	0	30	30	41	59	30	47	51	10
15.	Aligarh	9	88	3	1	1	61	39	20	19	34	17
16.	Hathras	3	97	0	1	1	34	66	0	39	63	63
17.	Mathura	1	98	1	3	3	78	22	55	32	25	24
18.	Agra	3	97	0	3	3	53	47	9	61	40	39
19.	Firozabad	10	89	1	1	1	55	45	22	49	42	22
20.	Kasganj	11	89	0	2	2	58	42	31	39	46	46
21.	Etah	21	78	1	7	7	47	53	4	66	65	35
22.	Mainpuri	13	87	0	1	1	51	49	0	43	59	51
23.	Budaun	29	71	0	15	15	42	58	21	54	69	22
24.	Bareilly	20	73	7	34	34	28	72	21		64	28
25.	Pilibhit	9	91	0	34	34	10	90	0		80	49
26.	Shahjahanpur	8	92	0	2	2	25	75	2	6	55	49
27.	Lakhimpur Kheri	31	69	0	5	5	20	80	19	0	41	25
28.	Sitapur	20	80	0	1	1	57	43	20	1	45	14
29.	Hardoi	25	75	0	1	1	45	55	7	3	53	48
30.	Unnao	22	78	0	4	4	66	34	17	2	39	28
31.	Lucknow	30	70	0	24	24	63	37	38	1	69	55
32.	Rae Bareli	41	58	1	6	6	41	59	12	3	48	35
33.	Amethi	24	76	0	8	8	48	52	22	2	51	32
34.	Farrukhabad	11	89	0	4	4	51	49	0	0	79	73

Table No. 10: Utilization of water at HHs for drinking and other activities

Sl. No.	Districts	Primary source of drinking water			Purifying water		Storage mechanism in households		Households paying water service delivery charges	HHs using booster pumps	HHs who faced water scarcity	HHs having coping mechanism
		FHTC Source	Other Improved Source	Unimproved Source	HHs purifying water before drinking	HHs not purifying water before drinking	Present	Not present				
35.	Kannauj	18	82	0	4	4	58	42	13	2	54	46
36.	Etawah	4	96	0	13	13	38	62	0	1	40	9
37.	Auraiya	22	78	0	0	0	73	27	8	2	82	77
38.	Kanpur Dehat	30	70	0	4	4	69	31	13	1	35	23
39.	Kanpur Nagar	34	65	0	0	0	81	19	38	1	20	13
40.	Jalaun	55	45	0	2	2	98	2	22	3	51	40
41.	Jhansi	20	80	0	1	1	51	49	6	13	51	46
42.	Lalitpur	19	78	3	5	5	50	50	18	17	62	55
43.	Hamirpur-Up	30	70	0	1	1	82	18	28	19	60	53
44.	Mahoba	23	77	0	8	8	68	32	24	19	74	63
45.	Banda	44	56	0	3	3	86	14	18	5	42	41
46.	Chitrakoot	32	68	0	10	10	76	24	69	13	58	51
47.	Fatehpur	35	65	0	17	17	74	26	53	3	64	64
48.	Pratapgarh-Up	35	63	2	2	2	31	69	10	3	74	60
49.	Kaushambi	86	14	0	3	3	54	46	49	0	26	21
50.	Prayagraj	29	68	2	2	2	32	68	30	3	53	43
51.	Barabanki	35	65	0	12	12	61	39	13	4	40	35
52.	Ayodhya	19	81	0	4	4	46	54	3	9	69	64
53.	Ambedkar Nagar	10	90	0	0	0	0	100	50	1	41	0
54.	Sultanpur	18	82	0	10	10	57	43	3	1	59	43
55.	Bahraich	20	80	0	1	1	46	54	14	16	33	13
56.	Shravasti	24	76	0	1	1	47	53	1	10	30	13
57.	Balrampur-Up	6	94	0	0	0	8	92	22	6	44	0
58.	Gonda	3	97	0	4	4	1	99	1	2	88	0
59.	Siddharth Nagar	6	94	0	3	3	49	51	6	4	90	76
60.	Basti	15	85	0	4	4	37	63	4	11	83	75
61.	Sant Kabeer Nagar	6	94	0	5	5	47	53	8	12	89	76
62.	Maharajganj	20	80	0	1	1	14	86	12	2	66	55
63.	Gorakhpur	28	72	0	1	1	29	71	13	12	73	69
64.	Kushi Nagar	8	92	0	1	1	11	89	1	29	79	63
65.	Deoria	22	78	0	1	1	28	72	6	15	73	54
66.	Azamgarh	4	96	0	5	5	19	81	1	11	88	45
67.	Mau	30	70	0	0	0	29	71	28	15	35	15
68.	Ballia	37	63	0	0	0	18	82	36	17	49	22

Table No. 10: Utilization of water at HHs for drinking and other activities

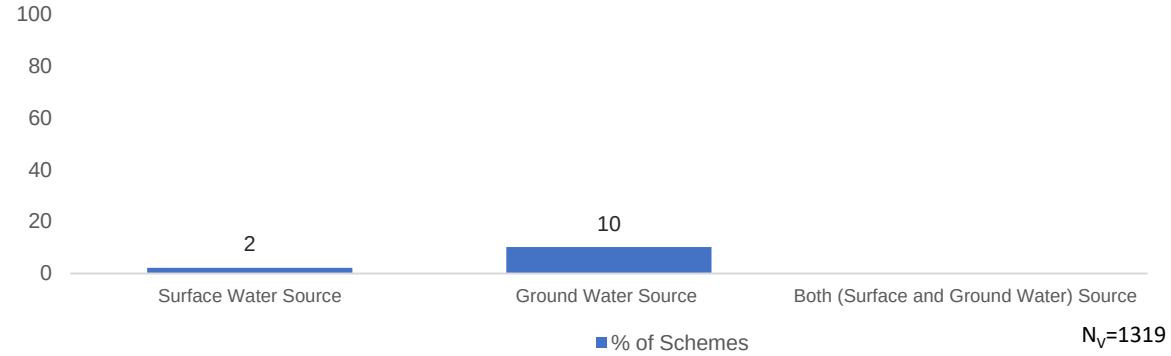
Sl. No.	Districts	Primary source of drinking water			Purifying water		Storage mechanism in households		Households paying water service delivery charges	HHs using booster pumps	HHs who faced water scarcity	HHs having coping mechanism
		FHTC Source	Other Improved Source	Unimproved Source	HHs purifying water before drinking	HHs not purifying water before drinking	Present	Not present				
69.	Jaunpur	22	78	0	1	1	45	55	15	19	28	8
70.	Ghazipur	24	76	0	3	3	26	74	19	4	67	38
71.	Chandauli	42	58	0	0	0	57	43	47	4	32	22
72.	Varanasi	38	62	0	2	2	40	60	25	5	21	9
73.	Sant Ravidas Nagar	31	68	0	12	12	53	47	31	7	63	42
74.	Mirzapur	70	30	0	4	4	56	44	32	8	38	26
75.	Sonbhadra	44	56	0	1	1	51	49	31	10	64	51
76.	**Uttar Pradesh**	**24**	**76**	**0**	**6**	**6**	**48**	**52**	**19**	**3**	**54**	**35**

3.5. Source sustainability at the village level

Schemes based on surface and ground water

2% of schemes reported to be based on surface water source while 10% of schemes reported to based of ground water sources.

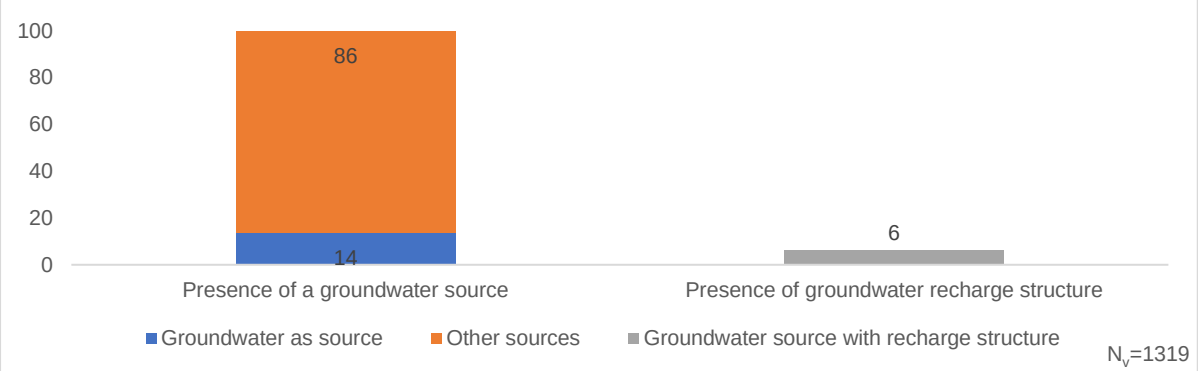
Figure 34: Schemes based on water source in village



**'Surface Water Source' is Stream, Spring, Glacier, River, lake, pond etc. and Groundwater Source is open well, borewell, tube well, handpump, spring, etc.*

Villages reported having presence of a groundwater source

Figure 35: Villages reported the presence of groundwater sources and among those how many reported to have a recharge structure

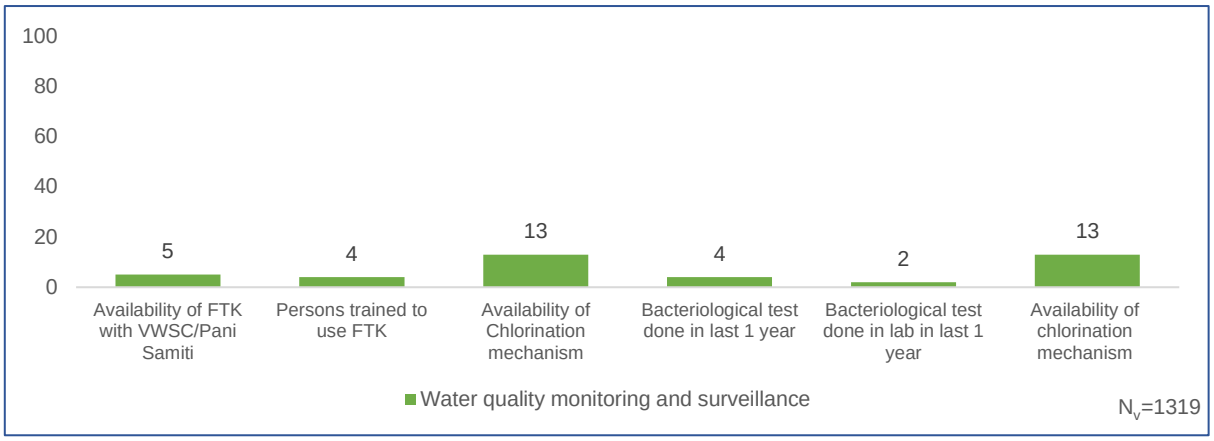


In the state, **14% villages** reported the presence of groundwater sources like improved dug wells and borewells. Out of which, 6% of villages reported (i.e., 82 villages) reported having a recharge structure.

3.6. Water quality monitoring and surveillance in the villages

The numerical figures for extensiveness of the different water quality monitoring and surveillance present in the villages are presented in the following chart.

Figure 36: Water quality monitoring and surveillance by villages

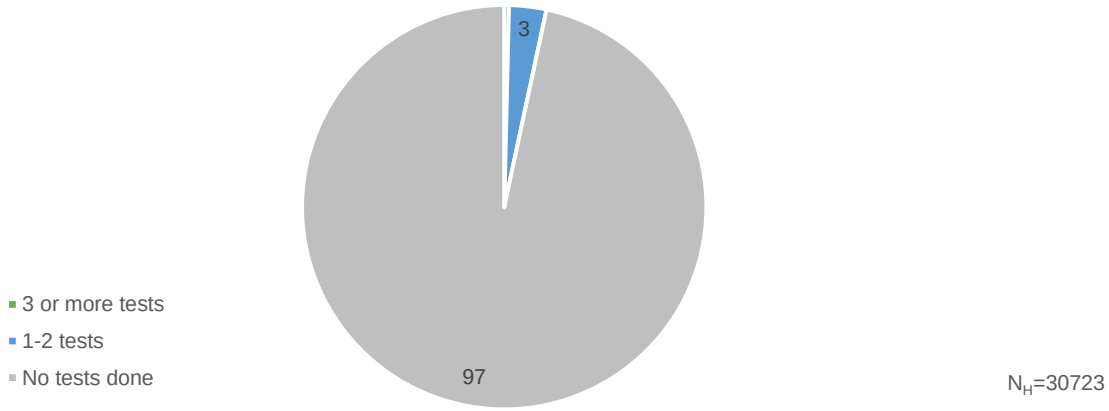


In Uttar Pradesh, it was found that in 5% of the sampled villages (N=1319) the VWSC/Pani Samiti were availed with FTKs and 4% of the VWSC/Pani Samiti members were trained to use them. Furthermore, to check for the presence of contamination in the water supplied, bacteriological test using FTK was done in 4% of the sampled villages in Uttar Pradesh. The presence of bacteriological contamination was also tested in labs in 2% of the sampled villages in Uttar Pradesh. It was also found that chlorination mechanism to treat the contamination (if present) was available in 13% of the villages in the state.

A. Water quality management by VWSC: Frequency of testing using FTK

Across the state, only 2% of the total sampled villages (2%) reported that the quality of water (at different points in the respective villages) was checked at least one or two times using FTKs in last one year.

