

CHAPTER-1

Introduction

This Chapter contains a brief introduction of Jal Jeevan Mission (JJM) and its physical and financial progress in Rajasthan.

1.1 Clean Drinking Water- A Basic Necessity

Access to clean drinking water is a basic necessity of human beings. It is one of the most essential requirements of life. Importance of clean drinking water can be gauged from the fact that human civilizations developed in river valleys where abundant clean drinking water was available. Even in our oldest sacred scripture *Rig Veda*, water has been declared as a source of great happiness and nourishing like affectionate mothers.

आपो हिष्ठा मयोभुवस्ता न ऊर्जे दधातन । महे रणाय चक्षसे ॥

Since, waters, you are the sources of happiness, grant to us to enjoy abundance, and great and delightful perception. (Rig Veda 10.9.1)

Dependence of rural population of India on unsafe sources of drinking water (ponds, rivers *etc.*), which were exposed to various biological contaminants, is a reason for widespread water-borne diseases in India.

Post-independence, though efforts were made by the Government of India (GoI) to achieve drinking water security through many schemes/programmes, such as the National Water Supply and Sanitation Programme (1954), Accelerated Rural Water Supply Programme (1951-56), the National Drinking Water Mission (1986), Swajaldhara (2002) and National Rural Drinking Water Programme (2009-10) but the issue of imbalance between demand and supply of water remained critical.

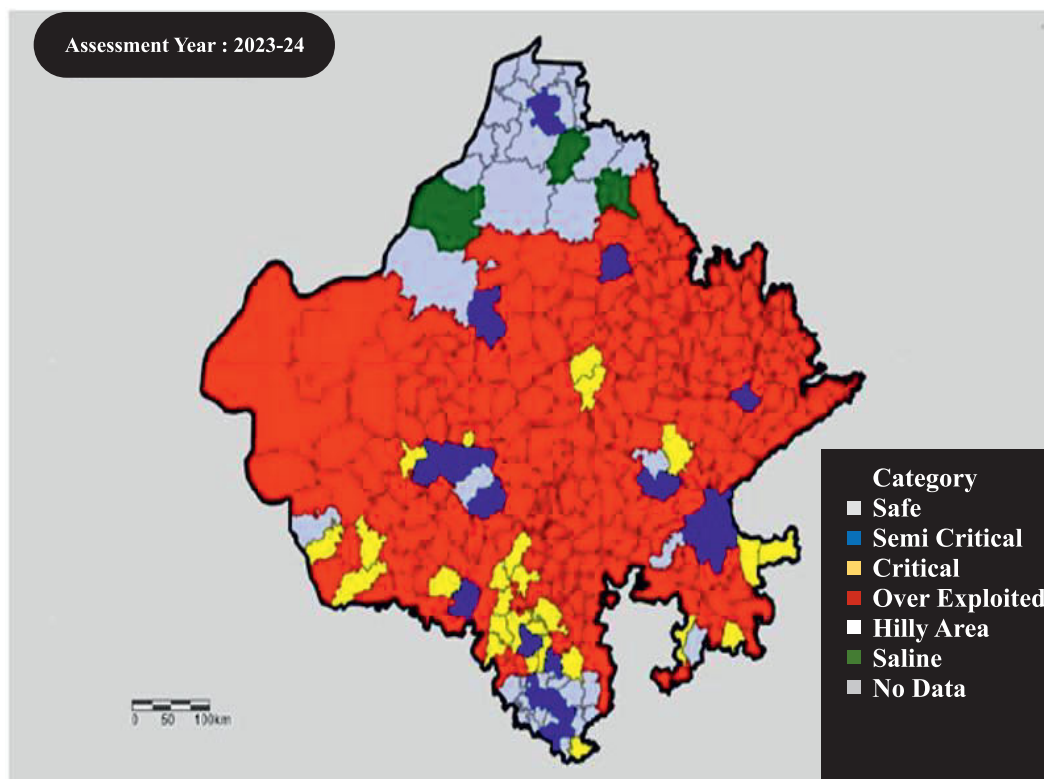
1.2 Status of drinking water in the State

The State of Rajasthan is the largest State in the country covering an area of 3,42,239 square kilometres, which is 10.40 *per cent* of the total geographical area of the country. The rural area of the State is largely dependent on ground water for drinking purposes as about 55 *per cent* of the water sources dependent on ground water. The total surface water resources in the State are only 1.16 *per cent* of the total surface water resources of the country. Scanty rainfall and excessive use of ground water for irrigation and drinking purposes have caused depletion of ground water to an alarming level.

