

Assessment of functionality status of household tap connections in rural areas (2020-21)

State report

Assam



Submitted to:
National Jal Jeevan Mission
Department of Drinking Water and Sanitation
Ministry of Jal Shakti

Report prepared by:
NIELSEN (INDIA) PRIVATE LIMITED

Table of Contents

1. Introduction	2
2. Objectives of the study	2
3. Approach and Methodology	2
4. Key Findings	3
5. Conclusions	7
Annexure 1: List of village with no scheme/defunct schemes/under construction	9
Annexure 2: List of villages with schemes supplying only through tap stand	18
Annexure 3: List of villages where 15 FHTCs were not found	19
Annexure 4: Indicative proportion of functional tap connections by districts	20
Annexure 5: List of villages where samples failed for given quality parameter	21

1. Introduction

Announced in 2019, the Jal Jeevan Mission – Har Ghar Jal (JJM – HGJ) is implemented by Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti in partnership with States/ UTs. JJM aims to provide a Functional Household Tap Connection (FHTC) to every rural home in the country by 2024. A household tap connection is said to be functional when the tap water supply is of adequate quantity (minimum 55 lpcd) and prescribed quality (as per BIS:10500) on regular and long-term basis. Further, JJM seeks to promote holistic management of local water sources and not just provide tap water connections.

The DDWS had engaged Nielsen (India) Private Limited to undertake 'Functionality Assessment' of household tap connections. The assessment covered household tap connections in 6,992 villages across 704 districts from 31 States/ UTs. The survey was undertaken in November – December 2020.

2. Objectives of the study

The main objectives were an assessment of Functionality of Household Tap Connections (FHTCs) under JJM on various parameters; ascertaining, in the form of data, on-ground progress of JJM in terms of adequate quantity of prescribed quality of drinking water supplied to rural households on regular basis; and engaging with Gram Panchayats and/ or its sub-committees of the sample villages and soliciting their feedbacks and recommendations for improving the programme implementation; and to suggest measures for mid-course correction for improvement in functionality of household tap connections.

3. Approach and Methodology

The approach followed was to assess the functionality of household tap connections (within premises) and in-village drinking water supply infrastructure. The selection of sample villages was from the JJM-Integrated Management Information System (IMIS) data-base of villages having at least 15 household tap connections. In each sample village, the largest PWS scheme was sampled. The survey was planned as in-person Computer Aided Personal Interview (CAPI) survey, and included an on-ground assessment of the functionality of sample PWS schemes and tap connections attached to the same. The survey included measurement of the quantity of water received at the household level through the tap connection, as well as water testing to check whether the quality of the drinking water is as per the BIS standards, using Field Test Kits (FTKs) and H₂S vials. The study also collected supply side information, including assessment of the quantity of water supplied by the scheme, operation and maintenance arrangements, availability and functionality of scheme level infrastructure and the aspects related to source and system sustainability.

A sample of 10 villages from every district in the State were selected following probability proportionate to size (PPS) systematic random sampling method ensuring due representation of SC/ SC majority villages as well as quality-affected villages. In each selected village, households for the survey were selected at head end, middle and tail end of the selected piped water supply network. In Assam the survey was conducted in 3202 households from 323 villages in 33 districts.

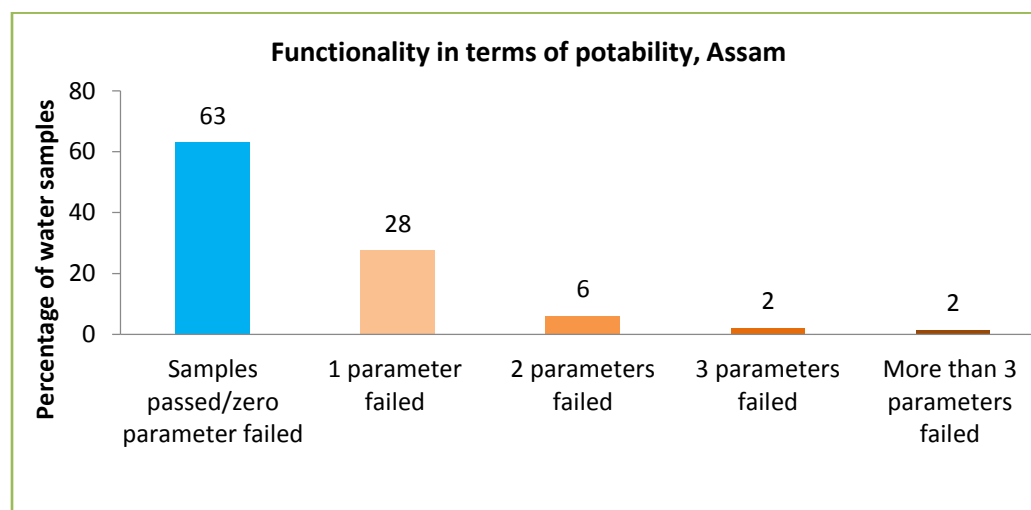
4. Key Findings

SL.	INDICATOR	Assam	India
Household level			
1	Average household size	5.1	5.6
2	Percent of households using FHTC for drinking purpose	90.5	88.9
3	Percentage of households reported working tap connections (supply at least one day in last 7 days)	87.9	93.6
4	Number of water supply days in a usual week		
4a	1 – 2 days	4.9	7.6
4b	3 – 4 days	7.3	10.4
4c	5 – 6 days	2.9	1.5
4d	7 days	84.9	80.5
5	Number of water supply days in the last week		
5a	0 days	8.2	2.4
5b	1 – 2 days	6.3	9.7
5c	3 – 4 days	11.1	14.8
5d	5 – 6 days	7.7	4.9
5e	7 days	66.8	68.1
6	Percentage of households reporting reliability of water supply days	86.4	86.5
7	Percentage of households reporting tap connections functioning continuously for more than 15 days in a month for last 12 months	80.2	84.6
8	Average number of times water is supplied on the days of supply		
8a	1 time	63.5	56.6
8b	2 times	34.9	28.2
8c	3 times	1.1	6.1
8d	4 times/24 hours	0.5	9.1
9	Percentage of households reporting reliability of supply for different supply timings	86.3	84.3
10	Percentage of households reporting adequate water pressure for different supply timings		
10a	Morning	77.7	80.1
10b	Afternoon	82.7	84.6
10c	Evening	25.0	84.8
11	Percentage of households reported paying water tariff – separately or along with other taxes	32.4	52.8
12	Percentage of households reported receiving 55 lpcd or more	84.5	83.5
13	Percentage of households having potable water *	63.0	61.3
14	Percentage of households reporting regularity of supply	83.7	87.2
15	Percentage of households reporting functional tap connections	44.3	47.8
Village level			
16	Percentage villages having functional water and sanitation committees	65.0	48.5
17	Percentage of functional schemes in the sample villages considering all schemes (supplying water any day in the last 7 days)	78.0	86.0
18	Percentage of in-village schemes having O&M undertaken by village water	74.5	83.1