Figure 37: Frequency of testing using FTK in villages



B. Water quality management by VWSC: Frequency of lab testing

Across the state, less than 5% of the total sampled villages (3%) reported that the quality of water (at different points in the respective villages) was checked at least one or two times through laboratories in last one year.

Figure 38: Frequency of lab testing

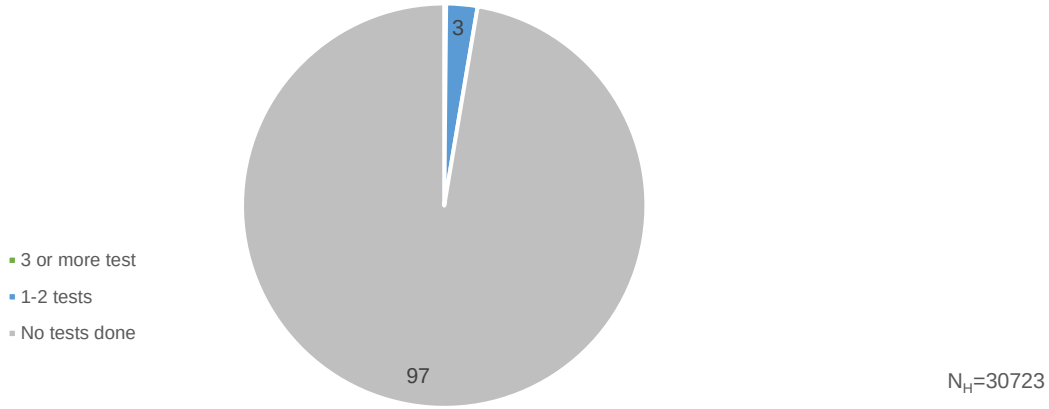


Table No. 11: District wise water quality monitoring and surveillance in the village

Sl. no	District	Availability of FTK	Persons trained to use FTK	Frequency of testing using FTK			Frequency of lab testing			Bacteriological test done in last 1 year (%)	Bacteriological test done in lab in last 1 year (%)	Availability of chlorination mechanism (%)
				3 or more tests (%)	1-2 tests (%)	No tests (%)	3 or more tests (%)	1-2 tests (%)	No tests (%)			
1.	Saharanpur	0	0	0	0	100	0	5	95	0	0	0
2.	Shamli	0	0	0	6	94	0	6	94	6	6	19
3.	Muzaffarnagar	0	0	0	0	100	0	0	100	0	0	12
4.	Bijnor	0	0	0	5	95	0	5	95	5	5	16
5.	Moradabad	11	5	0	0	100	0	0	100	0	0	21
6.	Sambhal	6	6	0	0	100	0	0	100	0	0	25
7.	Rampur	15	5	0	5	95	0	5	95	0	0	20
8.	Amroha	17	6	0	11	89	0	0	100	0	0	50
9.	Meerut	0	0	0	0	100	0	0	100	0	0	8
10.	Baghpat	7	0	0	0	100	0	0	100	0	0	0
11.	Ghaziabad	7	0	0	7	93	0	0	100	7	7	20
12.	Hapur	15	0	5	5	90	0	5	95	0	0	5
13.	Gautam Buddha Nagar	0	0	0	0	100	0	0	100	0	0	11
14.	Bulandshahr	7	0	0	0	100	0	0	100	0	0	13
15.	Aligarh	0	0	0	6	94	0	0	100	0	0	0
16.	Hathras	0	0	0	0	100	0	0	100	0	0	0
17.	Mathura	0	0	0	0	100	5	0	95	5	5	0
18.	Agra	0	0	0	0	100	0	0	100	0	0	0
19.	Firozabad	0	0	0	0	100	0	0	100	0	0	0
20.	Kasganj	5	5	0	0	100	0	5	95	0	0	0
21.	Etah	11	0	0	0	100	0	0	100	5	5	0
22.	Mainpuri	0	0	0	0	100	0	0	100	0	0	0
23.	Budaun	7	7	0	7	93	0	7	93	0	0	20
24.	Bareilly	0	0	0	0	100	0	0	100	0	0	6
25.	Pilibhit	5	0	0	5	95	0	0	100	0	0	0
26.	Shahjahanpur	13	7	0	7	93	0	7	93	20	7	0
27.	Lakhimpur Kheri	16	21	5	5	89	0	11	89	5	0	5
28.	Sitapur	0	17	0	0	100	0	11	89	11	6	22

Table No. 11: District wise water quality monitoring and surveillance in the village

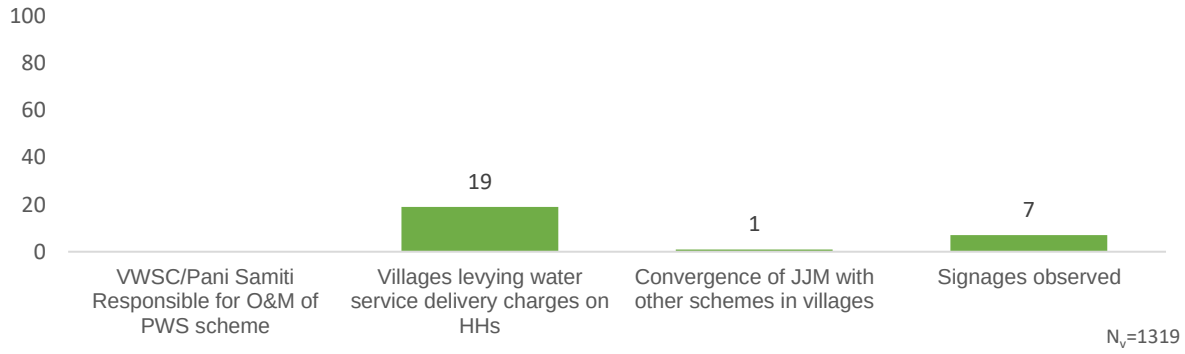
Sl. no	District	Availability of FTK	Persons trained to use FTK	Frequency of testing using FTK			Frequency of lab testing			Bacteriological test done in last 1 year (%)	Bacteriological test done in lab in last 1 year (%)	Availability of chlorination mechanism (%)
				3 or more tests (%)	1-2 tests (%)	No tests (%)	3 or more tests (%)	1-2 tests (%)	No tests (%)			
29.	Hardoi	7	7	7	0	93	7	0	93	7	7	21
30.	Unnao	6	11	0	0	100	0	11	89	6	0	11
31.	Lucknow	7	7	7	0	93	0	7	93	14	7	21
32.	Rae Bareli	0	5	0	5	95	0	0	100	5	0	0
33.	Amethi	0	0	0	0	100	0	0	100	6	0	12
34.	Farrukhabad	0	0	0	0	100	0	0	100	0	0	17
35.	Kannauj	0	0	0	0	100	0	5	95	10	5	30
36.	Etawah	0	5	0	0	100	0	0	100	5	0	0
37.	Auraiya	0	0	0	0	100	0	0	100	0	0	6
38.	Kanpur Dehat	0	0	0	0	100	0	0	100	6	6	65
39.	Kanpur Nagar	0	8	0	8	92	0	0	100	0	0	8
40.	Jalaun	20	5	0	10	90	0	10	90	5	5	20
41.	Jhansi	0	0	0	0	100	0	0	100	0	0	16
42.	Lalitpur	15	15	0	5	95	0	5	95	5	5	5
43.	Hamirpur-Up	0	0	0	0	100	0	0	100	0	0	0
44.	Mahoba	5	16	0	0	100	0	0	100	0	0	0
45.	Banda	6	6	0	0	100	0	0	100	0	0	0
46.	Chitrakoot	0	0	0	0	100	0	0	100	0	0	0
47.	Fatehpur	0	0	0	0	100	0	0	100	0	0	0
48.	Pratapgarh-Up	0	0	0	0	100	0	0	100	0	0	0
49.	Kaushambi	0	0	0	15	85	0	10	90	15	5	0
50.	Prayagraj	0	0	0	0	100	0	0	100	0	0	6
51.	Barabanki	17	6	0	6	94	0	0	100	6	6	33
52.	Ayodhya	6	6	0	6	94	0	12	88	12	12	29
53.	Ambedkar Nagar	43	0	0	0	100	0	0	100	0	0	0
54.	Sultanpur	0	6	0	0	100	0	0	100	6	6	12
55.	Bahraich	5	10	0	0	100	0	15	85	10	10	20
56.	Shravasti	0	0	0	5	95	0	0	100	0	0	0
57.	Balrampur-Up	28	0	0	0	100	0	0	100	0	0	0

Table No. 11: District wise water quality monitoring and surveillance in the village

Sl. no	District	Availability of FTK	Persons trained to use FTK	Frequency of testing using FTK			Frequency of lab testing			Bacteriological test done in last 1 year (%)	Bacteriological test done in lab in last 1 year (%)	Availability of chlorination mechanism (%)
				3 or more tests (%)	1-2 tests (%)	No tests (%)	3 or more tests (%)	1-2 tests (%)	No tests (%)			
58.	Gonda	29	12	0	6	94	0	0	100	6	0	0
59.	Siddharth Nagar	0	0	0	0	100	0	0	100	0	0	25
60.	Basti	6	6	0	0	100	0	0	100	13	6	38
61.	Sant Kabeer Nagar	10	5	0	0	100	0	0	100	14	14	29
62.	Maharajganj	11	17	0	6	94	0	0	100	0	0	50
63.	Gorakhpur	5	0	0	5	95	0	0	100	0	0	45
64.	Kushi Nagar	0	5	0	0	100	0	0	100	5	0	32
65.	Deoria	0	0	0	0	100	0	5	95	5	5	70
66.	Azamgarh	10	0	0	0	100	0	0	100	0	0	0
67.	Mau	6	12	0	0	100	0	0	100	0	0	0
68.	Ballia	7	21	0	0	100	0	0	100	0	0	7
69.	Jaunpur	0	6	0	0	100	0	6	94	6	6	6
70.	Ghazipur	11	11	0	0	100	0	0	100	5	5	32
71.	Chandauli	0	0	5	5	90	0	10	90	5	0	15
72.	Varanasi	0	0	0	0	100	0	0	100	0	0	0
73.	Sant Ravidas Nagar	0	0	0	0	100	0	0	100	6	6	6
74.	Mirzapur	5	0	0	15	85	0	5	95	5	0	0
75.	Sonbhadra	6	0	0	11	89	0	11	89	11	6	6
76.	**Uttar Pradesh**	**5**	**4**	**0**	**2**	**97**	**0**	**3**	**97**	**4**	**2**	**13**

3.7. Management of water service delivery at village level

Figure 39: Management of water service delivery at village level



In Uttar Pradesh, less than 1% of the sampled villages reported that VWSC/Pani Samiti were responsible for O&M of PWS scheme. It was also found in the survey that 19% of the villages levied water service delivery charges on HHs. Only 1% of the villages in the state reported convergence of JJM activities with other schemes in the villages, and signages were observed in 7% of the sampled villages.

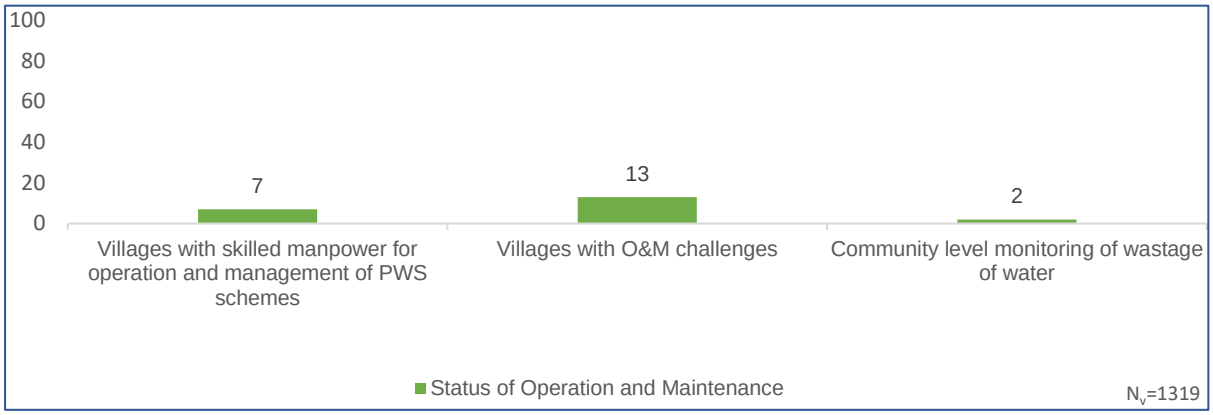
Table No. 12: Management of water service delivery at village level

Sl. No.	District (N_V=1319)	VWSC/Pani Samiti responsible of O&M of PWS scheme	Villages levying service delivery charges on households	Convergence of JJM activities with other schemes in villages	Villages where signages were observed
1.	Saharanpur	0	0	0	0
2.	Shamli	0	0	0	0
3.	Muzaffarnagar	0	0	0	0
4.	Bijnor	0	42	0	5
5.	Moradabad	0	32	0	21
6.	Sambhal	0	6	0	31
7.	Rampur	0	10	0	20
8.	Amroha	0	33	0	6
9.	Meerut	0	8	8	0
10.	Baghpat	0	14	0	0
11.	Ghaziabad	0	27	0	13
12.	Hapur	0	25	0	5
13.	Gautam Buddha Nagar	11	0	0	22
14.	Bulandshahr	0	20	0	0
15.	Aligarh	0	6	0	11
16.	Hathras	5	0	0	5
17.	Mathura	0	38	0	0
18.	Agra	0	6	0	0
19.	Firozabad	0	0	0	0
20.	Kasganj	10	25	5	10
21.	Etah	0	5	0	11
22.	Mainpuri	0	0	0	6
23.	Budaun	0	27	0	13
24.	Bareilly	6	18	0	0
25.	Pilibhit	0	0	0	0
26.	Shahjahanpur	0	0	0	7
27.	Lakhimpur Kheri	0	5	5	11
28.	Sitapur	0	11	0	17
29.	Hardoi	0	7	0	7
30.	Unnao	0	17	11	6