As per Report on Dynamic Ground Water Resources (DGWR) of Rajasthan published (December 2024) by Central Ground Water Board (CGWB), GoI, out of total 302 blocks in the State, 214 blocks are categorized as 'Over-exploited',

27 blocks as 'Critical', 21 blocks as 'Semi Critical' and only 37 blocks are categorised as 'Safe'. Apart from this, three blocks have been categorised as 'Saline'. The position is depicted in the map below:

Picture 1.1 Area-wise position of Rajasthan for Ground Water Resources



Source: Report on DGWR of Rajasthan (December 2024)

The available ground water is also chemically contaminated with fluoride, nitrate, salinity *etc.*, which makes it unsafe for drinking purpose. Fast depletion in available ground water reserves is deteriorating its quality on chemical parameters. Therefore, management of safe drinking water is a very crucial aspect.

State Government adopted the State Water Policy in February 2010, integrating multi-sectoral approach to planning, development and management of water resources on a sustainable basis.

1.3 Jal Jeevan Mission-Shifting of Goal Post to Piped Water Supply

JJM is the flagship scheme launched by the Prime Minister of India on 15 August 2019. The Ministry of Jal Shakti is the nodal Ministry for the overall policy, planning, funding and coordination of the JJM at National level. It has been launched in partnership with the State Governments.

In Rajasthan, the Public Health Engineering Department (PHED) is responsible for implementation of the JJM. Institutional arrangements have also been made

at various levels to help Gram Panchayat (GP) and/or its sub-committee to plan, implement, manage, operate and maintain its in-village water supply systems.

The JJM aimed to provide potable piped water supply to the 19 crore rural households (HHs) of the Country through Functional Household Tap Connections (FHTCs) by the end of 2024. An FHTC has three definite characteristics in terms of water supply *i.e.* (i) adequate quantity (at least 55 liters *per capita per day*), (ii) prescribed quality (as per BIS:10500 standard), and (iii) continuous supply in long-term. The mission also incorporates the aspects of reuse and recharge of water. A sense of ownership was also to be instilled in the village community as they are at the centre of this Mission.

1.4 Objectives of JJM

The broad objectives of the JJM were:

- To provide FHTC to every rural HHs with priority to quality affected areas, villages in drought prone and desert areas, *Sansad Adarsh Gram Yojana* (SAGY) villages, *etc.*;
- to provide functional tap connection to Schools, *Anganwadi* centres, GP buildings, Health centres, wellness centres and Community buildings;
- to monitor functionality of tap connections;
- to promote and ensure voluntary ownership among local community by way of contribution in cash, kind and/or labour and voluntary labour (*shramdaan*);
- to assist in ensuring sustainability of water supply system, *i.e.* water source, water supply infrastructure, and funds for regular O&M;
- to empower and develop human resource in the sector such that the demands of construction, plumbing, electrical, water quality management, water treatment, catchment protection, O&M, *etc.* are taken care of in short and long term; and
- to bring awareness on various aspects and significance of safe drinking water and involvement of stakeholders in manner that make water everyone's business.

1.5 Components of JJM

JJM has incorporated several components with regard to planning and implementation for achieving the intended objectives. Main components of JJM are depicted in the **picture 1.2** below:

Picture 1.2 Components of JJM



Source: JJM Brochure 2024

1.6 Institutional Mechanism

JJM is implemented as a decentralized, demand driven, and community-managed programme. A robust four-tier institutional mechanism has been set up at the National, State, District, and Village level for expeditious implementation of the JJM as given below:

At the National level, the National Jal Jeevan Mission is set up. It is headed by the Mission Director (National JJM) and supported by data and documentation centre of NIC and Project Management Unit comprising multi- disciplinary experts.

At the State level, the State Water and Sanitation Mission (SWSM) is constituted, which is headed by the Chief Secretary to the State Government. It also has Apex Committee and Executive Committee. Apex committee is headed by the Chief Secretary to the State Government with Secretary-in-charge of various line Departments. Executive Committee consists of 5- 10 members. *Experts not exceeding three* from the field of water, rural development and public/community health, hygiene and sanitation, and reputed voluntary organizations are co-opted as members.

