



# **Jal Jeevan Mission**

Webinar
on
Planning, implementation and
monitoring of outputs and outcomes

September 08, 2020

Ministry of Jal Shakti
Department of Drinking Water & Sanitation

## JJM - Building Partnerships, Changing Lives





## Vision

Every rural household shall have assured drinking water supply in adequate quantity of prescribed quality on regular and long-term basis at affordable service delivery charges leading to improvement in living standards of rural communities.

# Important Goals

- Assured tap water supply to every home
- Functionality on long-term basis
- Decentralized O&M by GP or its sub-committee
- Water testing facilities open for general public

## Service delivery: assured water supply to homes



In adequate quantity
at least 55 lpcd

State level

At prescribed quality IS 10500: 2012

PHED / RWS level

On a regular and long-term basis

At an affordable service delivery charge

**Gram Panchayat** 

# Policy initiatives for water security Convergence of efforts and resources Direction for working with speed and scale

Regular monitoring

business

•Making water everybody's

- Mindset change shift from 'construction' approach to 'service'
- Techno-economic appraisal capacity
- Monitor service delivery, grievance redressal
- Transform to public utility

#### District level

- Formation of VWSC
- VAP for all villages
- Formulation of DAP
- Cost effective solution
- Focus on long term O&M
- Convergence of schemes
- Make JJM a 'Jan Andolan'

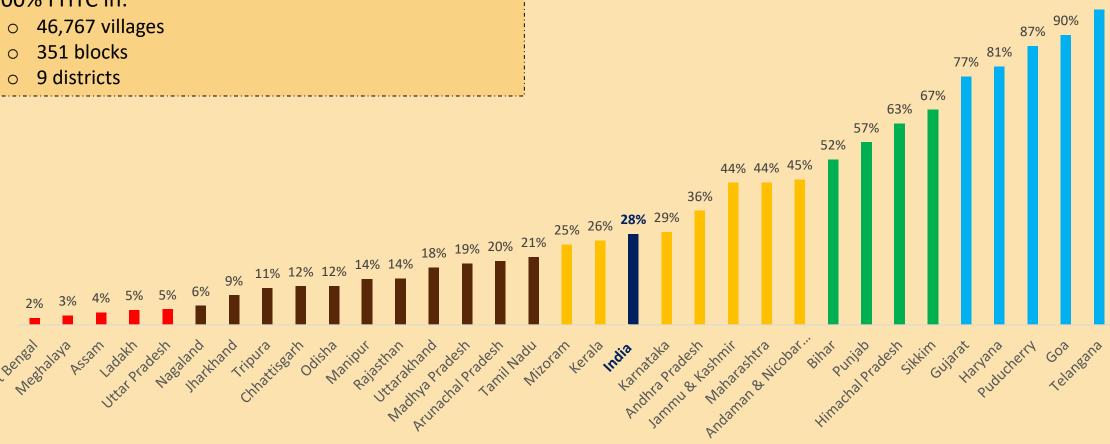
- Village Action Plan
- In-village infrastructure
- Convergence of schemes
- Strengthening water source
- Grey water management
- O&M & service charges.
- Quality surveillance
- GP / VWSC as utilities

# Freedom from drudgery – equality and inclusiveness



98%

- 5.35 crore rural families have tap connections
- Constant vigil needed to ensure assured water supply
- 100% FHTC in:

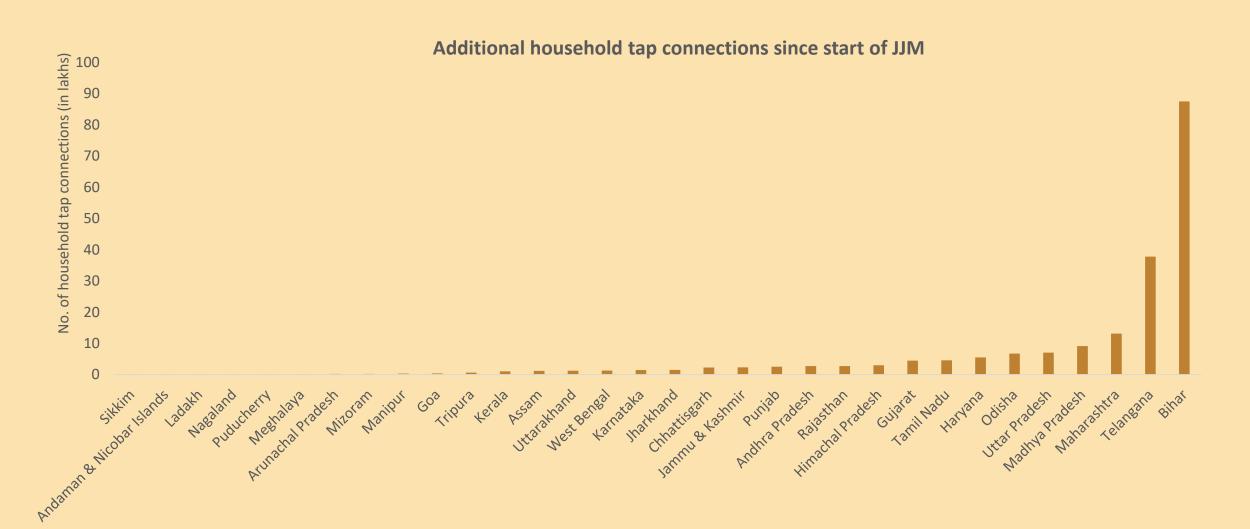


Source: IMIS

% of rural households with FHTCs as on date

# **FHTCs provided since start of JJM**





# Plan for 100% FHTCs by state

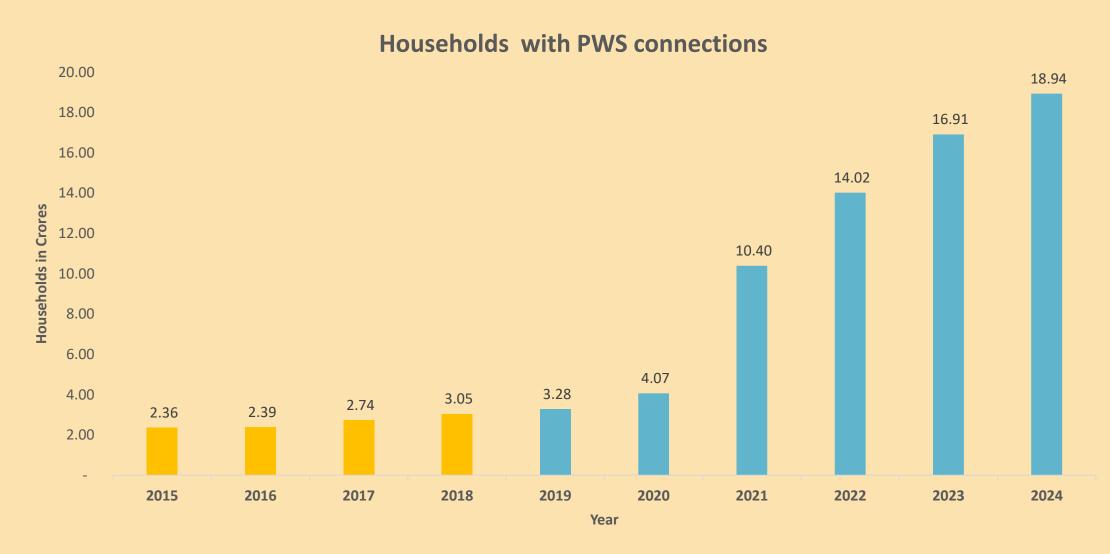


2021	2022	2023		2024	
Bihar	Ladakh	Arunachal Pradesh	Kerala	A&N Islands	Maharashtra
Goa	Manipur	Gujarat	Meghalaya	Andhra Pradesh	Nagaland
Puducherry	Punjab	Haryana	Mizoram	Assam	Odisha
Telangana	Sikkim	Himachal Pradesh	Tamil Nadu	Chhattisgarh	Rajasthan
	Uttar Pradesh	Jammu & Kashmir	Tripura	Jharkhand	West Bengal
		Karnataka	Uttarakhand	Madhya Pradesh	
3 States & 1 UT	4 States & 1 UT	11 States & 1 UT		10 States & 1 UT	

States / UTs to identify districts / block / villages for 100% FHTC completion

# **Acceleration needed in providing FHTC**





Number of families with assured water supply in their homes (in crores) at the end of each year