Table No. 12: Management of water service delivery at village level					
Sl. No.	**District (N_V=1319)**	**VWSC/Pani Samiti responsible of O&M of PWS scheme**	**Villages levying service delivery charges on households**	**Convergence of JJM activities with other schemes in villages**	**Villages where signages were observed**
31.	Lucknow	0	29	0	7
32.	Rae Bareli	5	16	0	0
33.	Amethi	0	24	0	0
34.	Farrukhabad	0	0	0	0
35.	Kannauj	0	15	0	0
36.	Etawah	0	0	0	0
37.	Auraiya	0	0	0	0
38.	Kanpur Dehat	0	29	0	29
39.	Kanpur Nagar	0	54	0	8
40.	Jalaun	0	40	10	15
41.	Jhansi	0	11	0	0
42.	Lalitpur	0	15	0	10
43.	Hamirpur-Up	0	33	5	5
44.	Mahoba	0	21	0	5
45.	Banda	0	17	0	0
46.	Chitrakoot	0	67	0	0
47.	Fatehpur	0	50	0	0
48.	Pratapgarh-Up	0	13	0	0
49.	Kaushambi	0	45	5	0
50.	Prayagraj	0	38	0	0
51.	Barabanki	0	11	6	17
52.	Ayodhya	0	0	6	18
53.	Ambedkar Nagar	0	57	0	0
54.	Sultanpur	0	18	0	0
55.	Bahraich	0	20	0	10
56.	Shravasti	0	11	0	26
57.	Balrampur-Up	0	6	0	6
58.	Gonda	0	0	24	12
59.	Siddharth Nagar	0	5	0	15
60.	Basti	0	19	0	25
61.	Sant Kabeer Nagar	0	10	0	33
62.	Maharajganj	0	11	0	28
63.	Gorakhpur	0	10	0	10
64.	Kushi Nagar	0	5	0	0
65.	Deoria	0	20	0	20
66.	Azamgarh	0	0	0	0
67.	Mau	0	35	6	0
68.	Ballia	0	29	0	0
69.	Jaunpur	0	18	0	0
70.	Ghazipur	0	32	0	11
71.	Chandauli	0	65	5	0
72.	Varanasi	0	31	0	13
73.	Sant Ravidas Nagar	0	38	0	0
74.	Mirzapur	0	20	0	0
75.	Sonbhadra	0	39	0	0
76.	**Uttar Pradesh**	**0**	**19**	**1**	**7**

3.8. Status of Operation & Maintenance

Figure 40: Status of Operation and Maintenance

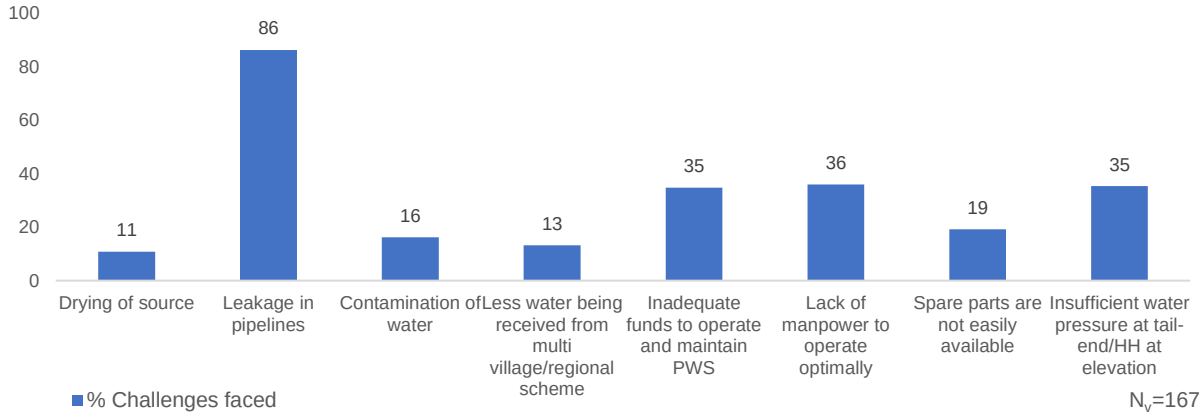


In Uttar Pradesh, availability of skilled manpower for the operation and maintenance of PWS schemes across the villages was found to be 7% based on the sample survey. It was also found that 13% of the villages faced challenges with respected O&M. Community level monitoring of wastage of water was also found among 2% of the sampled villages in Uttar Pradesh.

A. Details of challenges faced

Out of the 13% of villages that had faced challenges with respect to O&M of PWS schemes (167 villages), 'leakage in pipelines' was attributed the most – at 86%.

Figure 41: Details of O&M challenges faced by village



B. Responsible for O&M

Across the state, villages reported 'GP the most for being responsible for all essential aspects about operation and maintenance of PWS schemes.

Figure 42: Different bodies responsible for O&M

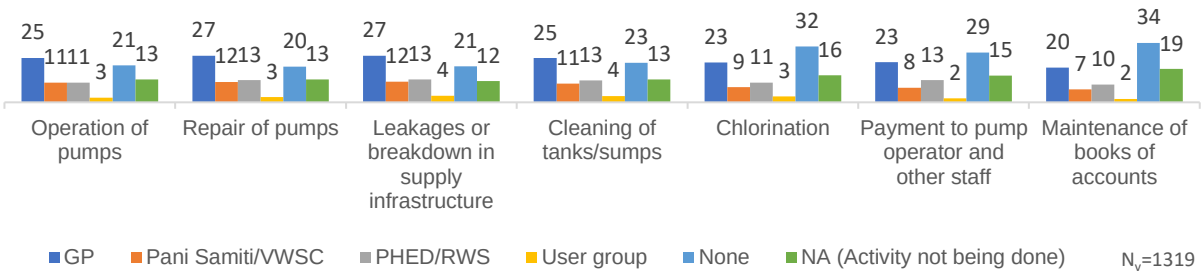


Table No. 13: Status of Operation and Management

Sl. No.	District	Villages with skilled manpower for O&M of PWS (% HH)	Villages with O&M challenges (% HH)	Villages with community monitoring (% HH)
1.	Saharanpur	0	0	0
2.	Shamli	0	6	0
3.	Muzaffarnagar	0	0	0
4.	Bijnor	5	21	11
5.	Moradabad	21	11	0
6.	Sambhal	31	19	0
7.	Rampur	20	15	0
8.	Amroha	6	33	11
9.	Meerut	0	0	0
10.	Baghpat	0	0	0
11.	Ghaziabad	13	20	0
12.	Hapur	5	5	0
13.	Gautam Buddha Nagar	22	11	0
14.	Bulandshahr	0	0	0
15.	Aligarh	11	0	0
16.	Hathras	5	0	0
17.	Mathura	0	0	0
18.	Agra	0	0	0
19.	Firozabad	0	0	0
20.	Kasganj	10	0	5
21.	Etah	11	0	11
22.	Mainpuri	6	28	0
23.	Budaun	13	27	7
24.	Bareilly	0	18	0
25.	Pilibhit	0	25	0
26.	Shahjahanpur	7	20	0
27.	Lakhimpur Kheri	11	5	5
28.	Sitapur	17	6	0
29.	Hardoi	7	29	0
30.	Unnao	6	11	11
31.	Lucknow	7	14	14
32.	Rae Bareli	0	11	0
33.	Amethi	0	0	0
34.	Farrukhabad	0	42	8
35.	Kannauj	0	25	0
36.	Etawah	0	5	0
37.	Auraiya	0	47	0
38.	Kanpur Dehat	29	12	6
39.	Kanpur Nagar	8	8	0
40.	Jalaun	15	15	0

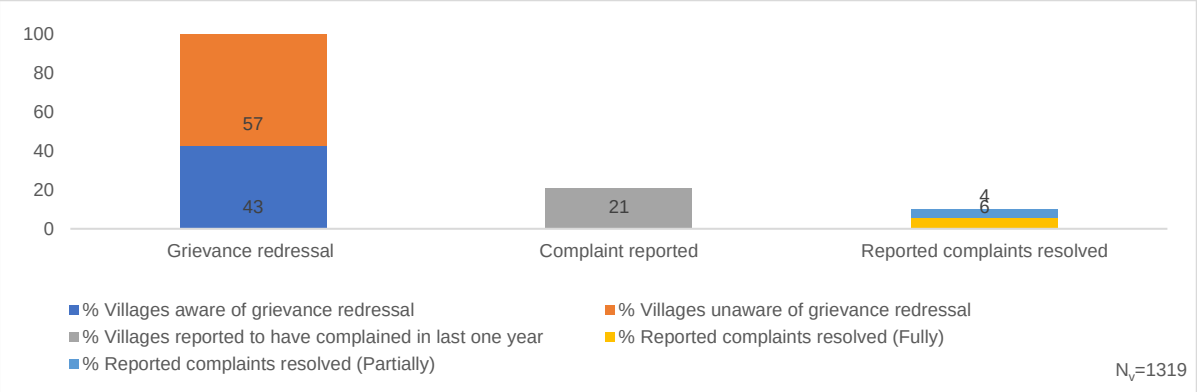
Table No. 13: Status of Operation and Management				
Sl. No.	**District**	**Villages with skilled manpower for O&M of PWS (% HH)**	**Villages with O&M challenges (% HH)**	**Villages with community monitoring (% HH)**
41.	Jhansi	0	0	0
42.	Lalitpur	10	10	0
43.	Hamirpur-Up	5	29	5
44.	Mahoba	5	5	0
45.	Banda	0	11	0
46.	Chitrakoot	0	0	5
47.	Fatehpur	0	13	6
48.	Pratapgarh-Up	0	47	0
49.	Kaushambi	0	45	0
50.	Prayagraj	0	38	6
51.	Barabanki	17	17	0
52.	Ayodhya	18	0	12
53.	Ambedkar Nagar	0	0	21
54.	Sultanpur	0	0	6
55.	Bahraich	10	0	0
56.	Shravasti	26	5	0
57.	Balrampur-Up	6	11	0
58.	Gonda	12	29	0
59.	Siddharth Nagar	15	10	0
60.	Basti	25	31	0
61.	Sant Kabeer Nagar	33	14	0
62.	Maharajganj	28	6	0
63.	Gorakhpur	10	5	5
64.	Kushi Nagar	0	0	0
65.	Deoria	20	10	0
66.	Azamgarh	0	0	0
67.	Mau	0	6	12
68.	Ballia	0	7	14
69.	Jaunpur	0	0	0
70.	Ghazipur	11	5	5
71.	Chandauli	0	15	5
72.	Varanasi	13	0	0
73.	Sant Ravidas Nagar	0	25	0
74.	Mirzapur	0	50	0
75.	Sonbhadra	0	33	0
76.	**Uttar Pradesh**	**7**	**13**	**2**

3.9. Status of service delivery related grievances and redressal

A. Village level

Grievance redressal at village

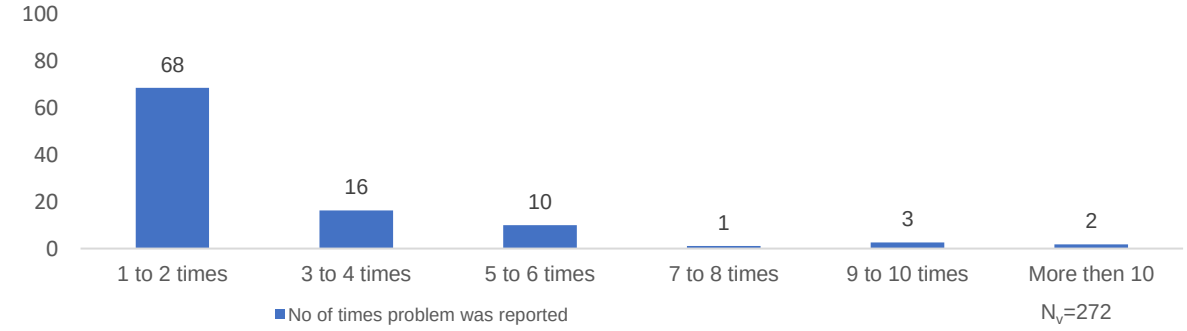
Figure 43: Reporting of grievance redressal at village level



In the state, **43% of villages** reported that they are aware of any grievance redressal mechanism, but only 21% HHs have reported a complaint in the last one year amongst which 6% reported that the complaints are fully resolved while 4% of complaints have been partially resolved.