SL.	INDICATOR	Assam	India
	and sanitation committee or by Panchayat		
19	Percentage of sample schemes reported having faced challenges in the last one year		
19a	Inadequate infrastructure	42.6	40.2
19b	Poor water availability at the source	14.2	33.0
19c	Poor maintenance	38.1	46.2
19d	Natural calamity	63.9	63.4
20	Percentage of schemes reporting measure to improve source sustainability	39.3	59.9
21	Number of sample villages found with no scheme (defunct/under construction/not handed over/not constructed)	98	751

Figures 1, 2 and 3 depicts the functionality aspects of the household tap connections in Assam. Figure 1 presents the details of the potability aspects – the proportion of samples which have qualified as per all 13-15 parameters, as well as the proportion of sample which have failed due to one/two/three/more than three parameters.

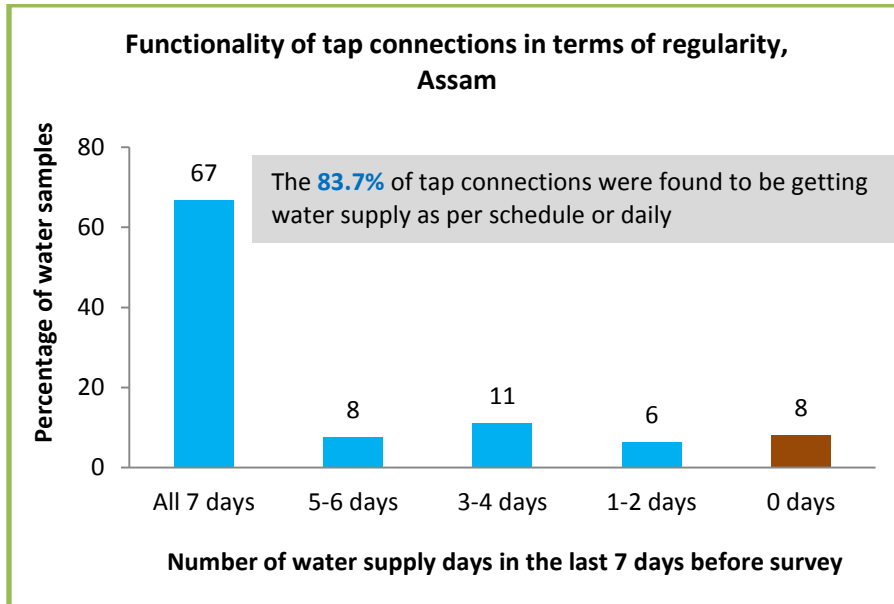
Fig 1: Functionality of the household tap connection in terms of potability - Assam



Base: Households with water quality testing done, N: 200

Figure 2 presents functionality in terms of regularity, and presents the water supply situation in the last 7 days (before survey date). This includes information on the proportion of taps supplying water on all 7 days, 5-6 days, 3-4 days, 1-2 days and zero days in the last 7 days. As not all schemes are planned to supply water daily, the information of the proportion of taps supplying water daily or as per the water supply schedule is also presented.

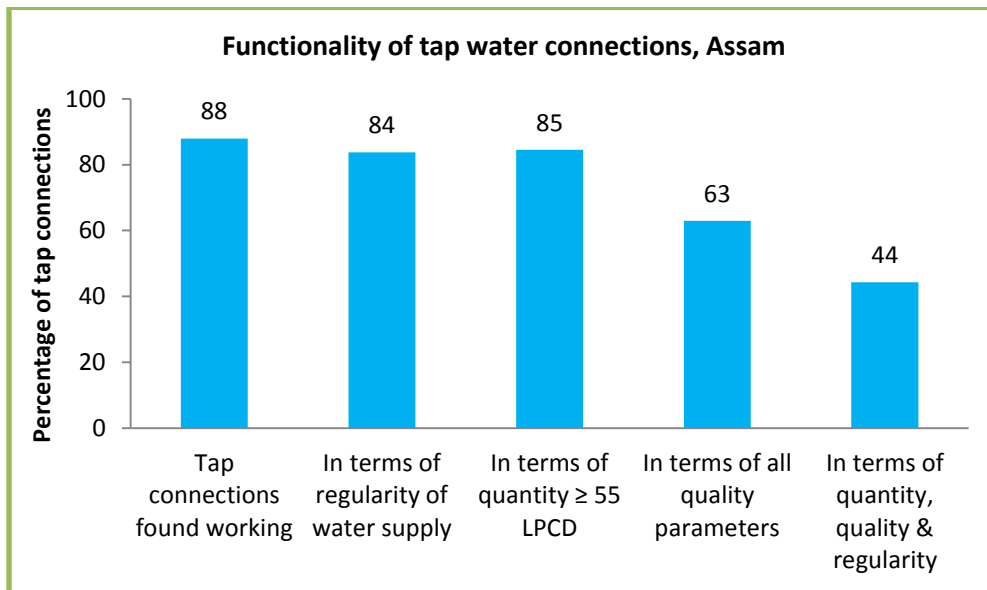
Fig 2: Functionality of the household tap connection in terms of regularity - Assam



Base: All Households, N: 3202

Figure 3, presents the summary situation of the working tap connections (defined as supplying water atleast on one day in the last 7 days), the functionality in terms of the proportion of tap connections which have qualified regularity, quantity, quality parameters, and the proportion which have qualified all 3 parameters.

