





## Overview

JJM launched August 15, 2019, to ensure rural household tap connections  
Focus shifted from infrastructure building to effective O&M of completed schemes  
**Key objective:** sustainability through decentralized participatory approach

## Context



- **58%** FHTC coverage across **107.74 lakh** rural households in **48** districts
- **5,332** villages certified as Har Ghar Jal villages ready for community-managed O&M
- Two main scheme types: **75.6%** single village schemes (24.15 lakh households) and **23.5%** multi village schemes (56.61 lakh households)
- **Shift to sustainable surface water schemes:** ratio changed from **48:52** to **68:32**
  - (surface: groundwater)
- Renewable energy increased from **9.5 MW** to **62.95 MW** post-JJM
- **28,000+** recharge structures implemented through convergent approach (MJSA + MGNREGA)

# Key Trends Shaping Drinking Water Sector in Rajasthan

## Water Scarcity

Limited freshwater sources, 50% dependency on groundwater, dried/encroached surface water sources

## Groundwater Depletion

148% extraction rate (16.74 BCM extracted vs 11.54 BCM recharged in 2023), only 38 safe blocks remaining (down from 45 in 1984)

## Water Quality Issues

Chemical contamination affects 4.20 lakh households (24.52 lakh population) across the state due to salinity, fluoride, and nitrate

## Climate Vulnerability

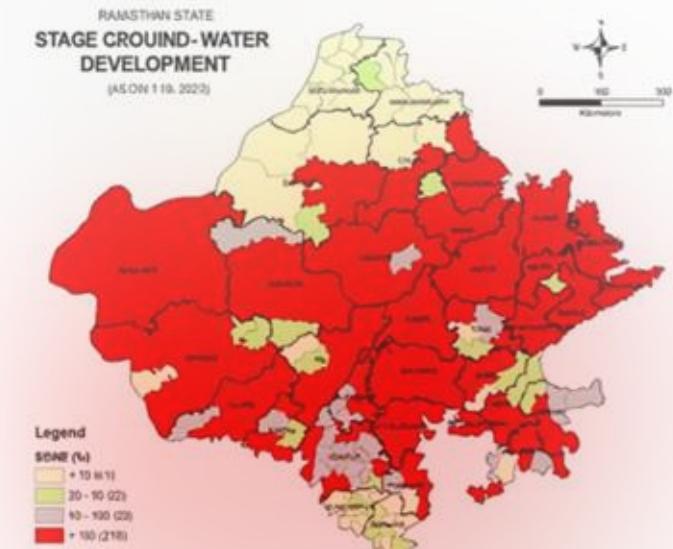
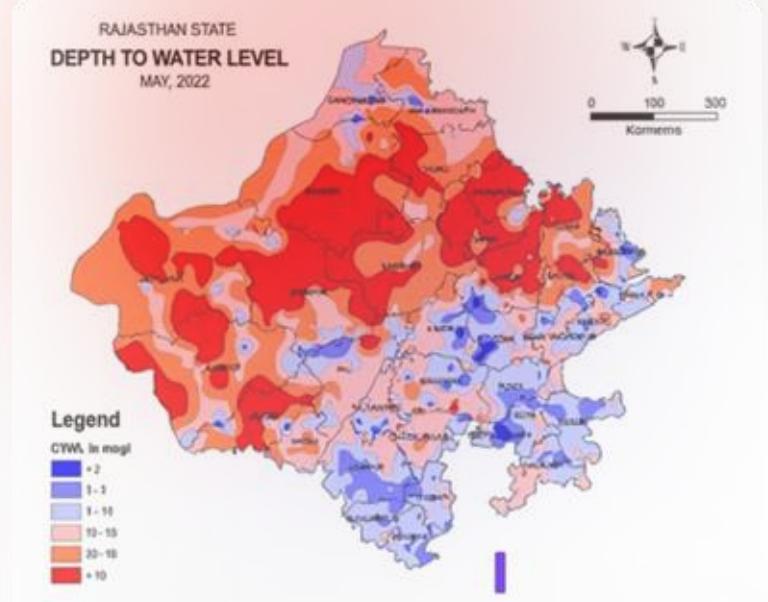
Extreme weather events, heat waves, heavy monsoon dependency making the region vulnerable to droughts and floods