Problem reported in last 1 year

Figure 44: Number of times villages have reported grievance in last 1 year

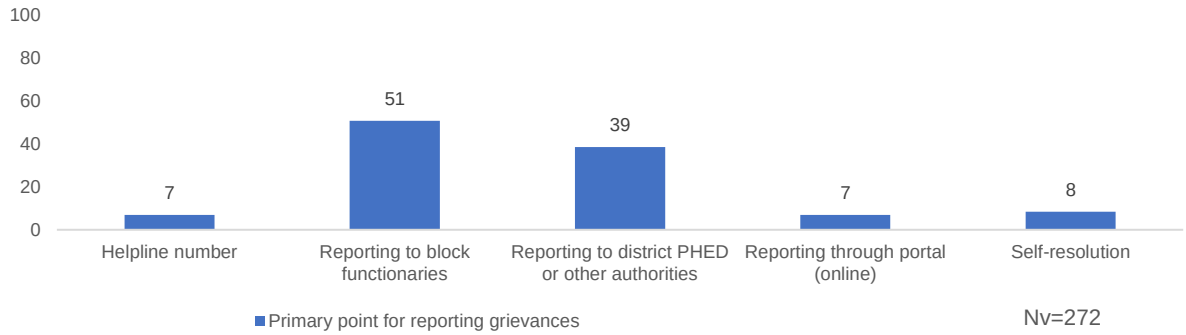


Among the villages who reported a complaint (i.e. 272 villages), 68% villages have reported a complaint once or twice in the last one year, while 16% reported a complaint at least three or four times.

Primary points for reporting grievances

Among those who reported complaint (i.e., 21% villages, 272 villages), **51% of villages** reported that they report their grievances to **block functionaries** beside other reporting-points.

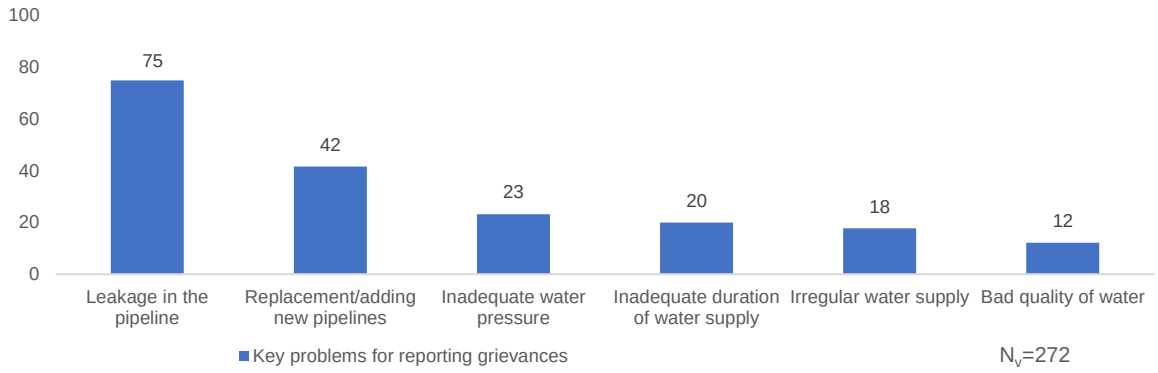
Figure 45: Primary points for reporting grievances by village



Key problems for reporting grievances

Overall, among those who reported complaint (i.e., 21% villages, 272 villages) **75% of villages** reported that **leakage in the pipeline** is their most encountered problem for reporting grievances

Figure 46: Key problems reported by village

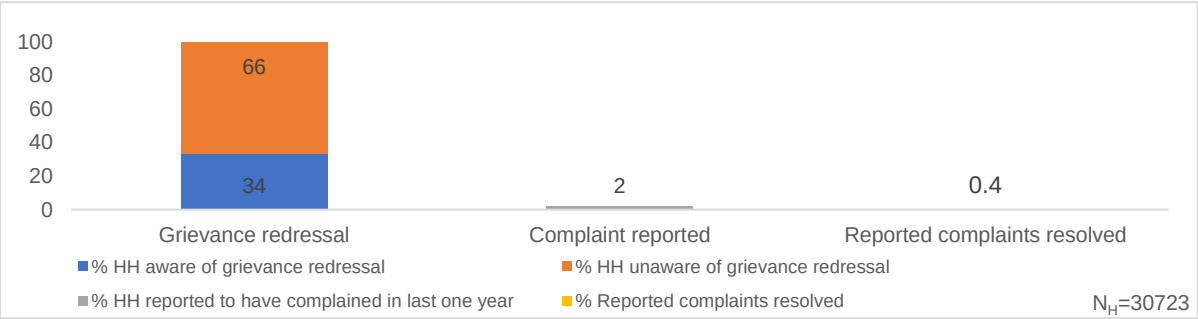


B. Household level

Awareness of grievance redressal at household

In the state, **34% of HHs** reported that they are aware of any grievance redressal mechanism w.r.t. HH tap water through PWS, but only 2% HHs have reported a complaint in the last one year and only 0.4% of complaints have been resolved.

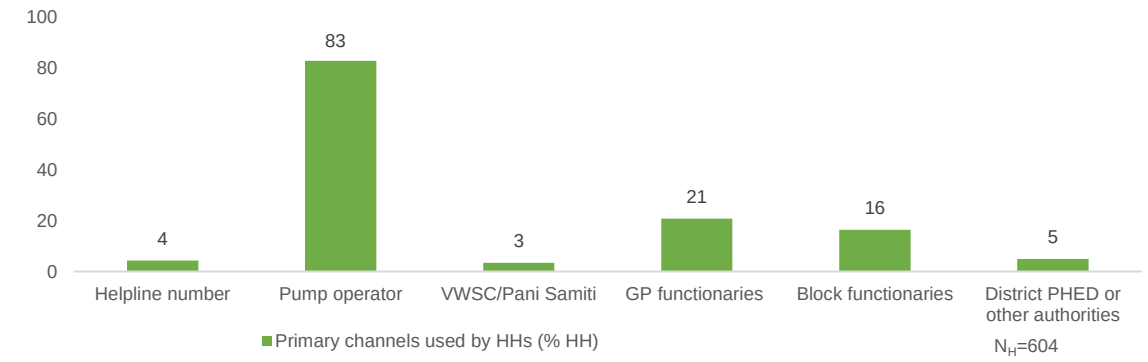
Figure 47: Number of times villages have reported grievance in last 1 year



Primary channels for reporting grievances by households

Among those who reported complaint as shown in the above graph (i.e., 2% HHs, 604 HHs), **83%** of the HHs reported their complaints to the **pump operators** beside other reporting-channels.

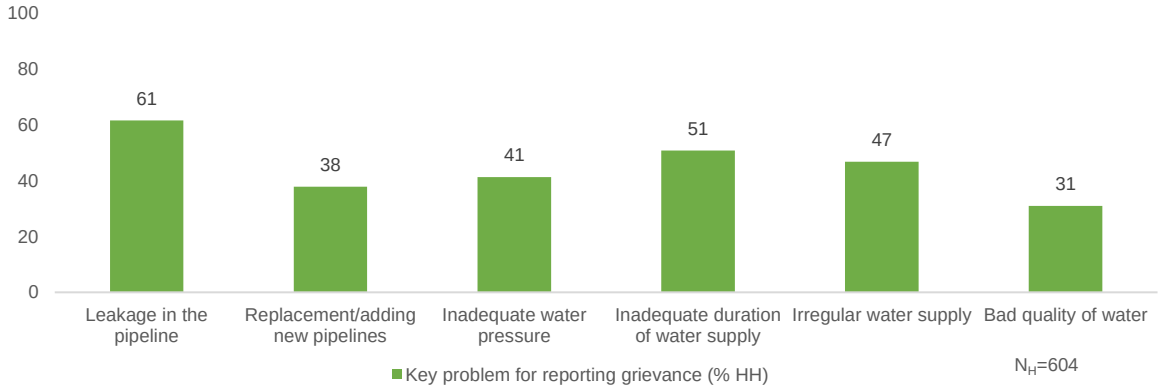
Figure 48: Primary points for reporting grievances by village



Key problems for reporting grievances

Overall, among those who reported complaint (i.e., 2% HHs, 604 HHs) **61%** of the HHs that reported problems was of **leakage in the pipeline** beside other problems

Figure 49: Key problems reported by village

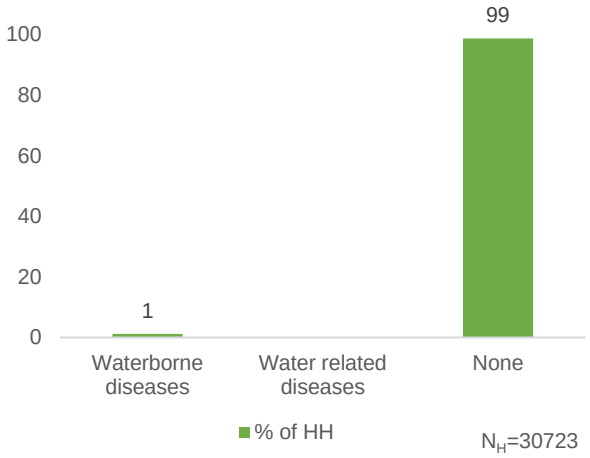


3.10. Perception of HHs on Outcome Indicators

A. Incidence of water borne diseases at HH level in last one year

Across the state only 1% HHs reported having an incidence(s) of water borne diseases in your household in last one year. The cases recorded were of Dysentery, Diarrhoea, Cholera and Typhoid

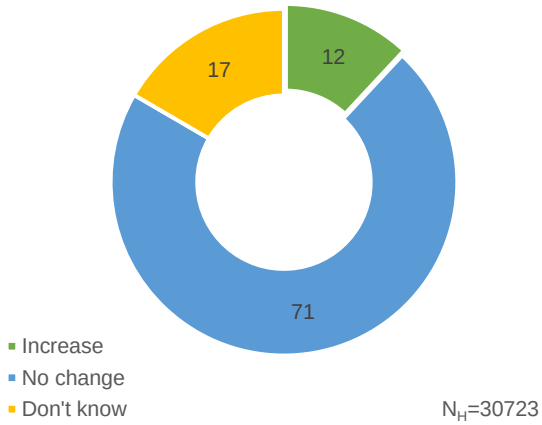
Figure 51: Household reported incidence of water borne diseases in last one year



B. Change in employment days since FHTC programmes/schemes

Since having a functional HH tap connection, 12% HHs across the state has reported that there has been an increase in the no. of employment days of the adult HH members while 71% HHs reported no change

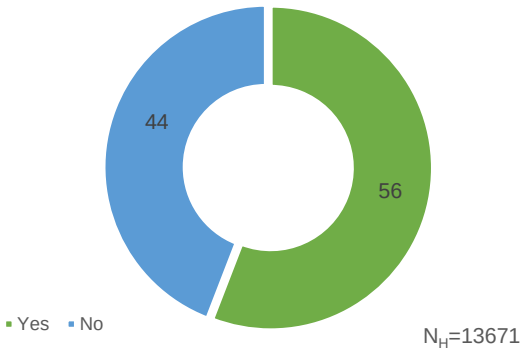
Figure 50: Household reported a change in employment days since FHTC programmes /schemes



C. Reduction in time and effort in collecting water

Out of the HHs reported (i.e., 13671) that female members used to fetch water before HH tap connection, 56% reported that post installation of HH tap connection it helped reduction of time and effort in collection of water

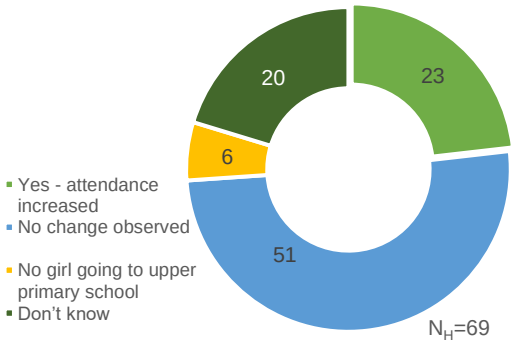
Figure 52: Households reported reduction in time and effort in collecting water



D. Impact on attendance of the girls going to upper primary

Across the state, 23% HHs reported that since having a functional HH tap connection the attendance of the girls going to schools increased, while 51% HHs reported no change in attendance which could possibly be an impact of shutting down of schools due to COVID-19 related lockdown during the survey

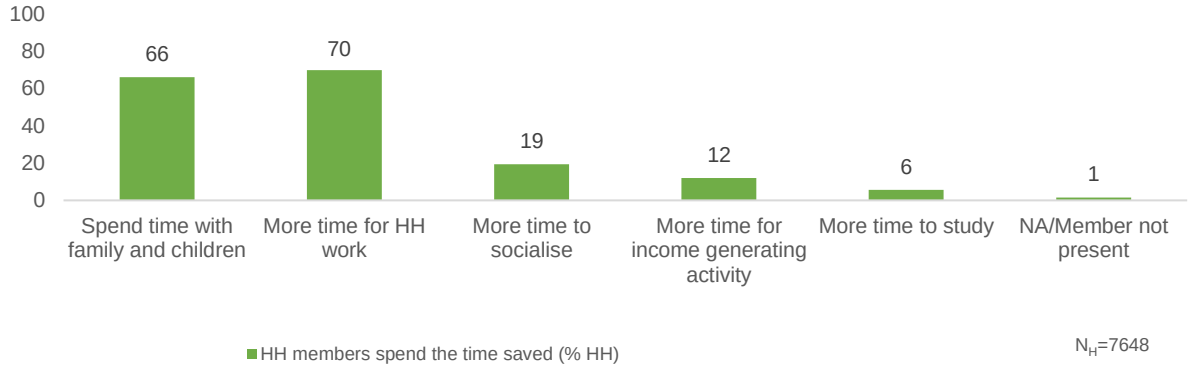
Figure 53: Households reported increase of attendance of girls going to upper primary school



E. HHs are using time saved due to provision of tap connection

Time saved by female HH members against collecting water, post installation of HH tap connections, was reportedly most utilized for other HH work (70%).