Fig 3: Overall functionality of the household tap connection - Assam

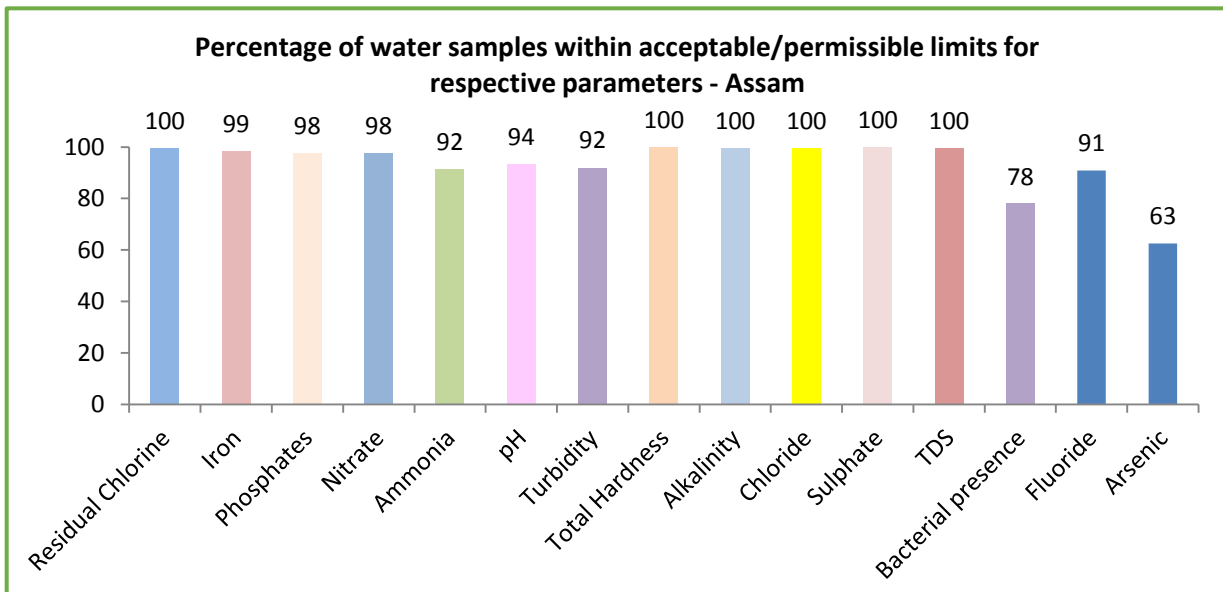


Base: Total count of tap connections considered for functionality assessment, N: 2798

A total of 200 water samples were tested as per BIS: 10,500 standards for all 13 parameters. Of these samples, 11 samples included testing for Fluoride and 8 samples included testing for Arsenic. All the water samples were taken from a randomly selected head end household of selected sample PWS schemes in the sample villages of Assam – one sample for each of separate water sources in the village. The figure below shows the proportion of samples in which different parameters were found within acceptable/permissible limits.

As can be seen, almost all the samples (98% or more) had Residual Chlorine, Iron, Phosphates, Nitrate, Total Hardness, Alkalinity, Chloride, Sulphate, TDS and Fluoride within acceptable/permissible limits. The key water quality issues were bacteriological (total coliform) presence in 22 percent of the water samples. In the villages affected by arsenic, about a third of the samples were not found to be within acceptable limits. In the case of fluoride affected villages, one of the eleven samples were outside the permissible limit. The main issues with the samples which were not found potable were Bacteriological presence, Ammonia, Turbidity and pH being above permissible limits.

Fig 4: Percentage of water samples within acceptable/permissible limits for respective parameters – Assam



Pic 1: Household survey being undertaken in one of the villages in Assam



Pic 2: Water quality sample testing being undertaken in a village in Assam



5. Conclusions

Assam had slightly lower functional tap connections (44.3%) as compared with the national average. About 85 percent of the households were estimated to be supplied 55 lpcd or more and 84 percent with a regular water supply. However, the proportion of households receiving potable water is less - about 63

percent. Since the tap connections considered to be functional were as per the JJM guidelines of including adequate quantity (55 lpcd or more), potability (as per BIS:10500 standards) and regularity of water supply (all days or as per the water supply schedule), the reason that a lower proportion of households had functional tap connections is mostly due to the lower proportion of households having a combination of potability and regularity (49.8% households having adequate quantity and potable water; 50.9% households having potable water received on a regular basis; while 75.2% households had adequate quantity of water supply on a regular basis).

The main issues with the samples which were not found potable were Bacteriological presence, Ammonia, Turbidity and pH being above permissible limits. Moreover, a third of the samples affected by Arsenic were found above the acceptable limit.

For most of the schemes (84.9%) water supply was scheduled as daily supply but there seems to be variation from the schedule. A much lower proportion of those reporting an usual daily water supply (84.9%), has reported receiving water supply on a daily basis in the last 7 days (66.8%). Almost two thirds of the households (63.9%) have reported being supplied water once a day, and the rest, mostly two times. A majority of the households have reported a reliability of water supply timings as well as adequate water pressure.

However, despite good quality water supply service delivery, the fact that only 32.4 per cent of the households have reported paying water tariff is an area of concern. As per the JJM guidelines, the State Government needs to ensure 100% fund requirement for operation and maintenance of the schemes are met by the Agency responsible for water supply provision to function as a utility.

Sixty-five per cent of the villages have reported having water and sanitation committees – of these villages, in about three-fourths (74.5%), the water and sanitation committees were actually taking responsibility for operation and maintenance activities of the PWS schemes. As reported by the communities ‘natural calamities, inadequate infrastructure and poor maintenance’ were the main challenges faced by the schemes. About two-fifth of the schemes had taken any initiatives for source sustainability.

Annexures to this report includes:

- List of village with no scheme/defunct schemes/under construction is placed as Annexure 1,
- List of villages with schemes supplying only through tap stand/stand posts is placed as Annexure 2,
- List of villages where 15 FHTCs were not found is placed as Annexure 3,
- Indicative proportion of functional tap connections by districts is placed as Annexure 4, and
- List of villages where samples failed for given quality parameter is placed as Annexure 5

Annexure 1: List of village with no scheme/defunct schemes/under construction

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
1.	Baksha	Baska	Bhogpara Vcdc	Bhogpara	Ahopa Bangnamari Pipe Water Supply Scheme	MVS	Scheme is defunct	Scheme is not functional since 2019. Tap stand also not functioning.
2.	Baksha	Dham Dhama	Ghoramara Vcdc	Niz-Barsial	Siral PWSS	MVS	Scheme is defunct	Scheme is defunct
3.	Baksha	Goreswar	Niz Betna Vcdc	Umananda Than	Kurupar PWSS	MVS	Scheme is defunct	This scheme has been disrupted since January 2020 due to lack of diesel supply and electricity supply unavailable.
4.	Barpeta	Bajali (Part)	Baghmara	Baghmara	Baghmara P.W.S.S.	SVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage and diesel machine not having sufficient pressure
5.	Barpeta	Bhawanipur	Dabaliapara	Jogir Pam	Jogirpam Dhakaliapara PWSS	MVS	Under construction	Till date the scheme didn't start due to: 1. Pump not available 2. Electricity not available
6.	Barpeta	Bhawanipur	Hazipara	Joypur	Joypur PWSS	SVS	Scheme is defunct	From February 2014 scheme was non-functional due to unavailability of power supply & pipe line damage.
7.	Barpeta	Chakchaka (Part)	Madulijar	Saru Harid	Saruharid PWSS	SVS	Scheme is defunct	Scheme is not functional since last 11 years
8.	Barpeta	Gobardhana (Part)	Uttar Howly	Gandari Para	Mechpara Part PWSS	MVS	Scheme is defunct	Scheme is not functional due to panel board damage and pipeline leakage
9.	Barpeta	Pakabetbari	Dakhin Betbari	Bariar Pathar	Bariar Pathar PWSS	SVS	Scheme is defunct	Scheme is not functional since last 2 years due to lack of diesel supply and electricity
10.	Barpeta	Rupsi	Kalgachia	Amguri	Spot Source	SVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage
11.	Biswanath	Biswanath	Panibharal	Gowal Toli	Gorbhitor Guwaltoli PWSS	MVS	No scheme	No scheme in the village

