

EVALUATING PROGRESS AND CRAFTING STRATEGIES FOR DRINKING WATER AVAILABILITY IN JAL JEEVAN MISSION IN RURAL RAJASTHAN

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ABSTRACT

After gaining independence, a program was initiated during the First Five Year Plan (1951-56) to provide access to safe water in all villages on the recommendations of Environmental Hygiene Committee. In 1954, National Water Supply Programme ("NWSP") was started. To overcome the challenges faced by water scarcity, National Drinking Water Mission ("NDWM") was launched in 1986. Later on, a decentralized form of administration and community management was given priority in the planning and management of drinking water schemes. In 2009-10, National Rural Drinking Water Programme ("NRDWP") involving Panchayati Raj Institutions ("PRIs"), and community organizations was initiated. Recently, Government of India has embarked on Jal Jeevan Mission ("JJM"/"Mission") in 2019.

Keywords: NSSP, NDWM, NRDWP, Environmental Hygiene Committee, Jal Jeevan Mission.

Introduction

Rajasthan is the largest State in the country, occupying 10.4 percent of land area and contributing more than 5.5 percent of the country's population. Due to the existence of the Thar desert, major part of state is arid or semi-arid and drought prone area. The major sources of surface water in the state are Indira Gandhi Canal, Narmada Canal, Bisalpur Dam, Chambal River and Mahi Dam. Most of the rivers in state are rainfed. The Government fulfils the water needs for irrigation and drinking water by making better use of available water resources in the state, boosting irrigation potential from 2.47 lakh hectares to 39.07 lakh hectares, and leading thereby to increased agricultural productivity.

Objectives and Strategy of Jal Jeevan Mission

The JJM was started in the year 2019 to provide tap water facilities (*'Har Ghar Jal'*) to all rural households by the year 2024. The JJM has been started with an aim to generate infrastructure for rainwater management, ground water and household water to be further recycled and reused in agriculture and allied activities. Under this Mission, all related schemes of water supply management have been merged to facilitate in achieving of the outlined objectives of the Mission. The main objectives are mentioned below:

- Ensuring Faucet-to-Household Connections ("**FHTC**") for every rural household.
- Prioritizing FHTCs in areas with water quality issues, drought-prone and desert regions, selected villages under MPLAD etc;
- Providing functional tap connections to educational institutions, health centers, community buildings, and other key public avenues;
- Encouraging voluntary community ownership through financial contributions, labour, and

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voluntary participation (shramdaan);

- Developing human resources in sector to meet needs required for water treatment, water quality management, catchment protection, and operations & maintenance (“O&M”) needs; and
- Raising awareness about safe drinking water and engaging stakeholders for collective responsibility.
- To execute Jal Jeevan Mission’s objectives, the adopted strategy is mentioned below:
- Planning at the State/UT level for achieving drinking water access to every rural household;
- Empowering local communities and local governance in planning, implementing, managing, operating, and maintaining water supply management in villages;
- Fostering community participation, ownership, and contribution in decision-making issues related to water; and
- Implementing measures to ease the burden on rural women and girls in fetching water, promoting their active participation.