At the District level, District Water Sanitation Mission (DWSM) is constituted under Deputy Commissioner or District Collector and other eminent persons from the field of water management, community health, community

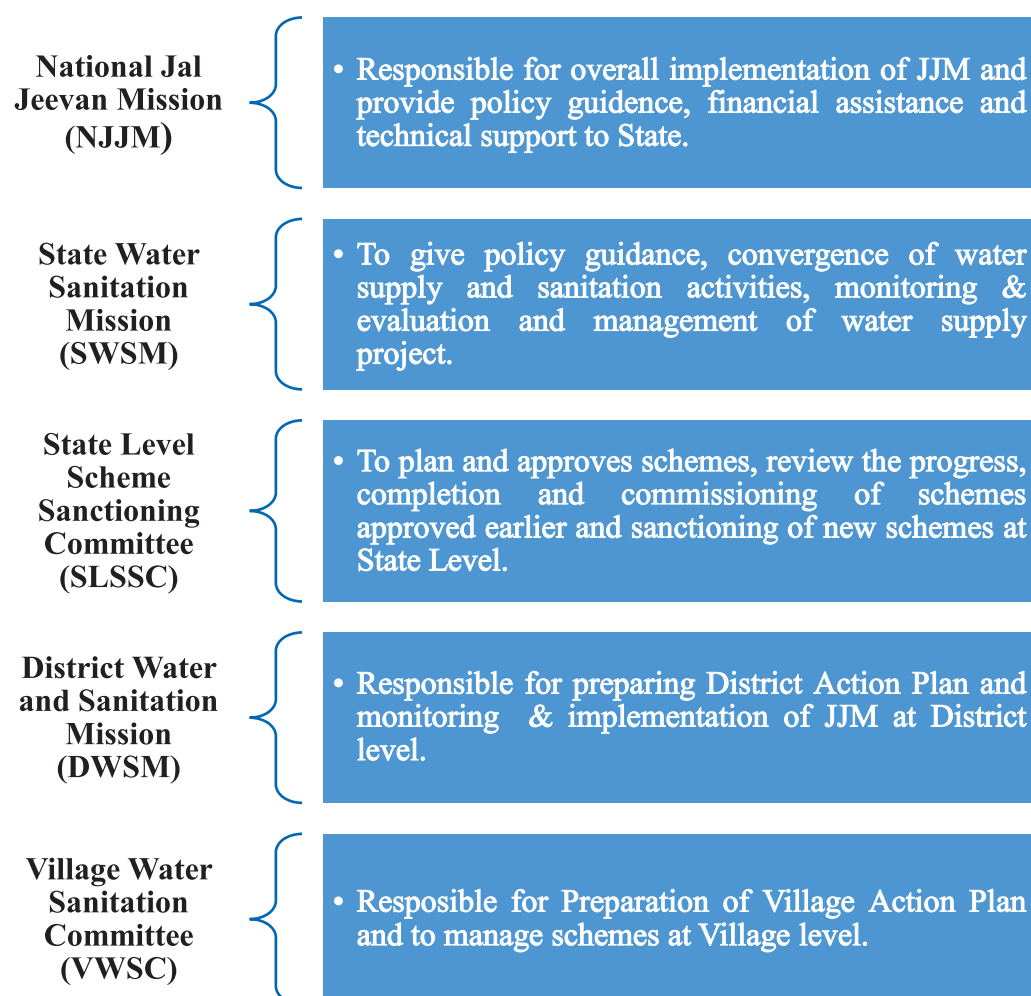
development and local Member of Parliament are co-opted as Members. Executive Engineer of PHED is to act as its Member-Secretary.

At the Village level, Village Water and Sanitation Committee (VWSC) is constituted under *Sarpanch* and 10 to 15 other members comprising 25 *per cent* elected members of GP, 50 *per cent* women members and 25 *per cent* from weaker section *i.e.* SC/ST of the composition. VWSC plays a key role in planning, implementation, management, operation and maintenance of in-village water supply systems, with assistance of PHED. The Mission envisions empowering VWSC to function as 'local water utility' that focuses on water supply service delivery.

Apart from above, a State Level Scheme Sanctioning Committee (SLSSC) was constituted (2010) by the State Government under the Chairmanship of Principal Secretary to the State Government.