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
12.	Biswanath	Sakomatha	Balichang	No.3 Barpathar	Borpathar PWSS	SVS	No scheme	No scheme in the village
13.	Bongaigaon	Manikpur (Part)	Manikpur	Kahibari	Kahibari PWSS	SVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage
14.	Bongaigaon	Tapatari	Kalbari	Duramari	Lalmati Duramari	MVS	Scheme is defunct	No water supply since January 2020
15.	Cachar	Lakhipur	Dighali Bahadurpur	Uttar Lalpani	Uttar Lalpani PWSS	MVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage
16.	Cachar	Salchakra	Barjatrapur	Barjatrapur	Jatrapur W/S/S	MVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage
17.	Cachar	Udarbond	Pangram	Pangram Pt li	RCC Water Tank At Different AWC 60 Nos (200)	MVS	Scheme is defunct	1. pipeline damage 2. electricity power problem
18.	Charaidoo	Sonari (Mahmora)	Niz Khaloighugura	Niz Khaloi Ghugra	Nizkhaloighugura WSS	SVS	Scheme is defunct	From 2010 scheme was non-functional due to overhead tank damage.
19.	Charaidoo	West Abhayapuri (Sonari)	Rajapukhuri	Raidongia Na-Kachari	Nakachari Raidangia W.S.S.	MVS	Scheme is defunct	Scheme is defunct
20.	Chirang	Borobazar	Ballamguri Vcdc	Oxiguri	Dongsiapara PWSS	MVS	Under construction	1. Electricity not connected till now. One generator is not working. 2. Don't have submersible pump 3. pipeline under construction now.
21.	Chirang	Borobazar	Rowmari Vcdc	Khamarpara (Khumarpara)	Khamarpara Pt I PWSS	SVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage
22.	Chirang	Dangtol	Tilokgaon	Bijoygao	Goglapara PWSS	MVS	Scheme	For 25 years scheme was non-functional

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
		(Part)	Vcdc	n			is defunct	due to pump, office and other machine not available.
23.	Chirang	Manikpur (Part)	Bijnigaon Vcdc	Fagunagaon No. 2	Fagunagaon PWSS	SVS	Scheme is defunct	Scheme is defunct since April 2020.
24.	Chirang	Sidli Chirang	Bangaldoba Vcdc	Dakshin Kajalgaon	South Kajolgaon PWSS	SVS	Scheme is defunct	Scheme is not functional since last 12 years due to pipeline damage
25.	Chirang	Sidli Chirang	Hatisar Vcdc	Deosri Fv	Construction Of Mini Water Supply Scheme	SVS	Scheme is defunct	Scheme is not functional since last 11 months. Electricity disconnected due to lack of payment
26.	Chirang	Sidli Chirang	Kadomtala Vcdc	Tangabari	Tangabari PWSS	SVS	Scheme is defunct	Scheme is not functional since last 12 years due to pipeline and pump house damage. Electricity also not available.
27.	Chirang	Sidli Chirang	Kajalgaon Vcdc	Chatibor Gaon (Ct)	Chungapota PWSS	MVS	Scheme is defunct	1. Pipeline leakage 2. Electricity connection not available till now 3. Pump availability not sufficient 4. Fuel supply not regular 5. Boring pipeline sometimes have blockage 6. No available filters to purify the water
28.	Chirang	Sidli Chirang	Subaijhar Vcdc	Debargaon	Debargaon PWSS	MVS	Scheme is defunct	1. No regularity in supply of fuel 2. Pump operator not working permanently 3. Pipeline collapsed 4. Pipeline repair not complete till now...
29.	Darrang	Pub Mangal doi (Part)	Mowamari	Mowamari	Mangalanagar PWSS	MVS	Scheme is defunct	Scheme is defunct since January 2020.
30.	Dhemaji	Dhemaji	Hatigarh	No.2 Kachoitin g	Kochiting PWSS	MVS	Scheme is defunct	From April 2020 scheme was non-functional due unavailability of electricity & some of tap connections are under

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
								construction.
31.	Dhemaji	Sissibargaon	Sissiborgaon	No.2 Takowbari	Thekeraguri PWSS	MVS	Scheme is defunct	From march 2020 scheme was non-functional due to unavailability of electricity.
32.	Dhubri	Agamoni	Halakura	Sonakhuli Pt.I	Greater Agomoni	MVS	No scheme	There is no scheme in the village
33.	Goalpara	Kushdowa	Damara	Thekashu Pt.Iii	Balasara PWSS	MVS	Scheme is defunct	Scheme is not functional since last 3 years. Pipeline damage and power line damage
34.	Goalpara	Rangjuli	Dhanubhanga	Madang Pt-iii	Dakuakata PWSS	MVS	Scheme is defunct	This scheme was not completed for electrical power supply and diesel unavailability
35.	Golaghat	Golaghat West	Rajabari	Geleki Mikir	Ghograpathar PWSS	MVS	Scheme is defunct	Scheme defunct since 2014 due to pipeline and motor damage
36.	Golaghat	Kakodonga	Negheriting	No.1 Negheriting Grant	Greater Dergaon Rural Piped Water Supply Scheme	MVS	Under construction	Scheme will be completed in march 2021
37.	Golaghat	Morongi	Murphulani	Leteku Basti	Thurajan PWSS	MVS	Scheme is defunct	No water supply since 2014
38.	Hailakandi	Hailakandi	Bandukmara Sudarsanpur	Dakhin Sonapur Pt li	Rongpur East PWSS	MVS	Scheme is defunct	1. Raw waterline damaged 2.s/t (pump) barge goes under the river 3.pipeline leakage and damage 4. Pump failure
39.	Hailakandi	Hailakandi	Serispur	Itorkandi Grant	Nunkuli PWSS	MVS	Scheme is defunct	1.pipeline damage 2.pump damage 3.electricity
40.	Hailakandi	Katliche rra	Appin Rongpur	Rongpur Pt li	Greater Seralipur Multivillage PWSS	MVS	Scheme is defunct	Scheme is not functional since last 1 year
41.	Hailakandi	Lala	Lalacherra Vernerpur	Lalacher a Grant	Bil Tillah PWSS	MVS	Scheme is defunct	Scheme is not functional since last 7 years