## Traditional Systems Need Revival

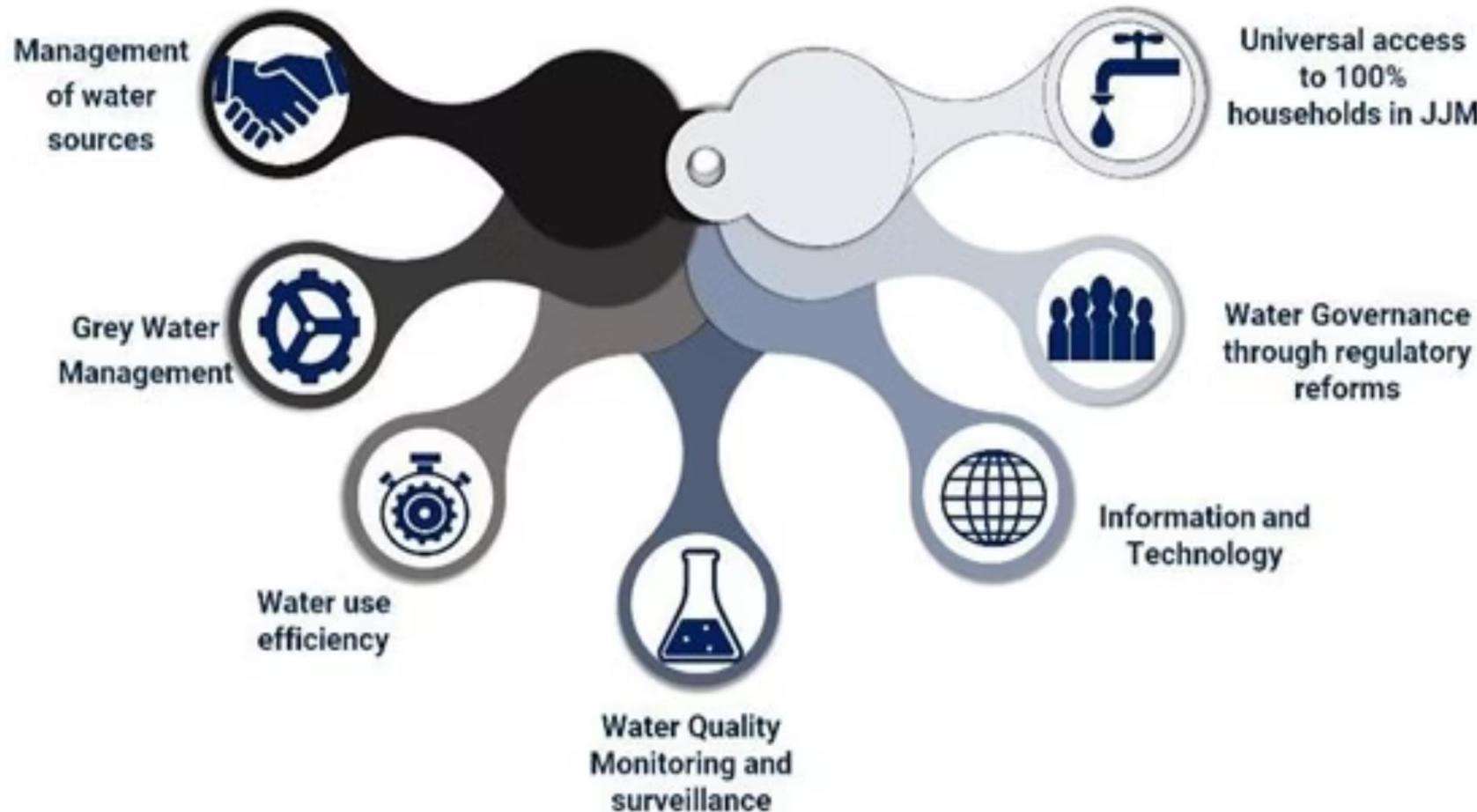
Rich heritage of rainwater harvesting (Bawari, Jhalara, Talab, Nadi, Taanka) requires rejuvenation