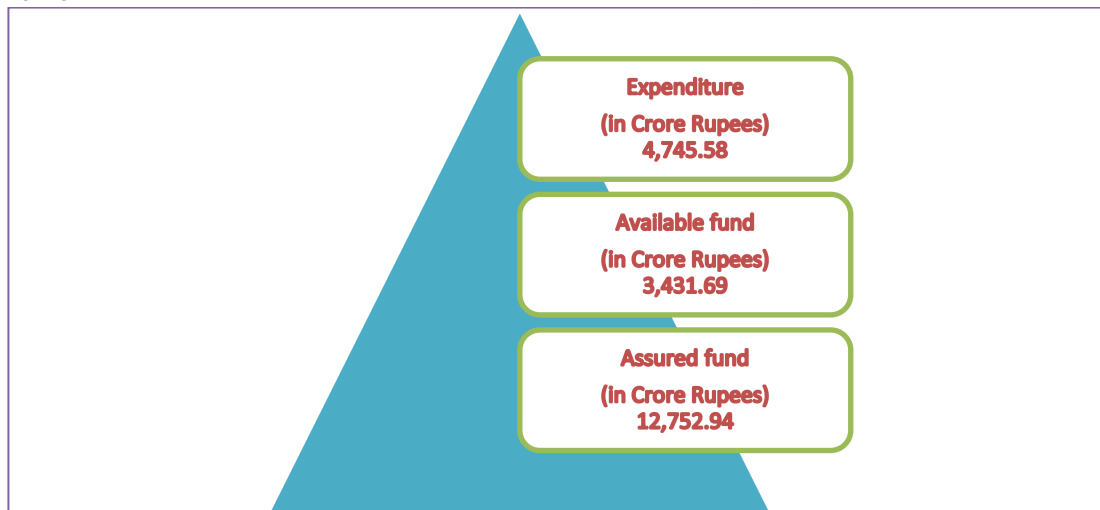
Mission in Rajasthan

Jal Jeevan Mission (“JJM”/Mission”) has been implemented in Rajasthan in 2019 in mission mode in order to provide tap water facilities to every household in rural Rajasthan with service level of 55 litres per person (capita) per day (“LPCD”) of potable quality. As per report of the state government, prior to the launch of JJM in 2019, only 11.74 lakhs (11 percentage) rural households out of total 106.64 households had access to water through tap connection. The JJM will be implemented in the state under the State Water and Sanitation Mission. The Public Health and Engineering Department (“PHED”) is to be the nodal agency to implement the Mission in Rajasthan as stipulated in guidelines issued by Ministry of Jal Shakti, Government of India.

Financial Progress

Financial progress of the Mission is imperative to ensure transparent and effective utilization of funds in achieving objectives of the Mission of providing tap water connections to every rural household. To assess the financial progress of the Mission the cumulative data available on official web portal of Ministry of Jal Shakti have been taken into consideration. The table given below provides insights into the Mission's fiscal health, and progress of the Mission in terms of fiscal parameters.

The assured fund for the Jal Jeevan Mission is INR 12,752.94 Crores which indicates total committed or promised financial support for the Mission from various sources. The assured fund highlights the collective assurance of funds needed to achieve the objectives of the Mission.



Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

The total expenditure for Mission is INR 4,745.58 Crores indicates funds that have either been spent or earmarked for various initiatives and projects under the Mission. It includes fund for providing tap water connections, addressing water quality concerns, and ensuring the sustainability of water management in targeted regions of the state. The available fund, standing at INR 3,431.69 Crores indicates amount of money available for further allocation and implementation of projects under the Mission. It is very crucial to monitor available funds in right way so that objectives may be fulfilled in the stipulated time.

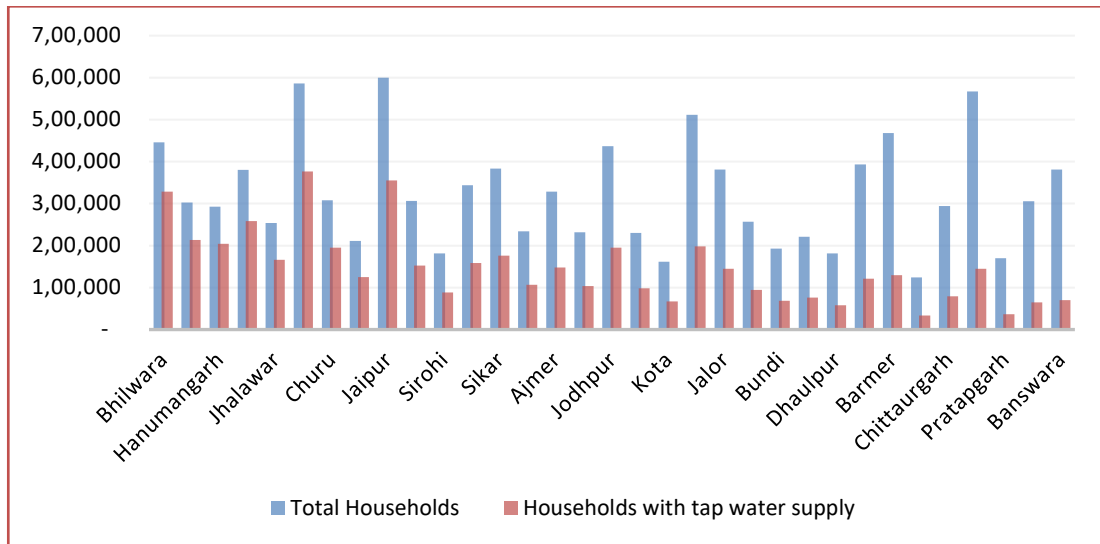
District Level Analysis of Availability of Tap Water

The district level analysis of tap water availability plays very important role in measuring the progress of Mission. The table given below provides a brief idea of tap water supply coverage in different districts comprising total households, households of water supply, and the percentage of households getting water supply in each district.