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
42.	Hailakandi	Lala	Rajyeswarpur	Rajyeswarpur Pt V	Kamranga Par PWSS	MVS	Scheme is defunct	Scheme is not functional since last 16 month. Pipeline damage and diesel not available
43.	Hojai	Binnakandi	Baliram Gaon	Borjari Maj Gaon	Borjari Maj Gaon PWSS	SVS	Scheme is defunct	Scheme is defunct
44.	Jorhat	Jorhat Central	Jatakia	Holongpar Grant	Composite Piped Water Supply Scheme For Sustainability & Quality In Jorhat, Jorhat Central And Jorhat North West Development Block Of Jorhat District	MVS	Scheme is defunct	From January 2020 scheme was non-functional due to pipe line damage
45.	Jorhat	Titabar	Raidangjuri	Annapurna	Greater Titabor Zone-I PWSS	MVS	Scheme is defunct	From 2014 scheme was non-functional due to pipe line damage and electricity supply not available.
46.	Kamrup	Boko	Dakhin Boko	Kaliabari	Kaliabari PWSS	SVS	Scheme is defunct	Scheme is not functional since last 9 months
47.	Kamrup	Boko	No 73 Pachim Bekeli	Bonda Para	Providing Drinking Water Supply Scheme Facility In Habitations Under No. 73 Paschim Bakeli GP (SAGY)	MVS	Scheme is defunct	Scheme is not functional since last 3 years
48.	Kamrup	Boko	No 75 Dakhin Luki	Malongkona N.C.	Molongkona PWSS	SVS	Scheme is defunct	Scheme is not functional since last 1 year due to pipeline damage
49.	Kamrup	Bongao n	Uttar Pachim Bangaon	Satabari	Chatabari No. 2 PWSS	MVS	Scheme is defunct	From 2015 scheme was non-functional due to pipe line damage.
50.	Kamrup	Chamaria	Bamunbari	Batiamari	Batiamari PWSS	SVS	Scheme is defunct	Scheme was totally non-functional from October 2019 due to pipe line damage
51.	Kamrup	Chaygaon	Bamunigaon	Belguri	Bituartari PWSS	MVS	Scheme is defunct	Scheme is not functional since last 2 years due to pipeline damage

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
52.	Kamrup Metropolitan	Chandrapur	Panikhaiti	Kharghuli N.C.	Composite Piped Water Supply Scheme For Sustainability & Quality In Chandrapur And Dimoria Development Block Of Kamrup District	MVS	Scheme is defunct	Scheme is defunct
53.	Kamrup Metropolitan	Dimoria	Hahara	Hahara Gaon	Composite Piped Water Supply Scheme For Sustainability & Quality In Chandrapur And Dimoria Development Block Of Kamrup District	MVS	Scheme is defunct	Scheme is not functional since 2019. Tap stand also not functioning.
54.	Karbi Anglong	Howraghat	Howraghat (Part)	Gangamala	Augmentation Of Howraghat PWSS	MVS	Scheme is defunct	Scheme is defunct
55.	Karbi Anglong	Howraghat	Mahamaya (Part)	Baje Tokbi	Bandhan Goasn PWSS	MVS	Scheme is defunct	Scheme is defunct
56.	Karimganj	Badarpur	Kankalash Basail	Kankalesh Pt I	Malaidighirpar PWSS	MVS	Scheme is defunct	Scheme is not functional since last 1 year. No electricity
57.	Karimganj	Dullav Cherra	Anipur	Hulashnagar Pt I	Ullashnagar PWSS	MVS	Scheme is defunct	1. Pipeline damaged by flood 2. Fuel supply not provided regularly 3.pump damage by flood
58.	Karimganj	Dullav Cherra	Lalcherra	Fanairbond	Paschim Chamtilla W.S.S.	MVS	Scheme is defunct	1. Lack of master Rol materials 2.old pipeline totally damaged and need to extend new pipeline 3. No power connection
59.	Karimganj	North Karimganj	Akbarpur	Dharakuna	Kesharkapan WSS	MVS	Scheme is defunct	Scheme is not functional since last 1 year. No electricity
60.	Karimganj	North Karimganj	Gandhai	Promodnagar T.E.	Promodenagar W.S.S.	SVS	Scheme is defunct	Scheme is not functional since last 1 year due to pipeline damage
61.	Karimganj	South Karimganj	Bazarghat	Karnamadhu Pt li	Karnamadhu-li W.S.S.	MVS	Scheme is	No water supply for 3 years due to pipeline damage and no diesel supply and

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
		nj					defunct	no electricity
62.	Kokrajhar	Dotoma	Aflagaon Vcdc	Belguri	Bituartari PWSS	MVS	Scheme is defunct	Scheme is not functional since last 10 months
63.	Kokrajhar	Dotoma	Jogdoi Vcdc	Jadumoni	Jadumoni Piped Water Supply Scheme	SVS	Scheme is defunct	Scheme is not functional since last 3 years
64.	Kokrajhar	Gossaigaon	Satyapur Vcdc	Alokjhar F.V.	Alokjhar PWSS	MVS	Under construction	Under construction
65.	Kokrajhar	Hatidhura (Part)	Harafuta Vcdc	Harafuta	Bhairiguri PWSS	MVS	Scheme is defunct	Scheme is not functional since last 9 months
66.	Kokrajhar	Kachugaon	Balagaon Vcdc	Suribari F.V.	Suribari F.V. - WS Scheme	MVS	Scheme is defunct	No diesel supply
67.	Kokrajhar	Kachugaon	Raimona Vcdc	Amritpur F V	Amritpur PWSS	SVS	Scheme is defunct	Scheme is not functional since last 10 months
68.	Lakhimpur	Boginodi	Bhimpara	No.2 Ghagarmukh	Kali Pam P.W.S.S. (Pertaining To Court Case)	SVS	Scheme is defunct	Scheme is defunct
69.	Lakhimpur	Karunabari	Dikrong	Dangi Bil	Dongibil PWSS	MVS	Scheme is defunct	Scheme is not functional since last 5 years
70.	Lakhimpur	Telahi	Lohit Khabolu	Gormur Nagar Gaon	Nagar Gaon PWSS	SVS	Under construction	Under construction
71.	Lakhimpur	Telahi	Lohit Khabolu	Kulamua N.C.	Kulamua PWSS	SVS	Scheme is defunct	Scheme is not functional since last 1 year
72.	Majuli	Majuli	Bongaon	Jogi Gaon	Greater Bongaon WSS	MVS	Scheme is defunct	This village is under MVS which is situated in another village. From that village, water not supplied to this village till now.