## Limited Community Participation

Lack of active community engagement in water management planning



# Viksit Rajasthan @ 2047



Sustenance Keys

O&M in rural water supply schemes

# Rajasthan : Rationale for O&M policy

01

Guarantees system functionality, efficiency, and longevity

02

Mitigates risks of system failures

03

Upholds consistent water quality standards

04

Optimizes financial and human resource allocation

05

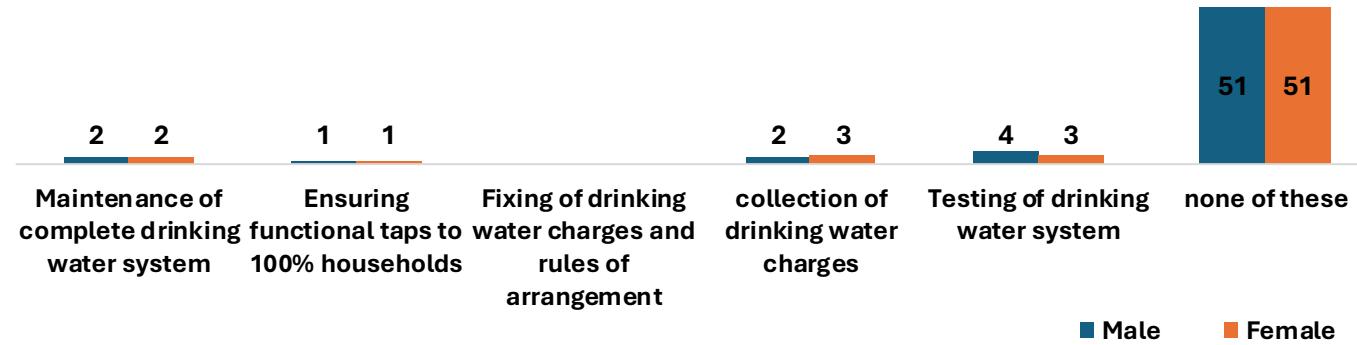
Drives achievement of equity, sustainability, and service delivery objectives

# Field insights on O&M : Community perspective

Parameter	Perspective
Awareness of community/VWSC on O&M	Waterman, VWSC members and community are not aware of their roles and responsibilities
Ownership of community and panchayat	Community and VWSC articulated that schemes belong to PHED, not to community. Reluctance to certify and manage schemes
Current O&M status	Community not informed about their roles in undertaking O&M responsibilities. Maintenance managed by VWSC President using personal funds
Capacity Building for O&M	Not done
Source	Dissatisfaction with water supply due to limited hours and inconsistent availability. Under/overhead water tanks installed as a backup, as water from hand pumps is not potable
Handover Process	No handover process done
tariff structure how is it being it collected	Communities ready to collect if proper handover and financial management trainings are done, Fixed amount being collected without proper basis. Community ready to pay if water supply is assured and adequate