Figure 54: Utilization of time saved by households post installation of HH tap connection

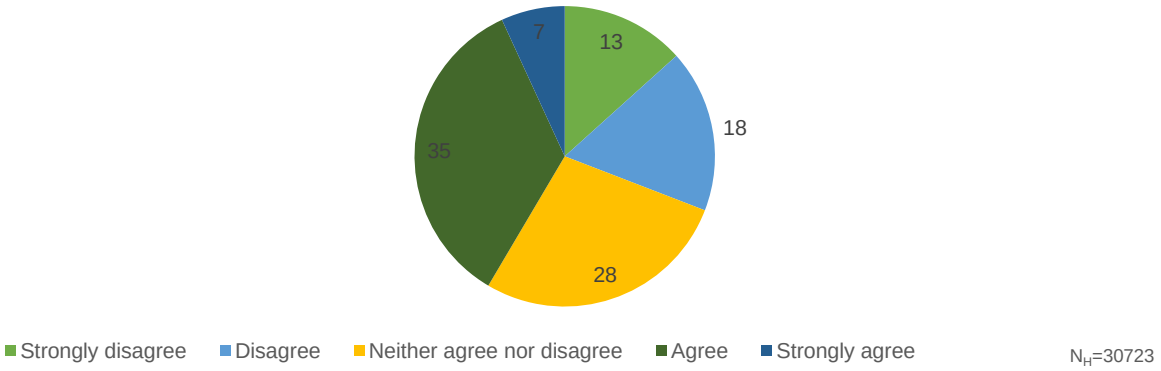


N_H=7648

F. Change in social status

Sense of pride and positive change in social status was reportedly realized by 42% of HHs post the installation of HH tap connections.

Figure 55: Households reported to have a positive change in social status

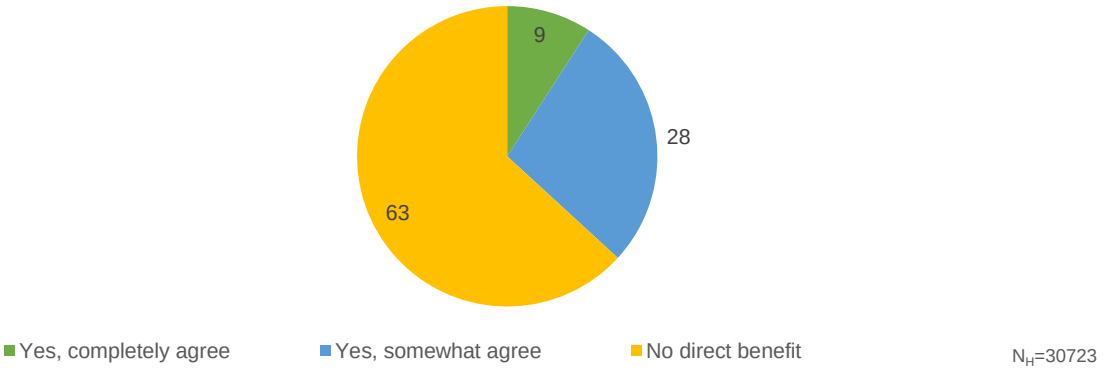


N_H=30723

G. Direct benefits in terms of income due to FHTC

Across the state, 9% of sampled HHs reported being in complete agreement that there had been direct benefits on their HH income since the installation of HH tap connection, while 63% HHs reported being in partial agreement against the same.

Figure 56: Households reported to have received direct benefits in terms of income due to FHTC



N_H=30723

3.11. User satisfaction

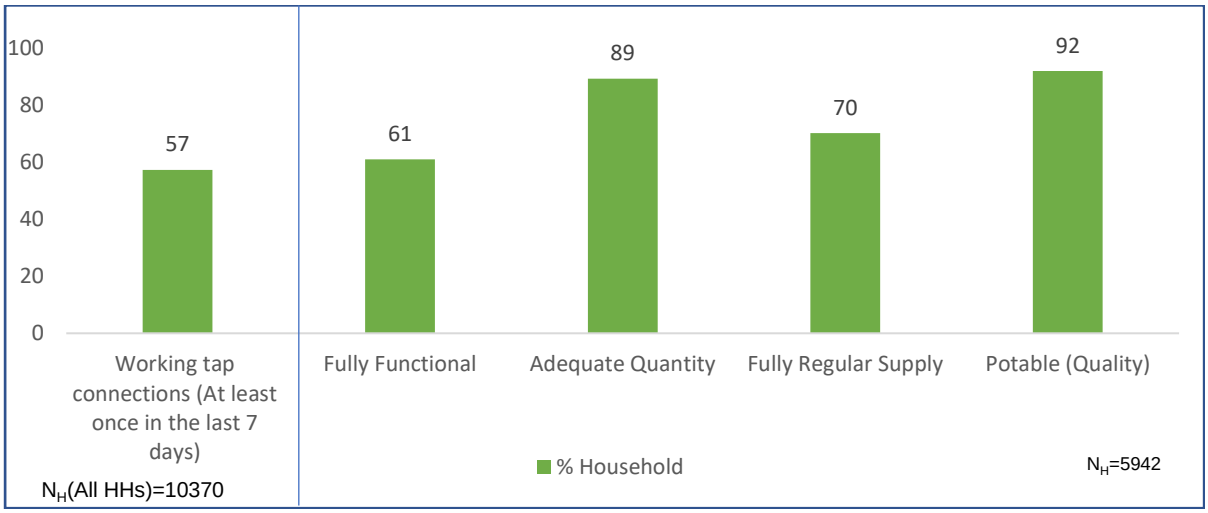
Table No. 14:	User satisfaction - more than 75% happy with FHTC services		
S. No.	**Parameter (N_h=30723)**		**In%**
1	Regularity	☹	58.2
2	Overall quality	☹	59.4
3	Colour	☹	60.4
4	Taste	☹	60.1
5	Odour	☹	57.5

Note:
Base (N_v)=1319 means all villages sampled and covered in Uttar Pradesh state
Base (N_H)=30723 means all households sampled and covered across the 1319 villages in Uttar Pradesh state
Base (N_H)=18072 means all households sampled where water sample be collected across the 1319 villages in Uttar Pradesh state
Base (N_H)=13689 means all households sampled where female members used to fetch water before HH tap connection
Base (N_H)=69 means all households sampled that had adolescent girls as one of HH members

4. Status of functionality in Har Ghar Jal villages

4.1. Overall Functionality (in %)

Figure 57: Functionality of HH tap connection for Har Ghar Jal districts



* *Fully Functional has been computed as = Adequate Quantity ∩ Fully Regular Supply ∩ Potable (Quality)*

Please note: For HGJ district, N_H=5942 implies all HHs where water was found on the day of the survey.

It has been found that 57 percent of the sampled HHs (N=10370) had working tap connections. 61 percent HHs in the state were found to have fully functional HH tap water connection. Moreover, almost 9 out of 10 of the households (89 percent) received adequate quantity (>=55 LPCD) of water supply and 7 out of 10 received regular supply (70 percent) of water. The on-site testing and lab test results of the water indicates that more than 9 out of 10 (92%) sampled households in the state receive potable water.

Table No. 15: Quantity, Regularity, and Quality of FHTC for Har Ghar Jal districts (%HH)

S. No.	District	Working tap connections (HHs which received water through FHTC at least once in the last 7 days) (% HH)	Fully functional (% HH)	Adequate Quantity (% HH)	Full Regular Supply (% HH)	Potable (Quality) (% HH)
1.	Ghaziabad	100	37	100	58	37
2.	Hapur	100	44	100	44	100
3.	Kannauj	100	100	100	100	100
4.	Etawah	100	39	55	76	97
5.	Jalaun	100	18	100	32	26
6.	Banda	100	100	100	100	100
7.	Chitrakoot	100	78	83	100	94
8.	Kaushambi	100	60	100	60	100
9.	Prayagraj	100	100	100	100	100
10.	Barabanki	100	52	87	54	99
11.	Ayodhya	100	56	67	72	100
12.	Mau	100	76	100	77	99
13.	Mirzapur	93	65	94	72	98
14.	Kanpur Nagar	90	50	79	61	88
15.	Mathura	88	20	62	87	30
16.	Varanasi	83	99	99	100	100
17.	Moradabad	75	82	98	84	100
18.	Amroha	75	79	89	92	98
19.	Muzaffarnagar	74	100	100	100	100
20.	Hardoi	74	63	82	67	99
21.	Aligarh	73	79	79	100	100
22.	Bijnor	71	78	82	78	100

Table No. 15: Quantity, Regularity, and Quality of FHTC for Har Ghar Jal districts (%HH)						
S. No.	**District**	**Working tap connections (HHs which received water through FHTC at least once in the last 7 days) (% HH)**	**Fully functional (% HH)**	**Adequate Quantity (% HH)**	**Full Regular Supply (% HH)**	**Potable (Quality) (% HH)**
23.	Meerut	71	77	97	81	96
24.	Gorakhpur	71	68	95	69	100
25.	Shahjahanpur	68	26	84	34	92
26.	Amethi	67	100	100	100	100
27.	Kanpur Dehat	67	75	100	75	100
28.	Bahraich	67	88	99	97	92
29.	Ghazipur	67	79	99	79	100
30.	Chandauli	67	78	98	80	100
31.	Shamli	66	57	93	60	100
32.	Hathras	66	32	65	46	100
33.	Kasganj	66	77	92	77	100
34.	Sant Ravidas Nagar	64	64	79	66	98
35.	Mahoba	63	63	95	68	100
36.	Deoria	61	58	100	58	100
37.	Bareilly	60	61	90	68	100
38.	Sitapur	60	63	100	63	100
39.	Pilibhit	57	38	90	40	100
40.	Unnao	57	11	100	75	11
41.	Balrampur-Up	57	45	89	51	97
42.	**UTTAR PRADESH**	**57**	**61**	**89**	**70**	**92**
43.	Saharanpur	56	95	95	100	100
44.	Rampur	54	28	72	28	100
45.	Ambedkar Nagar	54	90	100	94	96
46.	Budaun	53	56	74	69	100
47.	Lakhimpur Kheri	51	8	59	14	100
48.	Baghpat	50	86	99	100	87
49.	Hamirpur-Up	50	100	100	100	100
50.	Fatehpur	50	74	100	74	100
51.	Sonbhadra	50	45	89	49	90
52.	Shravasti	46	62	100	62	100
53.	Azamgarh	43	2	65	2	96
54.	Kushi Nagar	42	83	100	83	99
55.	Pratapgarh-Up	41	30	100	30	100
56.	Etah	40	19	68	64	23
57.	Farrukhabad	39	0	14	0	97
58.	Bulandshahr	36	59	100	100	59
59.	Jhansi	33	67	67	100	100
60.	Siddharth Nagar	33	30	98	31	98
61.	Sant Kabeer Nagar	33	31	97	31	100
62.	Firozabad	32	31	31	97	100
63.	Basti	30	70	89	81	93
64.	Lalitpur	29	46	95	49	100
65.	Sultanpur	25	47	100	47	100
66.	Jaunpur	23	97	100	97	100
67.	Mainpuri	17	100	100	100	100
68.	Agra	13	37	37	100	95
69.	Sambhal	0				
70.	Rae Bareli	0				
71.	Gonda	0				
72.	Maharajganj	0				
73.	Ballia	0				
# Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical, and bacteriological as given in Table 6 parameters (within acceptable/ permissible range) and onsite testing of pH. The details of laboratory test are mentioned in the table given above in the glossary.						

4.2. Perception of HHs from Har Ghar Jal villages on Outcome Indicators

Only around 11% of the households in aspirational districts reported increase in employment days since installation of FHTC. Only around 56% of the households in Har Ghar Jal villages reported reduction in time and effort in collecting water.