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
73.	Majuli	Majuli	Chilakola	Borgayan No.1	Borgayan New WSS	MVS	Scheme is defunct	Due to some technical reasons in the last 12 months, scheme was temporarily non-functional. For example PWD road is under construction so pipe line was totally damaged.
74.	Majuli	Majuli	Garmur	Garamur Jugi Pathar	Greater Garmur Pokajora Water Supply Scheme	MVS	Scheme is defunct	No water supply since 2019
75.	Majuli	Majuli	Garmur	Garmur Satra	Greater Garmur Pokajora Water Supply Scheme	MVS	Scheme is defunct	Scheme is not functional since 2018
76.	Morigaon	Mayang	Deosal	Nakhula Grant (Ct)	Jagiroad PWSS	MVS	Scheme is defunct	Scheme is not functional since last 14 months
77.	Morigaon	Mayang	Jagi Bhakat Gaon	Jagi Gaon	Jagi Bhakatgaon WSS	MVS	Under construction	Under construction
78.	Morigaon	Mayang	Nelly	Amguri	Spot Source	SVS	No scheme	No scheme in the village
79.	Morigaon	Mayang	Uttar Dharamtul	Bangaldhara	Bihubori PWSS	MVS	Under construction	Under construction
80.	Nagaon	Bajiagaon	Udmari	Borjuri	Integrated Udmari	MVS	Under construction	One scheme just started construction not completed
81.	Nagaon	Juria	Jaramari Langia	Jaramari	Jaramari PWSS	SVS	Under construction	Under construction
82.	Nagaon	Pakhimaria	Dakarghat	Jarani	Jarani PWSS	MVS	Under construction	Under construction
83.	Nalbari	Barbhag	48 (2) No. Upper Barbhag	Kalag	Kalag PWSS	SVS	Scheme is defunct	Scheme is not functional since last 2 years

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
84.	Nalbari	Barkhetri	55 No. Bornibari Naptipara	Naptipara	Naptipara Pwss	MVS	Scheme is defunct	Scheme is defunct since 2019
85.	Nalbari	Madhupur	38 No Paschim Natun Dehar	Khukhundi	Bonbhag Solmari PWSS	MVS	No scheme	No scheme in the village
86.	Nalbari	Pub-Nalbari	10 No Dakhin Bahjani	Deharkal akuchi	Pachim Khatara Kalakuchi PWSS	MVS	Under construction	Under construction
87.	North Cachar Hills	Jatinga Valley	Daotuhaja Mac Area (Part)	Impui (Ch)	Impoi (Ch) PWSS	SVS	Scheme is defunct	Scheme is defunct
88.	North Cachar Hills	Jatinga Valley	Laisong Mac Area	Hajaichak	NA	NA	Scheme is defunct	Scheme is defunct
89.	Sonitpur	Balipara	Chariduar	Chari Duar Gaon	RW-17 And Thp-5	MVS	Scheme is defunct	Scheme is defunct
90.	South Salmara Mancac har	Fekamari	Fekamari	Moinabndha	Moynabandha PWSS	MVS	Scheme is defunct	Scheme is not functional since last 11 months
91.	Tinsukia	Guijan	Borguri	Kachujan Gaon (Ct)	Kachujan PWSS	SVS	Scheme is defunct	Scheme is defunct
92.	Tinsukia	Hapjan	Tipuk	Ouguri Gaon	Ouguri PWSS	SVS	Scheme is defunct	Scheme is not functional since last 10 months
93.	Tinsukia	Itakhuli	Kachamari	No-2 Hebeda Gaon	Hebeda No.2 PWSS	MVS	Scheme is defunct	Scheme is defunct
94.	Udalguri	Mazbati	Lamabari VCDC	Lamabari T.E.	Lamabari Malti Village PWSS	MVS	Under construction	Under construction

Functionality Assessment Survey 2020-21- Assam

S.No	District Name	Block Name	Panchayat Name	Village Name	Name Of Largest Scheme In The Village	Type	Status of the scheme	Remarks
95.	Udalguri	Rowta	Ekrabari VCDC	Dhip Bichara	Dipbisara	SVS	Scheme is defunct	Scheme is not functional since last 1 year
96.	Udalguri	Rowta	Sivapur VCDC	Sibapur	Sibpur	SVS	Scheme is defunct	Scheme is not functional since last 3 years
97.	West Karbi Anglong	Chinthong	Chinthong (Part)	Umlapher	Umlapher WSS	SVS	Scheme is defunct	Scheme is not functional since last 2 years
98.	West Karbi Anglong	Rongkhong	Rongkhang (Part)	Rupachithi	Rupachity PWSS	SVS	Scheme is defunct	Scheme is defunct

Annexure 2: List of villages with schemes supplying only through tap stand

S.No	District Name	Block Name	Panchayat Name	Village Name	Name of Largest Scheme in the Village	Type	Remarks
1.	Goalpara	KHARM UJA	MARKULA	BATABARI	Batabari PWSS	SVS	Scheme is functional and supplying water through stand tap only.
2.	Karbi Anglong	Samelanso	Karkanthi (Part)	Langsithing	Hari Basti WSS	MVS	Scheme is functional and supplying through tap stand only.
3.	North Cachar Hills	Diyung Valley	Langting Mac Area	Langting Rly. Station	Langting Rly Station PWSS	SVS	No FHTC. Water supply through tap stand only
4.	North Cachar Hills	Diyung Valley	Maibang East Mac Area	Gidingpur	Gidingpur PWSS	SVS	No FHTC. Water supply through tap stand only
5.	North Cachar Hills	Harangajao	Harangajao Mac Area (Part)	Harangajao Bazar	Harangajao PWSS	MVS	No FHTC. Water supply through tap stand only
6.	North Cachar Hills	Harangajao	Jatinga Mac Area (Part)	Jatinga Khasia	Extn. Of Pipe Line Including Const. Of RCC Reservoir At Schools	MVS	No FHTC. Water supply through tap stand only
7.	North Cachar Hills	Jatinga Valley	Borail Mac Area	Pangmoul	Pangmul PWSS	SVS	No FHTC. Water supply through tap stand only