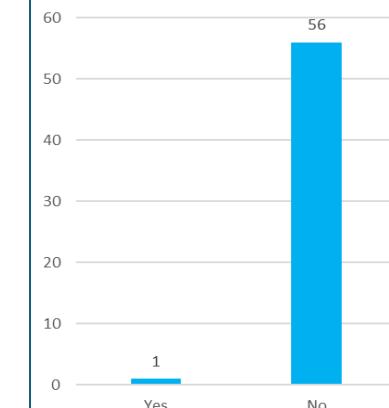
## 1.1 Role of VWSC on O& M Tasks

### Role played by VWSC in operation and maintenance

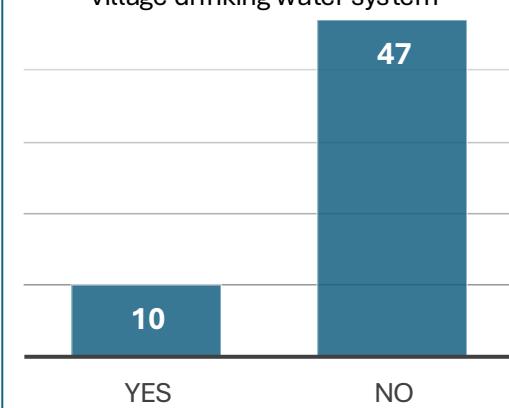


## 1.2 DEPLOYMENT OF O&M TEAM BY VWSC

### Rule made by the VWSC for maintenance of village drinking water

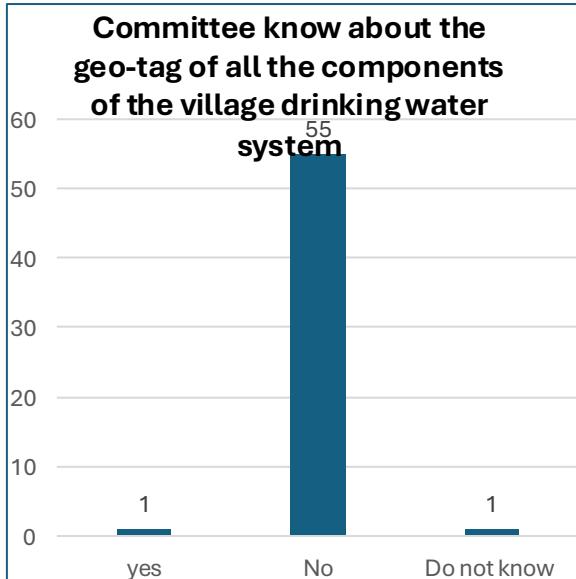


### Person identified for the operation and maintenance of village drinking water system

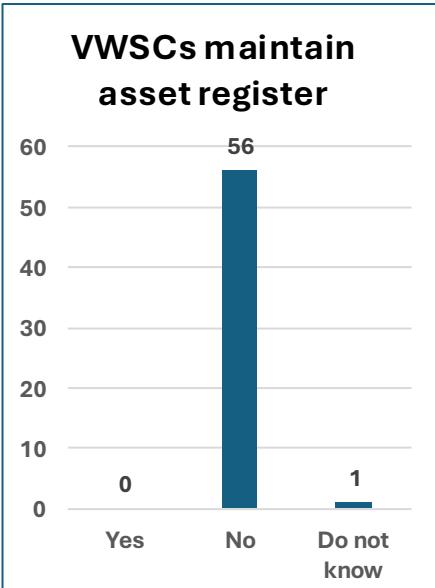


## 1.3 DOCUMENTATION AND RECORD KEEPING

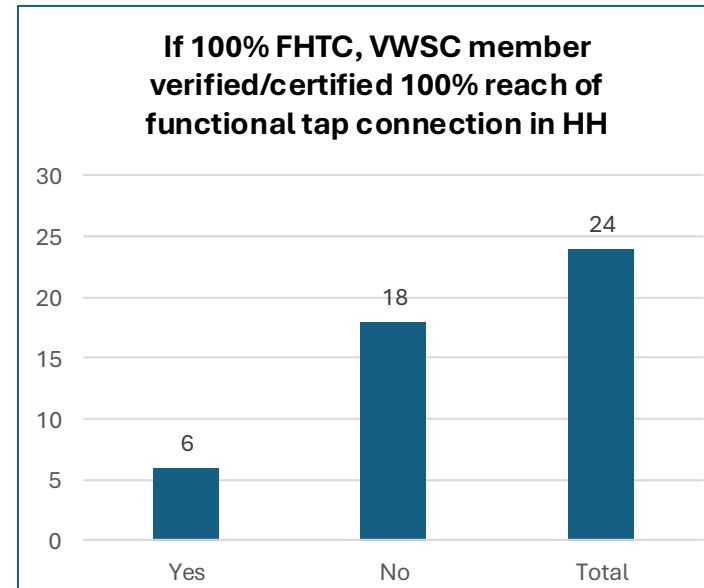
### Committee know about the geo-tag of all the components of the village drinking water system