District	Total Households	Households of tap water	Households of Tap Water (%)
Bhilwara	4,45,983	3,28,345	73.62
Ganganagar	3,02,401	2,13,700	70.67
Hanumangarh	2,92,570	2,03,985	69.72
Pali	3,79,947	2,58,422	68.02
Jhalawar	2,53,597	1,66,238	65.55
Nagaur	5,86,346	3,76,405	64.2
Churu	3,08,010	1,94,996	63.31
Rajsamand	2,10,771	1,24,975	59.29
Jaipur	5,99,443	3,54,981	59.22
Bikaner	3,06,535	1,52,290	49.68
Sirohi	1,81,108	88,066	48.63
Jhunjhunun	3,43,872	1,58,845	46.19
Sikar	3,83,655	1,75,930	45.86
Tonk	2,33,776	1,06,818	45.69
Ajmer	3,28,427	1,47,791	45
Sawai Madhopur	2,31,285	1,03,434	44.72
Jodhpur	4,37,029	1,95,132	44.65
Karauli	2,30,460	98,388	42.69
Kota	1,61,334	67,347	41.74
Alwar	5,11,762	1,98,050	38.7
Jalor	3,81,043	1,45,074	38.07
Dausa	2,56,706	94,533	36.83
Bundi	1,93,022	68,605	35.54
Baran	2,20,722	76,223	34.53
Dhaulpur	1,81,497	57,592	31.73
Bharatpur	3,93,626	1,20,937	30.72
Barmer	4,67,838	1,29,165	27.61
Jaisalmer	1,24,232	33,555	27.01
Chittaurgarh	2,93,887	79,118	26.92
Udaipur	5,67,389	1,44,610	25.49
Pratapgarh	1,69,894	36,663	21.58
Dungarpur	3,05,683	64,420	21.07
Banswara	3,81,275	69,810	18.31
Total	1,06,65,125	48,34,443	45.33

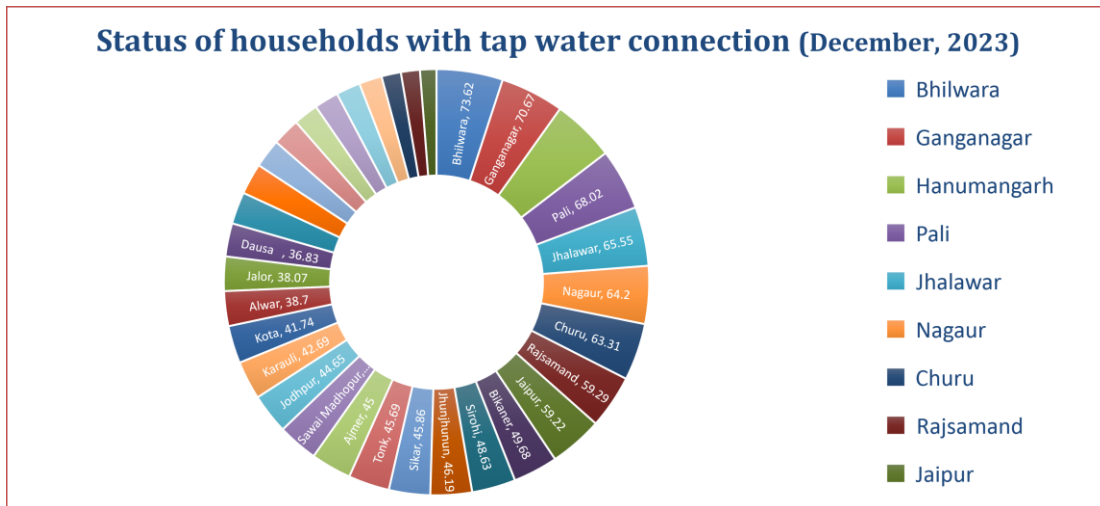
Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

The overall state provided access to tap water facility in rural households is 45.33 percentage with 48,34,443 number of households having the tap water connection. The district Bhilwara has the topmost position with 73.62 percentage of households equipped with tap water facility while district Banswarahas the lowest position with 18.31 percentage of households having tap water connection. The data mentioned in the above table are presented in two graphs mentioned below.



Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

The first graph indicates the total number of households in comparison to households equipped with tap water facility at each district level while the second figure indicates the percentage of households equipped with tap water connection at district level.



Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

The data mentioned in the table and figures depicted above are summarised below:

- **High Coverage Districts:** Bhilwara, Ganganagar, and Hanumangarh demonstrate relatively high tap water supply coverage with percentages exceeding 69 percentage.
- **Moderate Coverage Districts:** Pali, Jhalawar, Nagaur, and Churu fall into the category of districts with moderate tap water supply coverage, ranging from 65.55 percentage to 68.02 percentage.
- **Lower Coverage Districts:** Some districts, such as Dungarpur, Banswara, Pratapgarh, Udaipur, Chittaurgarh, and Jaisalmer, have tap water supply coverage percentages below 30 percentage.
- **Overall State Coverage:** The last row provides the total figures for the state, indicating that, on average, approximately 45.33 percentage of households in the state have access to tap water.

- Status of Water Supply in Rural Households:** The table presents a brief overview of the progress made under JJM in the state of Rajasthan. Out of a total of 1,06,65,125 households, approximately 11.01 percentage (11,74,131 households) had tap water connections while a considerable challenge remains, with 45.33 percent households (48,34,443 households) still lacking these connections. Since the initiation of the Mission, there has been significant progress, as 38.57 percent households (94,90,994 households) have been provided with the facility of tap water.

Total households	Tap Water Connections (15.08.2019)	Tap Water Connections	Remaining households (15.08.2019)	Households provided since launch of the Mission
1,06,65,125	11,74,131 (11.01%)	48,34,443 (45.33%)	94,90,994	36,60,312 (38.57%)

Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

- Status of Progress in Villages:** The multifaced and dynamic indicators of Jal Jeevan Mission, comprising capacity building, infrastructure development, community engagement to achieve the objective of qualitative and safe drinking water to households, are depicted in the table below. Out of total of 42,005 villages, 2,253 villages have successfully identified and trained human resources for the crucial task of operation and maintenance. A milestone has been achieved in 4,742 villages in which each household has been provided with tap connections.

A substantial portion of the villages, numbering 29,206, are currently undergoing water supply infrastructure development. Despite the progress, there are 8,057 villages where the water supply work is yet to commence indicating that there are still challenges or logistical considerations to be addressed in these village for better implementation of the Mission.

Around 41,849 villages (vast majority) have successfully formed Village Water and Sanitation Committees for effective monitoring and management of the Mission activities at grass root level administration. In a significant proportion of villages, specifically 41,879, comprehensive Village Action Plans have been formulated.



Source: Ministry of Jal Shakti Portal (<https://ejalshakti.gov.in/jjmreport/JJMState.aspx>)

Findings

The findings based on the observations of the study may be summarised as follows:

- Before launch of the Mission, only 11 percent of rural households had tap connections, but the Mission has made substantial progress, reaching 45.33 percent coverage in the state of Rajasthan. However, 38.57 percent of rural households are still lacking behind in availability of tap water connections.
- The total expenditure of the Mission in the state is INR 4,745.58 Crores, and the available fund is INR 3,431.69 Crores.
- The districts like Bhilwara, Ganganagar, and Hanumangarh are having high tap water supply coverage (above 69 percentage), while others like Dungarpur, Banswara, and Jaisalmer are having lower tap water coverage below 30 percentage.
- The overall state average stands at 45.33 percentage, emphasizing the need for targeted interventions in low-coverage districts.
- The data on village-level progress indicates positive developments, such as the identification of skilled human resources, the formation of Village Water and Sanitation Committees, and the creation of Village Action Plans. However, challenges remain in villages where water supply work is yet to start, emphasizing the need for prompt action.

Conclusion

The Mission has made significant efforts in increasing drinking water coverage in rural areas of state of Rajasthan with a significant proportion of households (*more than 45 percent of households in comparison to earlier coverage of only eleven percent*) now having access to functional tap connections. The financial resources are required to be optimally used to achieve the targets and goals of the Mission. There is urgent need to address the district level disparities in accessibility of water supply in order to have significant benefits of the Mission, especially in districts with lower water coverage. The Mission has positively impacted rural areas, providing substantial benefits to consumers. The progress at the village level reflects a comprehensive approach, including capacity building and community involvement.

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