## **Challenges to Overcome**



#### Mindset



In spite of PWS present in village, no water supply in many homes



Asset creation approach



Absence of service delivery approach

#### **Challenges of Scale**



Water quality issues in around 50,000 habitations



51.56% of habitations receive less than 55 LPCD of water



Only 9 districts and 28% households with 100% tap connections

#### **Challenges of Speed**



Planning – equality and inclusiveness



Procurement and contract management



Financial management and online payment

#### **Challenges of Skill**



Scope for greater community involvement



Reskilling opportunities to engineers



Institutional capacities at State, District and GP levels

## **Programme priorities**



#### Focusing on low hanging fruits

#### **Standardizing and Strengthening**

- → Retrofitting and augmentation of existing/ ongoing PWS – 31st March 2021
- → Arsenic and Fluoride affected habitations Dec 2020
- → NABL accreditation of water testing labs on priority
- → Village Action Plan on priority

- → Standardize designs, estimates, item rates
- → Selection of TPA for quality control
- → Utilise 5% support funds for capacity building

# Advance planning for meeting timelines



- → Expedite DPR preparation
- → Meet Contracts award timelines
  - 3 years scheme award before March, 2021
  - 2 years scheme award before March, 2022
- → Completion of SVS 18 months
- → Completion of MVS 36 Months
- → JE-AES affected priority districts on priority
- → Aspirational districts on priority
- → District Action Plan on priority

# **Change Management – Leadership Development**



Level	Activity
Administrators	<ul> <li>Policy formulation for water security</li> <li>Utility reforms</li> <li>Participatory management for sustainability</li> <li>Financial management and good governance</li> </ul>
Public Health Engineers	<ul> <li>Technological advancements and innovations</li> <li>Low capex, easy O&amp;M, and geographically appropriate engineering solutions</li> <li>Project Management capacity</li> </ul>
PRI representatives, ISAs, VWSCs, Water Users	<ul> <li>GP empowerment as per 73<sup>rd</sup> Constitutional Amendment</li> <li>ISAs to facilitate to prepare VAP</li> <li>VWSCs to operate and maintain in-village infrastructure</li> <li>Water Users to be mobilized for non-wastage, conservations, payment of user charges</li> </ul>
Work force	<ul> <li>Pool of plumbers, masons, fitters, electricians, pump operators and motor mechanics, etc.</li> </ul>

## Planning for assured water supply



#### **Village Action Plan**

- Gap analysis of existing water supply system
- Water demand drinking, cattle, agriculture
- Source sustainability
- Greywater management
- Proposed water supply scheme
- Community contribution, proposed user charges
- Appropriate technology, financial efficiency, optimal capex and easy O&M

# Planning for assured water supply (contd.)



#### **District Action Plan**

- Strategic plan for 100% FHTC coverage in district
- Human resource requirement, capacity building, training, IEC, third party inspections
- Plan for deployment of ISAs
- Plan for NABL accreditation of district labs
- Funding availability through convergence
- O&M for both in-village and regional water supply networks financial and institutional requirements
- Aggregation of all VAPs in district

# Planning for assured water supply (contd.)



#### State Action Plan

- Ensure water security
- Coverage
- Financial
- Support activity
- Water quality (WQM&S)
- Technology

# Village level FHTC coverage



FHTC coverage level								
Total villages	PWS villages	up to 25%	25 to 50%	50 to 75%	75 to 90%	90 to 100%	100%	No PWS
6,05,770	3,83,970	2,10,604	48,820	41,634	21,961	14,401	46,550	2,21,800