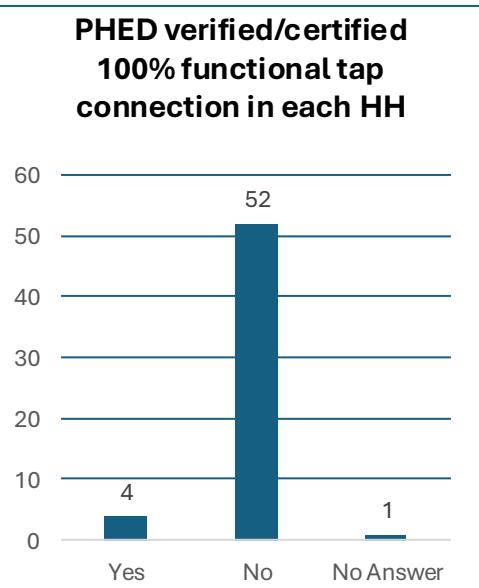
### VWSCs maintain asset register



### If 100% FHTC, VWSC member verified/certified 100% reach of functional tap connection in HH



### PHED verified/certified 100% functional tap connection in each HH



# Challenges : O&M of source sustainability

## Technical & Infrastructure Barriers

- Poor monitoring: Limited real-time data on groundwater levels and extraction.
- Canal-project inefficiencies: Large irrigation works (e.g., feeder links) need better automation and regular inspection.

## Recharge structures:

Existing check dams, ponds, and percolation tanks often lack routine de-silting and maintenance.

## Institutional & Governance Gaps

- Unregulated borewells: Lack of licensing and pumping quotas leads to overdraw.
- Fragmented management: Multiple departments operate in silos – missing unified water budgeting.

## Social & Behavioral Factors

- Crop patterns: Water-intensive crops remain attractive due to market demand
- Limited community ownership of recharge structures → poor upkeep.

# Why source sustainability matters to children

## Health & Development

**Safe water access:** Reduces waterborne diseases that disproportionately affect children.

**Nutrition & Education:** Reliable water supports school hygiene and attendance, especially the girl child

## Future Water Security

Sustainable groundwater management ensures future generations won't inherit a depleted resource

## Educational Impact

School curricula can integrate **local water science** and community stewardship initiatives.

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# UNICEF Engagement

- System strengthening through policy advocacy for climate change and environmental sustainability
- Focus on ensuring source sustenance by playing a convening and catalysing role for effective convergence
- Currently supporting Public Health Engineering Department (PHED) to address field implementation gaps in Jal Jeevan Mission, with a focus on community engagement interventions
- Capacity building of field functionaries of PHED and Watershed Development and Soil Conservation (WDSC) on scientific approaches for ensuring source sustenance and its operations and maintenance.

# Recommendations

Enhanced Communication and Clarity required about scheme ownership, roles and responsibilities

Institutional empowering and authorizing VWSC / PRI to own, operate and maintain by Rajasthan Panchayati Raj Act

Consistent investment in capacity building and training of all stakeholders : Government functionaries, PRIs communities, PRI

Effective Financial Management and Fund Utilization : **Transparency is the key to trust building**

Community Awareness and Participation : Constant communication within stakeholders

Address Specific Issues for assured supply, O&M of distribution network, ensuring last mile delivery

Stakeholder engagement for consistent redressal of local issues

Community and department joint monitoring and evaluate water supply schemes and source sustenance interventions

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