Figure 58: Perception of HHs on outcome indicators in Har Ghar Jal villages

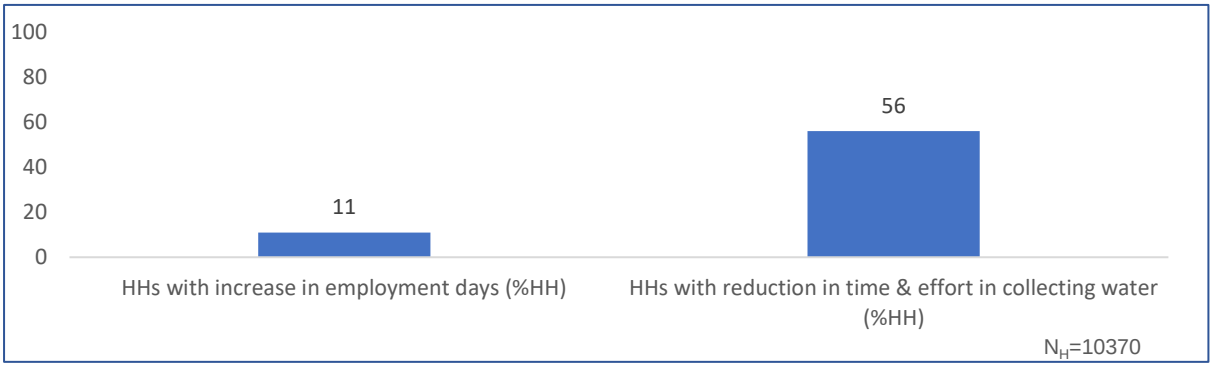


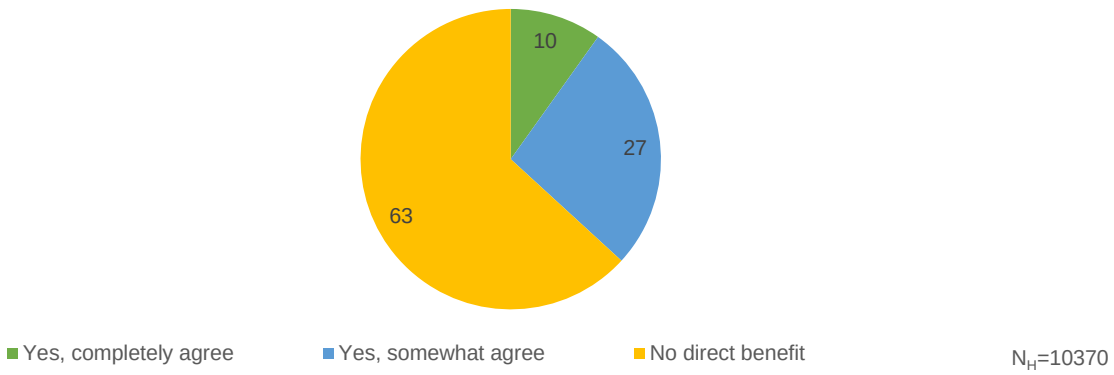
Table No. 16: Perception of HHs on outcome indicators in Har Ghar Jal villages (in %)			
Sl. No.	**Districts (N_H=10370)**	**Increased no. of employment days (% HH)**	**Reduction in time and effort in collecting water (% HH)**
1.	Mau	50	0
2.	Kanpur Nagar	44	82
3.	Jalaun	44	100
4.	Mirzapur	35	91
5.	Kanpur Dehat	32	76
6.	Shravasti	31	80
7.	Mahoba	30	64
8.	Jhansi	25	34
9.	Pratapgarh-Up	25	93
10.	Chandauli	25	80
11.	Unnao	24	66
12.	Barabanki	24	84
13.	Bareilly	22	23
14.	Prayagraj	22	100
15.	Pilibhit	21	69
16.	Sonbhadra	20	46
17.	Varanasi	19	75
18.	Rae Bareli	17	92
19.	Fatehpur	17	49
20.	Kaushambi	17	99
21.	Amroha	16	39
22.	Lakhimpur Kheri	16	83
23.	Budaun	15	35
24.	Siddharth Nagar	13	38
25.	Sant Kabeer Nagar	12	46
26.	Jaunpur	12	75
27.	Deoria	11	34
28.	**UTTAR PRADESH**	**11**	**56**
29.	Shahjahanpur	9	84
30.	Lalitpur	9	22
31.	Moradabad	8	23
32.	Kushi Nagar	8	34
33.	Etah	7	34
34.	Rampur	6	4
35.	Bahraich	6	84
36.	Ghaziabad	5	40
37.	Kasganj	5	56
38.	Etawah	5	86
39.	Hardoi	4	35
40.	Farrukhabad	4	33
41.	Saharanpur	3	6

Table No. 16: Perception of HHs on outcome indicators in Har Ghar Jal villages (in %)			
Sl. No.	**Districts (N_H=10370)**	**Increased no. of employment days (% HH)**	**Reduction in time and effort in collecting water (% HH)**
42.	Aligarh	3	25
43.	Banda	3	97
44.	Balrampur-Up	3	18
45.	Ghazipur	3	9
46.	Shamli	1	0
47.	Mathura	1	80
48.	Mainpuri	1	100
49.	Basti	1	34
50.	Gorakhpur	1	47
51.	Sant Ravidas Nagar	1	30
52.	Muzaffarnagar	0	0
53.	Bijnor	0	0
54.	Sambhal	0	0
55.	Meerut	0	25
56.	Baghpat	0	38
57.	Hapur	0	49
58.	Bulandshahr	0	93
59.	Hathras	0	33
60.	Agra	0	19
61.	Firozabad	0	10
62.	Sitapur	0	81
63.	Amethi	0	6
64.	Kannauj	0	100
65.	Hamirpur-Up	0	74
66.	Chitrakoot	0	89
67.	Ayodhya	0	20
68.	Ambedkar Nagar	0	100
69.	Sultanpur	0	29
70.	Gonda	0	0
71.	Maharajganj	0	0
72.	Azamgarh	0	13
73.	Ballia	0	38

4.3. Direct benefits in terms of income due to FHTC

Across the state, 10% of sampled HHs from Har Ghar Jal villages reported being in complete agreement that there had been direct benefits on their HH income since the installation of HH tap connection, while 27% reported being in partial agreement against the same.

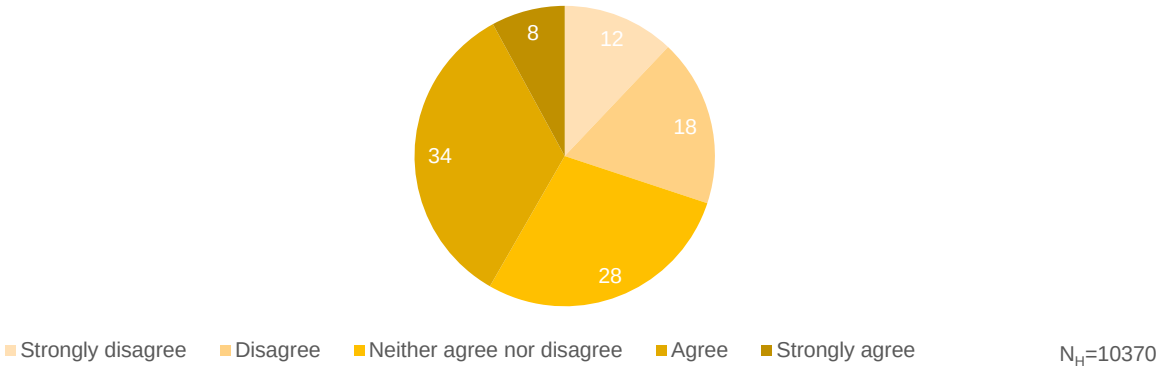
Figure 59: Households reported to have received direct benefits in terms of income due to FHTC in Har Ghar Jal districts



4.4. Change in social status

Less than half of the households in Har Ghar Jal villages felt HH tap connection earned them more respect, feeling of pride and brought a positive change in their social status.

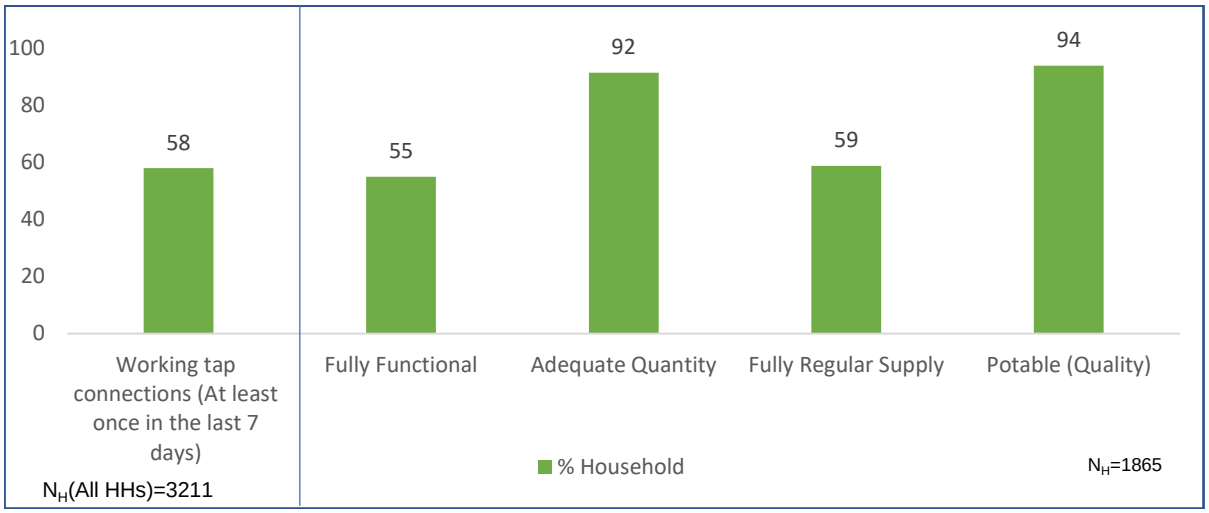
Figure 60: Households reported to have a positive change in social status in Har Ghar Jal districts



5. Status of functionality in aspirational districts

5.1. Overall Functionality (in %)

Figure 75: Functionality of HH tap connection for aspirational districts



** Fully Functional has been computed as = Adequate Quantity ∩ Fully Regular Supply ∩ Potable (Quality)*

Please note: For aspirational district, N_H=1865 implies all HHs where water was found on the day of the survey.

It has been found that 100 percent of the sampled HHs (N=3211) had working tap connections. 55 percent HHs in the state were found to have fully functional HH tap water connection. Moreover, more than 9 out of 10 of the households (92 percent) received adequate quantity (>=55 LPCD) of water supply and less than two-third of the sampled households received regular supply (59 percent) of water. The on-site testing and lab test results of the water indicates that more than 9 out of 10 (94%) sampled households in the state receive potable water.

Table No. 17: Quantity, Regularity, and Quality of FHTC for aspirational districts (%HH)

S. No.	District	Working tap connections (HHs which received water through FHTC at least once in the last 7 days) (% HH)	Fully functional (% HH)	Adequate Quantity (% HH)	Full Regular Supply (% HH)	Potable (Quality) (% HH)
1.	Fatehpur	73	54	100	54	100
2.	Chandauli	67	76	98	78	100
3.	Chitrakoot	62	78	96	82	99
4.	Balrampur-Up	59	32	83	37	98
5.	**UTTAR PRADESH**	**58**	**55**	**92**	**59**	**95**
6.	Sonbhadra	57	46	77	48	94
7.	Shravasti	55	56	100	56	100
8.	Bahraich	54	68	94	84	73
9.	Siddharth Nagar	36	19	78	19	94

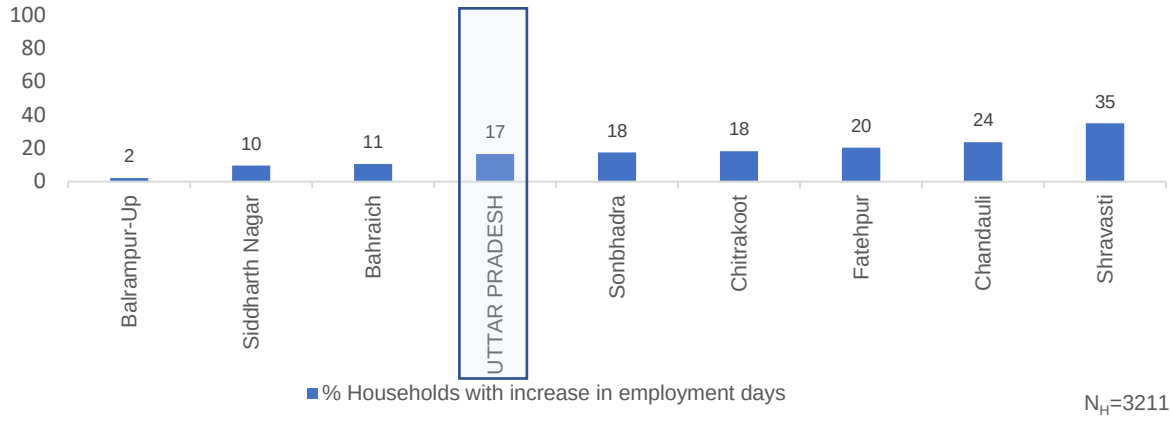
Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical, and bacteriological as given in Table 6 parameters (within acceptable/ permissible range) and onsite testing of pH. The details of laboratory test are mentioned in the table given above in the glossary.

5.2. Perception of HHs from aspirational districts on Outcome Indicators

A. Change in employment days since FHTC programmes/schemes

Only around 17% of the households in aspirational districts reported increase in employment days since installation of FHTC.