The functions of the aforesaid institutional mechanism established for the JJM is depicted in the **Chart 1.1** below:

Chart 1.1 Institutional Mechanism in JJM



Source: Operational guidelines of JJM

The Principal Secretary, PHED is the Administrative Head, who is assisted by Mission Director, JJM and eleven¹ Chief Engineers (CEs). All water supply schemes of JJM in the States are developed, executed, administered and managed by Regions, Circles, Divisions and Sub-divisions headed by Additional Chief Engineer (ACE), Superintending Engineer (SE), Executive Engineer (EE) and Assistant Engineer (AE) respectively. In the State, 25 Regional Offices, 73 Circle Offices and 229 Divisions are functioning. In addition, an office of ACE, Support Program is also established (October 2022) for carrying out support activities as per JJM guidelines.

Two² State Level Laboratories (SLLs) are functioning for chemical and bacteriological testing of water supplied to the consumers and monitoring of six³ Regional Laboratories and 26⁴ District Level Laboratories (DLLs) in the State.

1.7 Physical Progress under JJM

At the time of launching of JJM (15 August 2019), there were 1,07,75,281 rural HHs in the State. Out of these, 11,68,553 (10.84 *per cent*) already had tap water connections and therefore, remaining 96,06,728 HHs were to be provided FHTCs under JJM. As on 07 January 2025, a total of 47,65,980 HHs (49.61 *per cent*) have been provided the FHTCs and 48,40,748 HHs (50.39 *per cent*) were remaining to be covered. Year-wise progress of covering HHs under JJM is given in subsequent Chapter.

1.8 Financial Management

The fund requirement for capital expenditure for JJM is arrived at on the basis of the number of the remaining HHs to be provided for FHTCs as entered by the States on Integrated Management Information System (IMIS). There are three main components with regard to fund flow under JJM namely Coverage, Support activities and Water Quality, Monitoring and Surveillance (WQM&S). The expenditure for implementation of JJM is borne by the Central Government and the State Government on sharing basis *i.e.* 50:50 for Coverage and 60:40 for Support activities and WQM&S each. Further, up to five *per cent* and two *per cent* of total allocated fund can be utilised for support activities and WQM&S respectively.

An amount of ₹ 25,380.94 crore was incurred out of total released funds of ₹ 27,302.30 crore⁵ during the years 2019-25 (upto February 2025) on implementation of JJM in the State. Position of total available funds and

¹ CE and Additional Secretary, CE (Administration), CE (Technical), CE (Rural), CE (JJM), CE (Urban and NRW), CE (Quality Control), CE (Special Project), CE (JICA), CE (Project), Jodhpur, CE (Project), Udaipur.

² One under Chief Chemist (CC), Administration & Urban and another under CC, JJM & Rural.

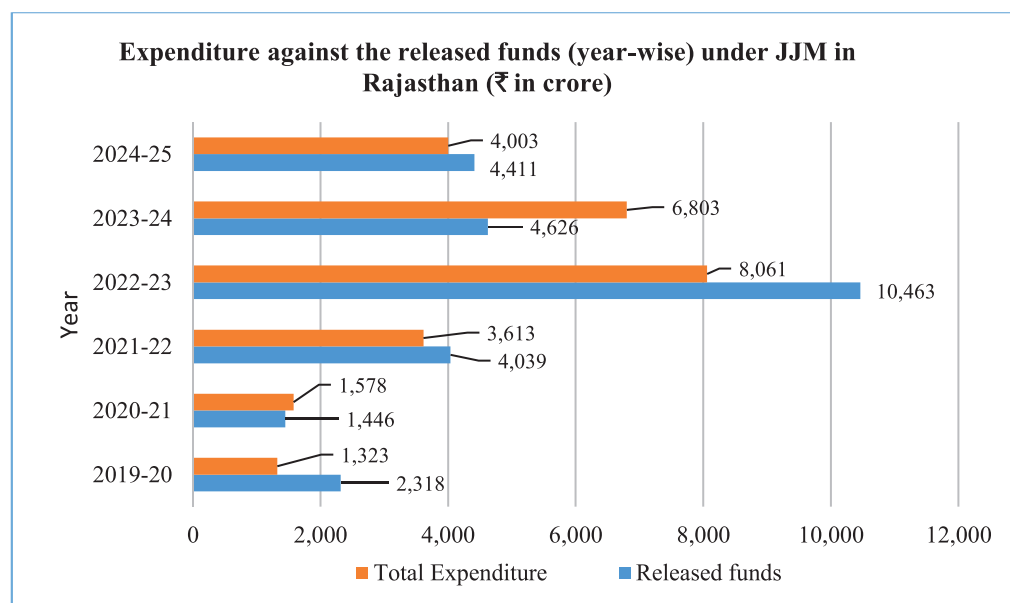
³ Ajmer, Bharatpur, Bikaner, Jodhpur, Kota and Udaipur.