Source: IMIS

# For villages with no PWS, plan for...



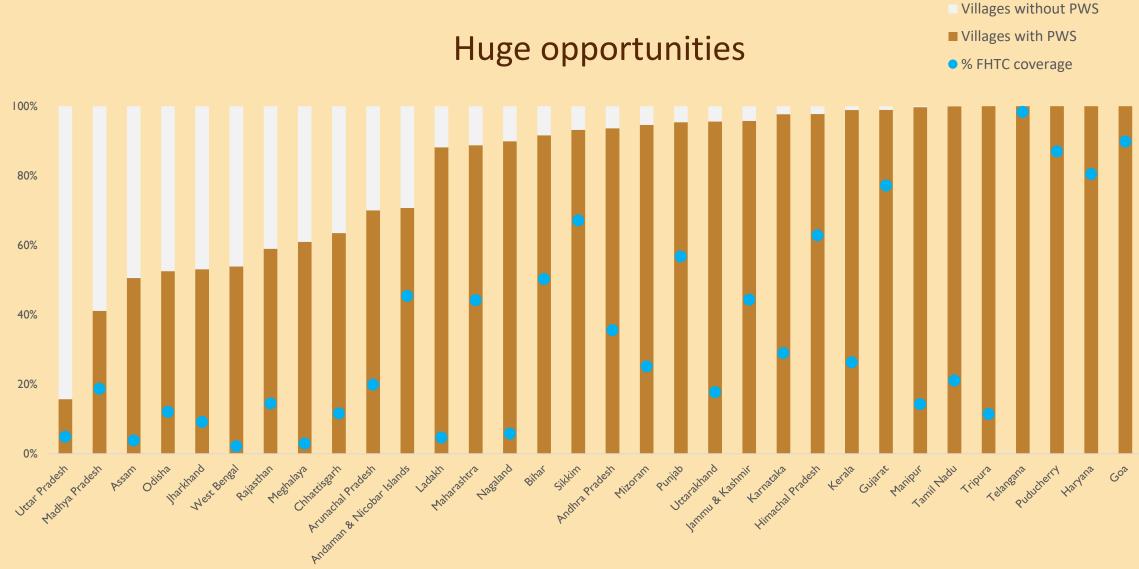
 SVS in villages having adequate groundwater/ spring water/ local or surface water source of prescribed quality

Multi Village Schemes where SVS is not feasible

Mini solar power-based piped water supply in isolated/ tribal hamlets

# Piped water supply and FHTC coverage in villages





Source: IMIS

# IMIS – an important tool for planning and monitoring



- Use of IMIS can avoid wasteful expenditure
- Village level analysis is possible for planning, implementation and monitoring
- Can be used to focus on priority areas such as aspirational districts, SC / ST habitations, SAGY villages, etc.

Can be used to control and monitor expenditure

May help in determining O&M charges and selecting least cost option for community

# IMIS – responsibilities



Daily data entry is expected

Expenditure audit will be based on IMIS data

Data on households and tap water connections should be updated daily

Baseline data needs to be revalidated

## Measurement and monitoring of water service delivery



Pilots projects have been taken by States and support agencies

SI	State	Area	Source
1	Gujarat	Plain (Tribal area)	Borewell
2	Uttarakhand	Hilly area (Himalayas)	Spring
3	Rajasthan	Water scarce (Near Desert)	Borewell
4	Maharashtra	Plain (Sahyadri)	Dam
5	Jharkhand	Plain (Near mines)	River
6	Karnataka	Plateau/Plain (Peri-urban)	Borewell
7	Himachal Pradesh	Hilly area (Himalayas)	Spring
8	Assam	Plain (Quality affected)	Borewell
9	Haryana	Plain (Peri-urban)	Borewell

#### 1,000 + pilot implementation locations planned in next 6 months

UK: Uttarakhand, HP: Himachal Pradesh, J&K: Jammu & Kashmir, ML: Meghalaya, NL: Nagaland, AR: Arunachal Pradesh, UP: Uttar Pradesh, BH: Bihar, JH: Jharkhand, WB: West Bengal, MH: Maharashtra, PB: Punjab; GJ: Gujarat, OD: Odisha, RJ: Rajasthan, TN: Tamil Nadu