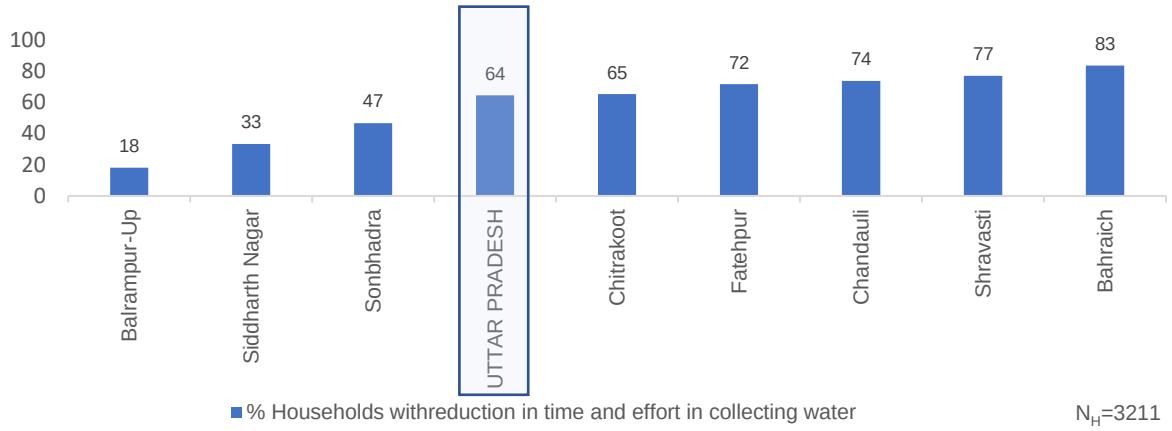
Figure 61: Household reported a change in employment days since FHTC programmes /schemes in Aspirational districts



B. Reduction in time and effort in collecting water

Only around 64% of the households in aspirational districts reported reduction in time and effort in collecting water.

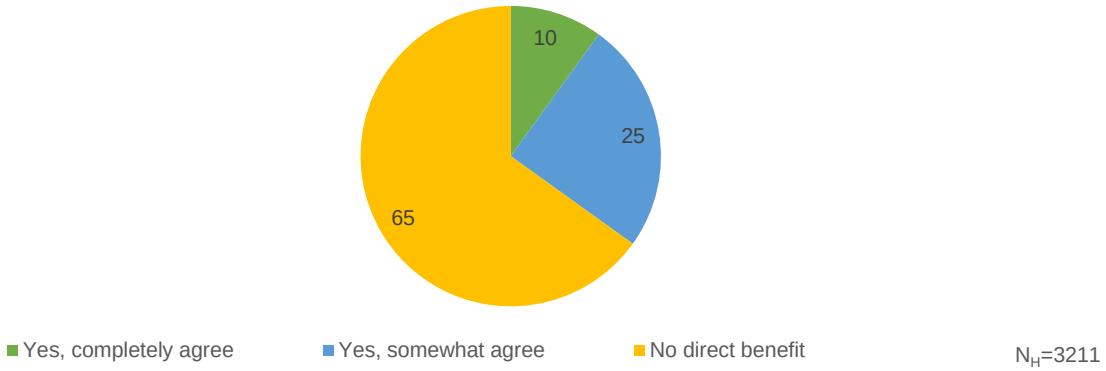
Figure 62: Households reported reduction in time and effort in collecting water in Aspirational districts



5.3. Direct benefits in terms of income due to FHTC

Across the state, 10% of sampled HHs from aspirational districts reported being in complete agreement that there had been direct benefits on their HH income since the installation of HH tap connection, while 25% reported being in partial agreement against the same.

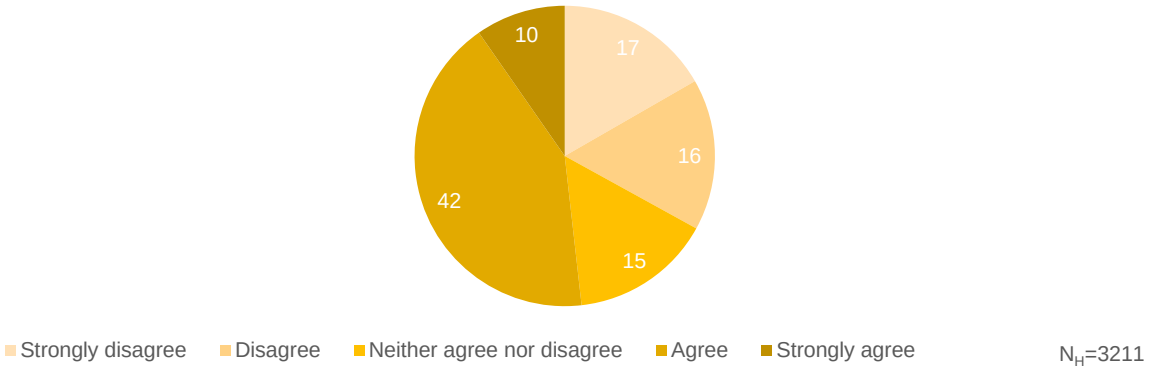
Figure 63: Households reported to have a positive change in social status in Aspirational districts



5.4. Change in social status

More than half of the households in aspirational districts felt HH tap connection earned them more respect, feeling of pride and brought a positive change in their social status.

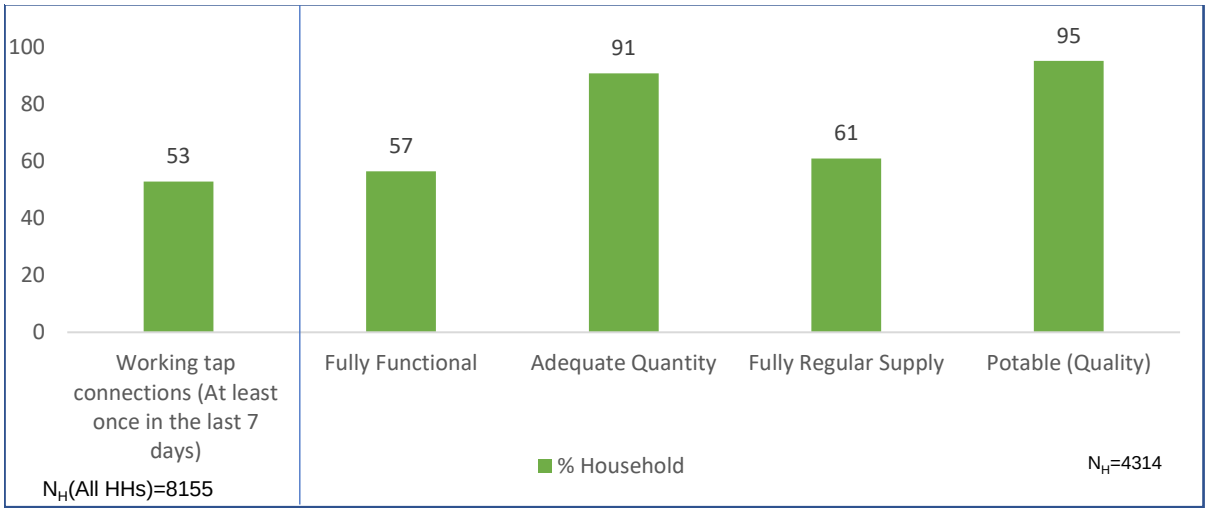
Figure 64: Households reported to have a positive change in social status in Aspirational districts



6. Status of functionality in JE-AES affected villages

6.1. Overall Functionality (in %)

Figure 65: Functionality of HH tap connection for JE-AES districts



** Fully Functional has been computed as = Adequate Quantity ∩ Fully Regular Supply ∩ Potable (Quality*

Please note: For JE-AES district, N_H=4314 implies all HHs where water was found on the day of the survey.

It has been found that 53 percent of the sampled HHs (N=8155) had working tap connections. 57 percent HHs in the state were found to have fully functional HH tap water connection. Moreover, more than 9 out of 10 the households (91 percent) received adequate quantity (>=55 LPCD) of water supply and about three-fourth received regular supply (61 percent) of water. The on-site testing and lab test results of the water indicates that almost all the (95%) sampled households in the state receive potable water.

Table No. 18: Quantity, Regularity, and Quality of FHTC for JE-AES districts (%HH)

S. No.	District	Working tap connections (HHs which received water through FHTC at least once in the last 7 days) (% HH)	Fully functional (% HH)	Adequate Quantity (% HH)	Full Regular Supply (% HH)	Potable (Quality) (% HH)
1.	Mau	82	74	100	75	99
2.	Lakhimpur Kheri	81	17	79	24	94
3.	Hardoi	77	36	63	42	99
4.	Sitapur	64	72	99	72	99
5.	Rae Bareli	64	52	93	62	84
6.	Saharanpur	62	88	90	99	99
7.	Balrampur-Up	59	32	83	37	98
8.	Kanpur Dehat	57	86	100	87	100
9.	Gorakhpur	57	66	95	67	100
10.	Deoria	57	58	100	66	84
11.	Shravasti	55	56	100	56	99
12.	Bahraich	54	68	94	84	73
13.	**UTTAR PRADESH**	**53**	**57**	**91**	**61**	**95**
14.	Ballia	45	98	100	98	100
15.	Maharajganj	44	84	100	85	99
16.	Basti	43	61	86	64	94
17.	Siddharth Nagar	36	19	78	19	94
18.	Azamgarh	36	18	87	20	96
19.	Gonda	31	1	88	2	93
20.	Kushi Nagar	31	71	99	72	99
21.	Sant Kabeer Nagar	24	31	97	31	100

Table No. 18: Quantity, Regularity, and Quality of FHTC for JE-AES districts (%HH)						
S. No.	**District**	**Working tap connections (HHs which received water through FHTC at least once in the last 7 days) (% HH)**	**Fully functional (% HH)**	**Adequate Quantity (% HH)**	**Full Regular Supply (% HH)**	**Potable (Quality) (% HH)**
# Potable water has been considered basis testing of water samples through laboratory tests for physical, chemical, and bacteriological as given in Table 6 parameters (within acceptable/ permissible range) and onsite testing of pH. The details of laboratory test are mentioned in the table given above in the glossary.						

6.2. Perception of HHs from aspirational districts on Outcome Indicators

A. Change in employment days since FHTC programmes/schemes

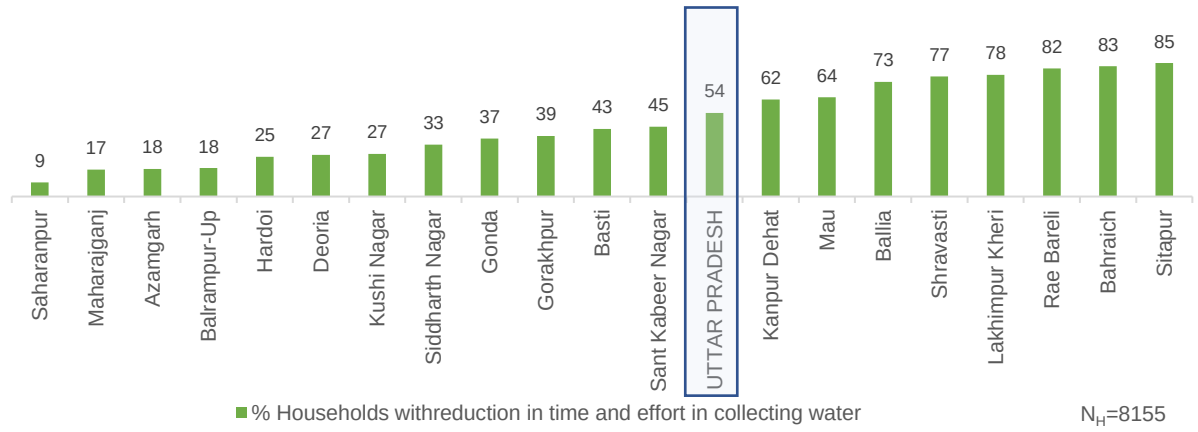
Only around 10% of the households in JE-AES affected districts reported increase in employment days since installation of FHTC.

Figure 66: Household reported a change in employment days since FHTC programmes /schemes in JE-AES districts

B. Reduction in time and effort in collecting water

Only around 54% of the households in JE-AES affected districts reported reduction in time and effort in collecting water.

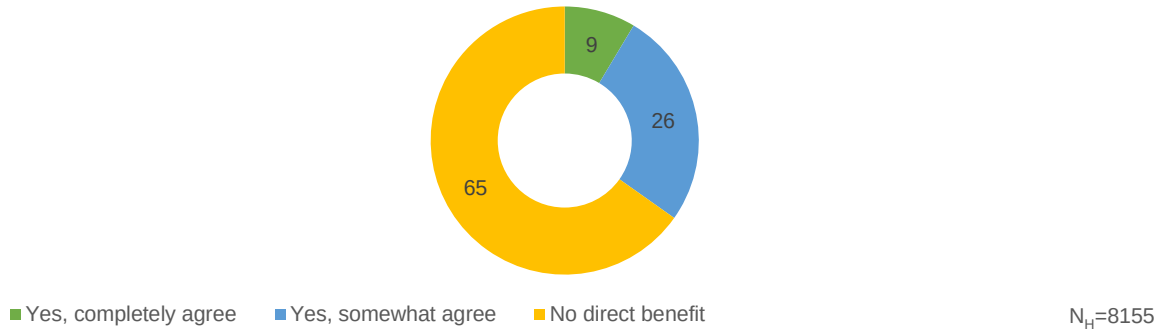
Figure 67: Households reported reduction in time and effort in collecting water in JE-AES districts



6.3. Direct benefits in terms of income due to FHTC

Across the state, 9% of sampled HHs from JE-AES affected districts reported being in complete agreement that there had been direct benefits on their HH income since the installation of HH tap connection, while 26% reported being in partial agreement against the same.