Annexure 3: List of villages where 15 FHTCs were not found

S.No.	District Name	Block Name	Panchayat Name	Village Name	Name of Largest Scheme in the Village	Type	Number of households surveyed
1.	Charaideo	Sapekhati	Purbanchal	Panisaki Grant	Pachim Panichaki WSS	SVS	12
2.	Chirang	Manikpur (Part)	Bijnigaon Vcdc	Fagunagaon No. 2	Fagunagaon PWSS	SVS	10
3.	Dhubri	Chapar-Salkocha	Barunitara Batardal	Batardol	Batardal SCCP	MVS	13
4.	Dhubri	Chapar-Salkocha	Barunitara Batardal	Chagalkhuti	Batardal SCCP	MVS	8
5.	Dibrugarh	Barbarua	Lezai	Binoigutia Gaon	Restoration of defunct Binoigutia Ashapur PWSS	SVS	7
6.	Goalpara	Jaleswar	Guriadhap	Morichbari Reserve	Kartimari PWSS	MVS	10
7.	Goalpara	Lakhipur	Jayram Kuchi	Boistompara	Boistompara PWSS	MVS	14
8.	Golaghat	Gamariguri	Simanta	Chitalmari	Hirimapur PWSS	MVS	2
9.	Kamrup	Bongaon	Uttar Dakhin Bongaon	Lamgaon N.C.	Lamgaon	MVS	10
10.	Karbi Anglong	Lumbajong	Dhansiri	Dhanshri Bazar (295887)	Dhansiri WSS	MVS	9
11.	Kokrajhar	Debitola (Part)	Devitola Vcdc	Debitola Pt.li	Debitola PWSS	MVS	3
12.	Kokrajhar	Dotoma	Aflagaon Vcdc	Belguri	Bituartari PWSS	MVS	10
13.	Majuli	Majuli	Dakhin Kamalabari	Kamalabari Satra	Bhogpur Bengena ATI WSS	MVS	2
14.	North Cachar Hills	Harangajao	Jatinga Mac Area (Part)	Arda	NA	NA	12

Annexure 4: Indicative proportion of functional tap connections by districts

S.No.	District	Percentage Functional Taps
1.	Baksha	58.1
2.	Barpeta*	75.9
3.	Biswanath	60.0
4.	Bongaigaon	35.5
5.	Cachar	32.0
6.	Charaideo	30.8
7.	Chirang*	7.1
8.	Darrang	29.2
9.	Dhemaji	35.0
10.	Dhubri	81.0
11.	Dibrugarh	65.1
12.	Goalpara	43.8
13.	Golaghat	77.9
14.	Hailakandi	53.3
15.	Hojai	37.8
16.	Jorhat	11.4
17.	Kamrup*	60.0
18.	Kamrup Metropolitan	63.8
19.	Karbi Anglong	46.4
20.	Karimganj*	13.3
21.	Kokrajhar*	24.2
22.	Lakhimpur	54.4
23.	Majuli	25.8
24.	Morigaon	0.0
25.	Nagaon	50.5
26.	Nalbari	20.0
27.	North Cachar Hills*	59.5
28.	Sivasagar	43.0
29.	Sonitpur	28.6
30.	South Salmara Mancachar*	51.7
31.	Tinsukia	65.6
32.	Udalguri	46.7
33.	West Karbi Anglong	34.4

* The denominator is less than 50

Annexure 5: List of villages where samples failed for given quality parameter

S.No.	District name	Block name	Gram panchayat name	Village name
Villages with failed water samples for Turbidity test				
1.	Charaideo	Lakwa	Chalapathar	Chola Pothar Gaon
2.	Charaideo	Sapekhati	Borhat	Borhat Bagicha
3.	Charaideo	Sapekhati	Nahar Pukhuri	Borhat Habi Gaon
4.	Charaideo	Sapekhati	Purbanchal	Panisaki Grant
5.	Charaideo	West Abhayapuri (Sonari)	Tawkak	Towkok Grant No.2
6.	Darrang	Kalaigaon (Pt)	Borbagan	Grandland Bagicha
7.	Goalpara	Balijana	Kalyanpur	Kurowa Bhasa
8.	Jorhat	Jorhat East	Pub Na-Kachari	Nakachari Gaon
9.	Kamrup Metropolitan	Rani (Part)	Majirgaon	Barjhar
10.	Karbi Anglong	Lumbajong	Dhansiri	Dhanshri Bazar (295887)
11.	Karbi Anglong	Lumbajong	Dhansiri	Alturam Gaon
12.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
13.	Morigaon	Dulongghat (Part)	Barchila	Boalguri
14.	Morigaon	Laharighat	Kacharibori	Udkati
15.	Sivasagar	Amguri	Lalim Chapori	Hatimuria Gharphalia
16.	Tinsukia	Kakapathar	Kakajan	Pithaguti Gaon No-1
Villages with failed water samples for pH test				
1.	Bongaigaon	Baitamari	Jogighopa	Korea Pahar
2.	Bongaigaon	Srijangram	Deohati	Singimari Pt I
3.	Bongaigaon	Tapatari	Rangapani	Rangapani
4.	Charaideo	West Abhayapuri (Sonari)	Tawkak	Towkok Grant No.2
5.	Dibrugarh	Khowang	Gazpuria	Khowang Chah Co. 108 No Fs Grant
6.	Hojai	Binnakandi	Akashi Ganga	Urdha Gaon
7.	Jorhat	Jorhat Central	Rajoi Badulipukhuri	Mudoijan Bhorulua Gaon
8.	Morigaon	Kapili (Part)	Kalmowbari	Barsaka Baha
9.	Morigaon	Laharighat	Kacharibori	Udkati
10.	Nagaon	Juria	Sutirpar	Sutirpar
11.	Nagaon	Khagarijan	Senchowa	Sensuwa
12.	North Cachar Hills	Harangajao	Jatinga Mac Area (Part)	Arda
13.	Sivasagar	Nazira	Borboruah	Hulang Katoni
Villages with failed water samples for Total Alkalinity test				
1.	Jorhat	Jorhat	Khongia	Sonari
Villages with failed water samples for Chloride test				
1.	Hojai	Jugijan	Borpukhuri	Borpukhuri (Ct)