# IoT in measurement and monitoring

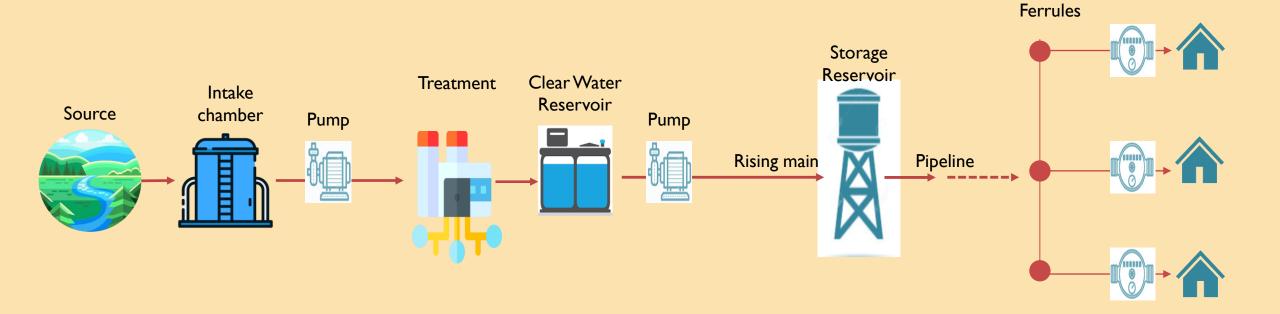


**Source and Intake** 

Water Treatment Plant

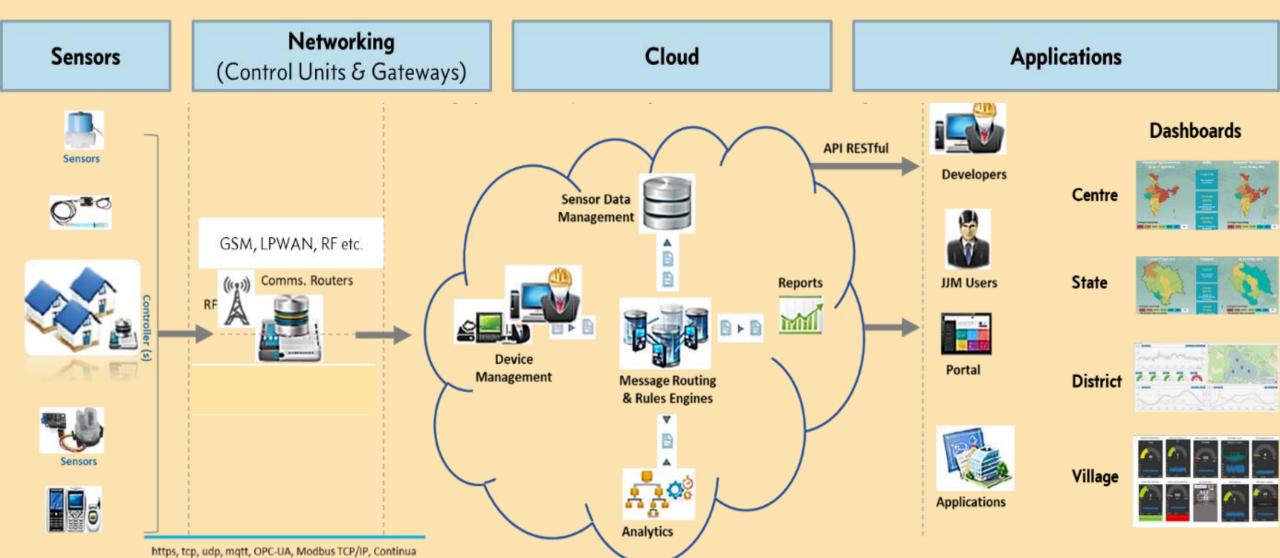
Pipeline and Storage

Distribution Network



## **Architecture for measurement and monitoring**

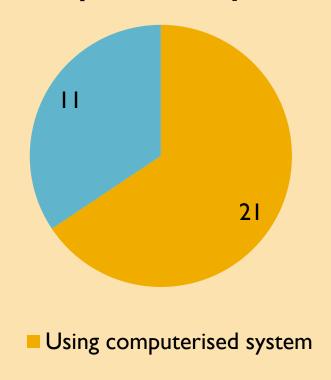


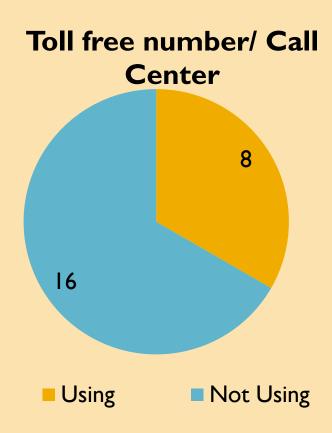


## Addressing public grievance



**Computerised System** 





Kerala, Odisha and Gujarat are using 1916 helpline number