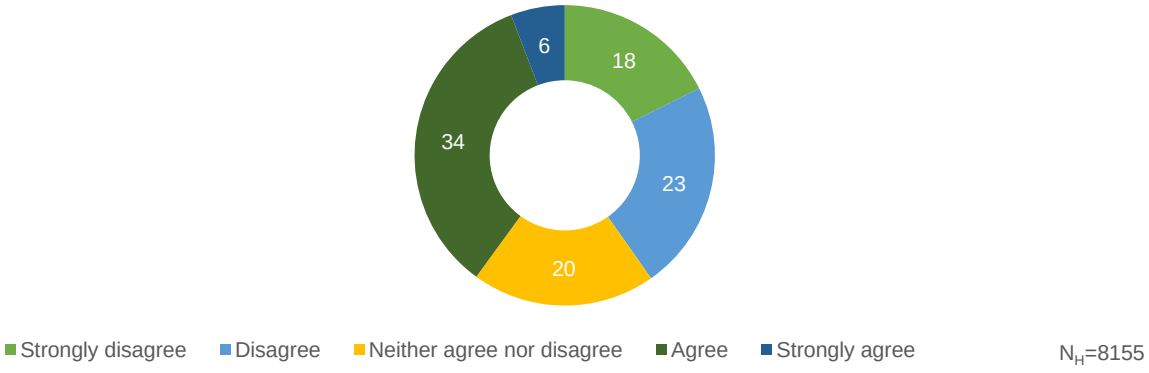
Figure 68: Households reported to have received direct benefits in terms of income due to FHTC in JE-AES districts



6.4. Change in social status

4 out of ten households in JE-AES affected districts felt HH tap connection earned them more respect, feeling of pride and brought a positive change in their social status.

Figure 69: Households reported to have a positive change in social status in JE-AES districts



7. Annexure

Table No. 19: List of replaced villages

S. No.	District Name	Village Name	Status of the Scheme (No Scheme/Replaced & Defunct)	Remarks
1	Bijnor	Allhepur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Basera Narain. Scheme found to be functional in replacement village
2	Moradabad	Akka Bhikanpur Mustahkam	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Didaura. Scheme found to be defunct in replacement village
3	Moradabad	Akbarpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Guaroo. Scheme found to be functional in replacement village
4	Sambhal	Aitauli	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Salarpur Kalan. Scheme found to be functional in replacement village
5	Rampur	Bhoobra Ehatmali	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Hardashpur Kotra. Scheme found to be defunct in replacement village
6	Baghpat	Rataul	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Rawan Urf Baragoan. Scheme found to be defunct in replacement village
7	Ghaziabad	Dasna Dehat	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Ataur. Scheme found to be functional in replacement village
8	Hapur	Malakpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Harsinhpur. Scheme found to be defunct in replacement village
9	Aligarh	Pisava	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Nagla Padam. Scheme found to be defunct in replacement village
10	Aligarh	Dhanipur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Harduaganj Dehat. Scheme found to be defunct in replacement village
11	Hathras	Bargawan	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Agsauli. Scheme found to be defunct in replacement village
12	Mathura	Dhana Shamsabad	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Bhahai. Scheme found to be functional in replacement village
13	Agra	Bainpur Mustkil	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Midhakur. Scheme found to be functional in replacement village
14	Firozabad	Jarauli Khurd	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Gudun. Scheme found to be functional in replacement village
15	Firozabad	Kalahri	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Dhatari. Scheme found to be functional in replacement village
16	Kasganj	Allipur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Athaiya. Scheme found to be functional in replacement village
17	Mainpuri	Kharpary	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Ghitoli. Scheme found to be functional in replacement village
18	Mainpuri	Vijaipur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Dudgaun. Scheme found to be defunct in replacement village

Table No. 19: List of replaced villages				
S. No.	**District Name**	**Village Name**	**Status of the Scheme (No Scheme/Replaced & Defunct)**	**Remarks**
19	Mainpuri	Nakau	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Kakan. Scheme found to be functional in replacement village
20	Bareilly	Khimupura	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Basawanpur. Scheme found to be defunct in replacement village
21	Shahjahanpur	Nigohi	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Ladholi. Scheme found to be defunct in replacement village
22	Shahjahanpur	Bhartauli	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Nagla Haloo. Scheme found to be functional in replacement village
23	Lakhimpur Kheri	Khanjanpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Mailani. Scheme found to be functional in replacement village
24	Sitapur	Sakaran	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Sultanapur. Scheme found to be functional in replacement village
25	Unnao	Sirdharpur Gair Ahatmali	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Jale Pur. Scheme found to be functional in replacement village
26	Unnao	Hadha	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Satan. Scheme found to be functional in replacement village
27	Unnao	Bay	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Garhewa. Scheme found to be defunct in replacement village
28	Lucknow	Chandpur Khanipur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Bahdanamau. Scheme found to be functional in replacement village
29	Rae Bareli	Bannawa	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Thulendi. Scheme found to be functional in replacement village
30	Rae Bareli	Godwara	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Garhi Mutwalli. Scheme found to be functional in replacement village
31	Etawah	Chaubeypur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Ramet. Scheme found to be defunct in replacement village
32	Auraiya	Jagatpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Mohari. Scheme found to be functional in replacement village
33	Kanpur Dehat	Jahangirpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Sidhamau. Scheme found to be defunct in replacement village
34	Kanpur Dehat	Shakhin Buzurg	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Devki Purwa. Scheme found to be defunct in replacement village
35	Jhansi	Karkos	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Behta Sant. Scheme found to be functional in replacement village
36	Jhansi	Madha Dilawali	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Mawai. Scheme found to be defunct in replacement village
37	Jhansi	Taktoli	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Pancham Pura. Scheme found to be defunct in replacement village

Table No. 19: List of replaced villages				
S. No.	**District Name**	**Village Name**	**Status of the Scheme (No Scheme/Replaced & Defunct)**	**Remarks**
38	Lalitpur	Dhangoul	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Aivani. Scheme found to be defunct in replacement village
39	Lalitpur	Siron Khurd	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Nagwans. Scheme found to be defunct in replacement village
40	Lalitpur	Ajnora	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Alapur. Scheme found to be functional in replacement village
41	Hamirpur-Up	Bhatpura Danda	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Bhauli Danda. Scheme found to be functional in replacement village
42	Hamirpur-Up	Dhundh Pur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Helapur Danda. Scheme found to be functional in replacement village
43	Hamirpur-Up	Para Rai Pura	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Isauli. Scheme found to be functional in replacement village
44	Hamirpur-Up	Vidokhar Purai	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Pateora Danda. Scheme found to be functional in replacement village
45	Hamirpur-Up	Mamrejpur Danda	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Pachkhura Buzurg. Scheme found to be defunct in replacement village
46	Hamirpur-Up	Uparhaka	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jalalpur. Scheme found to be defunct in replacement village
47	Hamirpur-Up	Akauna	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Bangra. Scheme found to be defunct in replacement village
48	Hamirpur-Up	Audera	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Tooka . Scheme found to be functional in replacement village
49	Hamirpur-Up	Parohri	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Kamehriya. Scheme found to be functional in replacement village
50	Chitrakoot	Ram Nagar	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Mawai Khurd. Scheme found to be defunct in replacement village
51	Fatehpur	Aladadpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Deokali. Scheme found to be functional in replacement village
52	Pratapgarh-Up	Ajgra	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jaisinghgarh. Scheme found to be defunct in replacement village
53	Kaushambi	Nasirpur Bari Sultan	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Samaspur. Scheme found to be functional in replacement village
54	Ambedkar Nagar	Akbarpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Babhanpur. Scheme found to be functional in replacement village
55	Ambedkar Nagar	Rampur Sahabram	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Parsanpur. Scheme found to be functional in replacement village
56	Ambedkar Nagar	Nariyawan	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Pratappur Chamurkha. Scheme found to be functional in replacement village

Table No. 19: List of replaced villages				
S. No.	**District Name**	**Village Name**	**Status of the Scheme (No Scheme/Replaced & Defunct)**	**Remarks**
57	Ambedkar Nagar	Chandpur Bhatura	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Hiri Pakriya. Scheme found to be functional in replacement village
58	Amethi	Lugari	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Dhana Pur. Scheme found to be functional in replacement village
59	Sultanpur	Maniyarpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Gopalpur. Scheme found to be defunct in replacement village
60	Sultanpur	Somnabhar	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Belamohan. Scheme found to be functional in replacement village
61	Bahraich	Mohammad Nagar	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jhigaha. Scheme found to be defunct in replacement village
62	Shravasti	Kharch	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Gothwa. Scheme found to be functional in replacement village
63	Balrampur-Up	Harraiyasat Gharwa	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Majgawan. Scheme found to be functional in replacement village
64	Balrampur-Up	Davipatan	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Ganwaria Tulsipur (Dehat). Scheme found to be functional in replacement village
65	Balrampur-Up	Raniapur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Ratanpur Jhingha. Scheme found to be functional in replacement village
66	Siddharth Nagar	Chhatahari	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Pagua. Scheme found to be defunct in replacement village
67	Siddharth Nagar	Biskohar	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Mahulani. Scheme found to be defunct in replacement village
68	Basti	Benipur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Gaharwar Joot. Scheme found to be defunct in replacement village
69	Basti	Sarai Ghat Urf Lalganj	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Bhatha. Scheme found to be defunct in replacement village
70	Sant Kabeer Nagar	Belahi	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jakhauta. Scheme found to be defunct in replacement village
71	Sant Kabeer Nagar	Natwabar	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Padari. Scheme found to be defunct in replacement village
72	Maharajganj	Chauk	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Jagdaur. Scheme found to be functional in replacement village
73	Maharajganj	Pratppur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Barahari. Scheme found to be defunct in replacement village
74	Maharajganj	Partawal	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Basahiya Khurd. Scheme found to be defunct in replacement village
75	Gorakhpur	Bajahee	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Marhta. Scheme found to be functional in replacement village

Table No. 19: List of replaced villages				
S. No.	**District Name**	**Village Name**	**Status of the Scheme (No Scheme/Replaced & Defunct)**	**Remarks**
76	Gorakhpur	Mudila Urf Mundera	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Parmeshwarpur. Scheme found to be functional in replacement village
77	Kushi Nagar	Tamakuhi Raj	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Saphi. Scheme found to be functional in replacement village
78	Deoria	Mundadih	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Narainpur. Scheme found to be defunct in replacement village
79	Azamgarh	Ghaghra	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jalalpur. Scheme found to be defunct in replacement village
80	Azamgarh	Surhan	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Rudari. Scheme found to be defunct in replacement village
81	Azamgarh	Varehta	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jiyapur. Scheme found to be defunct in replacement village
82	Mau	Atrari	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Bhujahi. Scheme found to be defunct in replacement village
83	Mau	Yakubpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Mahpur. Scheme found to be defunct in replacement village
84	Ballia	Sonwani	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Bharatpur Chaubey. Scheme found to be functional in replacement village
85	Ballia	Bariya	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Patkauli. Scheme found to be defunct in replacement village
86	Ballia	Kharouni	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Khorouli. Scheme found to be defunct in replacement village
87	Jaunpur	Mahagupur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Dharmapur. Scheme found to be functional in replacement village
88	Jaunpur	Baiza Bad	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Chaktali. Scheme found to be functional in replacement village
89	Ghazipur	Salempur Baghai	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Hiranarpur. Scheme found to be functional in replacement village
90	Ghazipur	Nasirabad	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Nari Pachdewa. Scheme found to be functional in replacement village
91	Ghazipur	Aalapur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Sukhdehra. Scheme found to be defunct in replacement village
92	Varanasi	Bartholi	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Pahadpur. Scheme found to be defunct in replacement village
93	Varanasi	Gahura	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Kapasa. Scheme found to be functional in replacement village
94	Varanasi	Thathara	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Vishun Pur. Scheme found to be defunct in replacement village

Table No. 19: List of replaced villages

S. No.	District Name	Village Name	Status of the Scheme (No Scheme/Replaced & Defunct)	Remarks
95	Varanasi	Chandpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Gurvat. Scheme found to be defunct in replacement village
96	Varanasi	Phulwariya	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Gajadharpur. Scheme found to be defunct in replacement village
97	Varanasi	Kurav	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Chitawni. Scheme found to be functional in replacement village
98	Sant Ravidas Nagar	Gaura Z.Shripur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Kusura. Scheme found to be functional in replacement village
99	Sant Ravidas Nagar	Arjunpur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Dattipur. Scheme found to be defunct in replacement village
100	Sant Ravidas Nagar	Derawa	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Khedopur N. Koirauna. Scheme found to be defunct in replacement village
101	Sant Ravidas Nagar	Mulapur Uparwar	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Ugapur. Scheme found to be defunct in replacement village
102	Sonbhadra	Negae	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Barayeel. Scheme found to be defunct in replacement village
103	Sonbhadra	Barawe	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Fulawar. Scheme found to be functional in replacement village
104	Lakhimpur Kheri	Murgaha	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Dharama Pur. Scheme found to be functional in replacement village
105	Kanpur Dehat	Gausganj	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Fatehpur Roshanai. Scheme found to be defunct in replacement village
106	Mirzapur	Fuliyari	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Devari Kalan. Scheme found to be functional in replacement village
107	Jhansi	Parichha	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Garhmau. Scheme found to be defunct in replacement village
108	Sonbhadra	Madhupur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Gordiha. Scheme found to be functional in replacement village
109	Sonbhadra	Mubarakpur	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Baghori. Scheme found to be functional in replacement village
110	Varanasi	Lohta	No Scheme	No Scheme present in the sampled village, hence replaced with Village- Paterwan. Scheme found to be functional in replacement village
111	Kanpur Dehat	Nabipur	No Scheme / Defunct Scheme	No Scheme present in the sampled village, hence replaced with Village- Jaraila. Scheme found to be defunct in replacement village