⁴ Alwar, Barmer, Banswara, Baran, Bhilwara, Bundi, Chittorgarh, Churu, Dausa, Dholpur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Hanumangarh, Karauli, Nagaur, Pali, Pratapgarh, Rajsamand, Sawaimadhpur, Shriganganagar, Sikar, Sirohi and Tonk.

⁵ Including opening balance of ₹ 313.67 crore.

expenditure there against during the years 2019-25 is depicted in the **Chart 1.2** below:

Chart 1.2: Expenditure against the released funds under JJM in Rajasthan



Source: JJM Reports available on www.ejalshakti.gov.in (as of February 2025)

1.9 Audit Objectives

Audit was to ascertain whether:

- Programme objectives (output and outcomes) have been achieved successfully;
- Efficient institutional framework is in place for planning, implementation, and post-operational management of the schemes;
- Financial resources have been employed in an economic and efficient manner; and
- Assets created through the programme are sustainable for the next two to three decades and do not compromise water security for future generations.

1.10 Audit Criteria

The main sources of audit criteria were as follows:

- Operational Guidelines for Implementation of JJM;
- Margdarshika for GP & VWSC to provide safe drinking water in rural HHs;
- Water Quality Monitoring & Surveillance Framework;

- Sustainable Development Goals obligations and Standard Operating Procedure for WASH standards;
- General Financial Rules, 2017 and Public Works Financial and Accounting Rules, Rajasthan
- Orders issued by the State Government/GoI facilitating implementation of JJM.

1.11 Audit Sampling

There are 50 districts in the State of Rajasthan as of July 2024, of which *two* districts, namely Jodhpur city and Jaipur city are completely urban districts, and no JJM activities were carried out in these two districts. From the remaining 48 districts, the audit selected⁶ seven districts⁷ and from each selected district, audit further selected two blocks by Random Sampling technique through *iDEA* software. Thereafter, from ‘Har Ghar Jal’ certified villages of each selected block, two villages were taken through *iDEA* software. Thus, 14 blocks and 28 villages were selected for the field study. Details of selected districts, blocks and villages are given in *Appendix-1*.

1.12 Scope of Audit and Coverage

The Performance Audit (PA) covered the activities carried out by the PHED for implementation of JJM during the period August 2019 to March 2024.

Audit conducted test-check of records of the offices of CE (JJM), CE (Special Projects), Chief Chemist (SLL), Chemists (DLL), SEs (DWSM) and SEs (Circle) of selected seven districts. The records of PHED divisions headed by EEs who executed the in-village water supply schemes of selected 28 villages, was also analysed. Further, a beneficiary survey of 560 beneficiaries (taking 20 beneficiaries from each selected village) along with examination of the records of respective VWSCs was conducted for assessment of outputs/outcomes of the JJM.

The PA commenced with an entry conference on 30 August 2024, wherein the Audit Objectives, Audit Scope and Audit Methodology were discussed with Secretary, PHED and other departmental officers.

Audit conclusions were drawn on the basis of scrutiny of records, beneficiary survey and analysis of data uploaded on Integrated Management Information System (IMIS).

An Exit Conference was also held on 20 August 2025 with the Mission Director (JJM) cum Joint Secretary, PHED, in which the points raised in Audit were

⁶ During the conduct of the PA, the total no. of districts was reduced from 50 to 40. However, there is no effect of this reduction on the PA, as the seven districts selected for the audit still existed in the revised 40 districts.

⁷ Alwar, Baran, Hanumangarh, Jaisalmer, Jodhpur-rural, Pali and Sirohi.

discussed. The replies received from the State Government (August 2025 and November 2025) have been incorporated in the Report. The Audit findings are discussed in the succeeding paragraph.

1.13 Acknowledgement

The Indian Audit and Accounts Department acknowledges the co-operation extended by the Public Health Engineering Department, its officers and staff in providing necessary information and records to Audit.