Functionality Assessment Survey 2020-21- Assam

S.No.	District name	Block name	Gram panchayat name	Village name
Villages with failed water samples for Ammonia test				
1.	Charaideo	Sapekhati	Borhat	Borhat Bagicha
2.	Charaideo	Sapekhati	Purbanchal	Panisaki Grant
3.	Darrang	Pub Mangaldoi (Part)	Ondolajhar	Gelaidingi
4.	Dibrugarh	Tengakhat	Tipling	Digboi Mukh
5.	Jorhat	Jorhat	Khongia	Sonari
6.	Jorhat	Jorhat	Baghchung Charaibahi	Naubaisa Goan (Ct)
7.	Jorhat	Jorhat	Madhya Thengal Khongia	No.1 Mohbondha Grant
8.	Jorhat	Jorhat East	Pub Na-Kachari	Nakachari Gaon
9.	Jorhat	Jorhat North West	Nowboicha	Nakari Bamun Gaon
10.	Karbi Anglong	Lumbajong	Lumbajong	Longki Engleng (296607)
11.	Majuli	Majuli	Bongaon	Mudoi Tanti
12.	Majuli	Ujani Majuli	Sriram	Keturi Bil Khat Pam
13.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
14.	Morigaon	Laharighat	Kacharibori	Udkati
15.	Sivasagar	Amguri	Lalim Chapori	Hatimuria Gharphalia
16.	Sivasagar	Gourisagar	Mogorahat	Garkakharia
17.	Sivasagar	Nazira	Borboruah	Hulang Katoni
Villages with failed water samples for Phosphate test				
1.	Charaideo	Sapekhati	Purbanchal	Panisaki Grant
2.	Dhemaji	Murkonselek	Kemi Jelem	Purani Jelam
3.	Jorhat	Jorhat	Madhya Thengal Khongia	No.1 Mohbondha Grant
4.	Karbi Anglong	Bokajan	Deopani	Kath Katia
5.	Sivasagar	Amguri	Lalim Chapori	Hatimuria Gharphalia
Villages with failed water samples for Residual Chlorine test				
1.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
Villages with failed water samples for Iron test				
1.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
2.	Morigaon	Laharighat	Kacharibori	Udkati
3.	Sivasagar	Amguri	Lalim Chapori	Hatimuria Gharphalia
Villages with failed water samples for Nitrate test				
1.	Jorhat	Jorhat East	Pub Na-Kachari	Nakachari Gaon
2.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
3.	Morigaon	Dulongghat (Part)	Barchila	Boalguri
4.	Morigaon	Laharighat	Kacharibori	Udkati
5.	Sivasagar	Gourisagar	Mogorahat	Garkakharia

Functionality Assessment Survey 2020-21- Assam

S.No.	District name	Block name	Gram panchayat name	Village name
Villages with failed water samples for Total Dissolved Solids test				
1.	Hojai	Jugijan	Borpukhuri	Borpukhuri (Ct)
Villages with failed water samples for Bacteriological present/ absence test using H2S vials				
1.	Biswanath	Chatia	Dakhin Nagsankar	Nag-Sankar Gaon
2.	Biswanath	Chatia	Sootea No.4	Barbhathi
3.	Biswanath	Chatia	Sootea No.5	Magurmara
4.	Darrang	Dalgaon-Sialmari (Part)	Bahabari	Bahabari
5.	Darrang	Pachim Mangaldoi (Part)	Janaramchowka	Gakhir Howa Para
6.	Darrang	Sipajhar (Part)	Dipila	Khasdipila
7.	Dhemaji	Machkhowa	Bengenagarah	No.2 Begenagara
8.	Dibrugarh	Barbarua	Lezai	Binoigutia Gaon
9.	Hojai	Binnakandi	Nilbagan	Nilbagaon
10.	Hojai	Binnakandi	Akashi Ganga	Urdha Gaon
11.	Hojai	Dhal Pukhuri	Farmarpar	Simlai Pathar
12.	Hojai	Jugijan	Borpukhuri	Borpukhuri (Ct)
13.	Hojai	Jugijan	Radha Nagar	Siliguri
14.	Jorhat	Jorhat Central	Rajoi Badulipukhuri	Mudoijan Bhorulua Gaon
15.	Jorhat	Titabar	Borhola	Borholla Grant
16.	Lakhimpur	Boginodi	Kadam	Na-Ali Majgaon
17.	Lakhimpur	Boginodi	Kadam	Chalajan Kachari
18.	Morigaon	Dulongghat (Part)	Chabukdhara	Etakali Sabukdhara
19.	Morigaon	Kapili (Part)	Kalmowbari	Barsaka Baha
20.	Morigaon	Laharighat	Kacharibori	Udkati
21.	Nagaon	Batadraba (Part)	Rampur Satra	Haidubi Pathar
22.	Nagaon	Juria	Sutirpar	Sutirpar
23.	Nagaon	Khagarijan	Senchowa	Sensuwa
24.	Nalbari	Barbhag	50 (4) No. Upper Barbhag	Ulabari
25.	Nalbari	Barigog-Banbhag	14 No Pub Banbhag	Paisara
26.	Nalbari	Pachim Nalbari	25 No Rupiyabathan	Rupiyabathan (Ct)
27.	Nalbari	Tihu	45 No Pachim Nam Barbhag	Haribhanga
28.	Sivasagar	Amguri	Bhuyan Hat	Sunuwal
29.	Sivasagar	Amguri	Lalim Chapori	Hatimuria Gharphalia
30.	Sivasagar	Gourisagar	Mogorahat	Garkakharia
31.	Sivasagar	Sivasagar (Part)	Chaulkara	Chaul Kora No.1
32.	Sonitpur	Balipara	Siloni	Akabasti Miri
33.	Sonitpur	Bihaguri	Bihaguri No.2	Bhaluke Howa Gaon

Functionality Assessment Survey 2020-21- Assam

S.No.	District name	Block name	Gram panchayat name	Village name
34.	Sonitpur	Gabharu	Dolabari	Gutlong Gaon (Ct)
35.	Sonitpur	Naduar	Pub Murhadol	Murha Dal
36.	Sonitpur	Rangapara	Namanigaon	Namani Gaon No.1
37.	Tinsukia	Kakapathar	Kakajan	Pithaguti Gaon No-1
38.	Tinsukia	Margherita	Bhitor Pawoi	Lama Gaon
39.	Udalguri	Barchala (Part)	Kacharison Vcdc	Kacharichangaon
40.	Udalguri	Kalaigaon (Part)	Chengapathar Vcdc	Oza Gaon
41.	Udalguri	Rowta	Purani Goraibari Vcdc	Purani Goroibari
42.	West Karbi Anglong	Amri	Amri (Part)	Hadaw
43.	West Karbi Anglong	Rongkhang	Rongkhang(Part)	Baithalangso
44.	West Karbi Anglong	Rongkhang	Rongkhang(Part)	Chekso Borkheromi
Villages with failed water samples for Fluoride test				
1.	Morigaon	Bhur-Bandha	Solmari	Salmari Mikir Gaon
Villages with failed water samples for Arsenic test				
1.	Jorhat	Jorhat Central	Rajoi Badulipukhuri	Mudoijan Bhorulua Gaon
2.	Majuli	Ujani Majuli	Sriram	Keturi Bil Khat Pam
3.	Nalbari	Pachim Nalbari	25 No Rupiyabathan	Rupiabathan (Ct)