

# Water for All? An Empirical Study of Operational Efficiency in the Jal Jeevan Mission

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## ABSTRACT

One of the most important things for living is water. A reliable supply of drinkable water is essential to the advancement of humanity. In the year 2019, Jal Jeevan Mission (JJM) was introduced by the Government of India under the Ministry of Jal Shakti with an objective of providing 55 liters of water per person per day to every rural household through Functional Home Tap Connections (FHTC) by the year 2024. The present study basically tries to light up the JJM program in India through the SWOT analysis and present status of the JJM program in India. The study is completely based on secondary sources of data. The results of the study shows that the financial year 2020-21 has the highest number of households have tap water connections and the financial year 2023-24 has the highest amount of funds drawn under this JJM scheme.

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## 1. INTRODUCTION

One of the most important things for living is water. A reliable supply of drinkable water is essential to the advancement of humanity. 18% of the world's human population and 15% of the world's cattle population dwell in India. But it only has 4% of the world's freshwater resources and 2% of the land mass. According to estimations, the yearly per capita freshwater availability decreased from 5,177 cubic metres in 1951 to 1,545 cubic metres in 2011. According to estimates, it will be around 1,368 cubic metres in 2019 and is expected to decrease to 1,293 cubic metres in 2025. If current trends continue, freshwater availability is projected to drop to 1,140 cubic metres by 2050.

The demand for water is rising across a number of industries and sectors, including residential, agricultural, industrial, recreational, and infrastructural development, due to the increased population and economic activity. However, the supply of water is limited. Thus, managing drinking water is a complicated issue due to limited supply and conflicting needs. Other issues, such as the depletion of groundwater due to over-extraction, inadequate recharge, limited storage capacity, unpredictable rainfall due to climate change, the presence of toxins, inadequate operation and maintenance (O&M) of water delivery systems, etc., further exacerbate the growing demand-supply imbalance.

One goal of the former National Rural Drinking Water Programme (NRDWP), 2017

was to "enable all households to have access to and use safe & adequate drinking water within premises to the extent possible." This goal was intended to be fulfilled by 2030 in accordance with the Sustainable Development Goals (SDG 6) of the United Nations.

People now logically want piped water supply within their household premises, which will help to improve 'ease of living', because the government has placed a strong emphasis on providing basic services like housing, toilets, electricity, cooking gas, healthcare, financial services, social security, broadband connectivity, roads, etc. during the last five years. Ensuring that there is clean drinking water available within residential premises would not only benefit the rural population's health and socioeconomic standing, but it will also relieve rural women and girls of their menial labour.

Against this backdrop, the Jal Jeevan Mission (JJM) was initiated with the goal of reaching every rural home by 2024 with a Functional Home Tap Connection (FHTC). The JJM programme was introduced in 2019 with the objective of providing every rural home with access to 55 litres of water per person per day through Functional Home Tap Connections (FHTC) by 2024. Water is something that JJM wants to make a priority for everyone by creating a Jan Andolan for it. It is under the Ministry of Jal Shakti.

The goal is to maintain sustainable agriculture, water quality testing and monitoring, and the operation of the current water supply infrastructure and water connections. Additionally, it makes sure that grey water is treated and reused, drinking water delivery systems, drinking water sources are enhanced, and conjunctive use of saved water is ensured. The plan is centred on providing services at the household level, such as regular, sufficient, and high-quality water supply. This calls for the use of contemporary technology in the development and execution of water supply plans, the creation of water sources, the treatment and distribution of water, the empowerment of the local community and Gramme Panchayat, the focus on service delivery, collaboration

with other stakeholders, convergence with other programmes, meticulous programme monitoring, and the automated collection of service delivery data to guarantee the quality of services. This will assist in realizing the Jal Jeevan Mission's objective in both text and spirit.

## 2. SIGNIFICANCE OF THE STUDY

Water is a necessity for all living things. Without water, no one could survive. Since fresh water is a necessary component of every person's daily existence, everyone has the right to access it. To eradicate the scarcity of water problem from the rural areas, government announced and introduced Jal Jeevan Mission scheme which provide fresh water supply through functional tap water connections to every rural household. It is very much important to undergo a detailed study about the JJM scheme and to know the present status and progress of it. Keeping in mind these points, the researcher undertook this topic for his research work.

## 3. OBJECTIVES OF THE STUDY

The objectives of the present study are:

- a. To highlighted the Jal Jeevan Mission (JJM) scheme through SWOT analysis.
- b. To access the present status of Jal Jeevan Mission (JJM) scheme in India.

## 4. RESEARCH METHODOLOGY

The present research work is completely based on the secondary sources of data and collected from the official website of Jal Jeevan Mission, official and governmental reports, research papers, you tube videos, magazines, and newspapers.

## 5. PRESENT STATUS OF JJM IN INDIA

The union government has stated that under the Jal Jeevan Mission (JJM), 100% of rural homes will have tap water supply

connections in 2024, the year India elects its 18th parliament.

On Independence Day 2019, Prime Minister Narendra Modi unveiled the JJM, an anticipated expenditure of Rs. 3.6 lakh crore (\$43 billion), from the ramparts of the Red

Fort in Old Delhi. He discussed the struggle of women and girls in rural India to get safe drinking water. The main goal is to install Functional Household Tap Connections (FHTC), which supply each individual with a minimum of 55 litres of water per day.

Table 1. Status of tap water supply in rural homes

<b>Total number of households (HHs)</b>	19,30,58,981
<b>Households with tap water connections as on 15 Aug 2019</b>	3,23,62,838 (16.76%)
<b>Households with tap water connections (as on date 15<sup>th</sup> May, 2024)</b>	14,76,77,495 (76.49%)
<b>Remaining households as on 15 Aug 2019</b>	16,06,96,143
<b>Households provided with tap water connection since launch of the Mission</b>	11,53,14,657 (71.76%)

Note. official website of ejalshakti.gov.in (Retrieved from <https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx>)

Table 1 provides information on the state of tap water supply in Indian rural houses. According to the official ejalshakti report, there are 19,30,58,981 houses in India overall. As of August 15<sup>th</sup> 2019, only 16.76% of

these rural households had tap water connections; however, that number climbed to 71.76% once the JJM scheme was put into place.

Table 2. Status of households with tap water connection (as on date 15th May, 2024)

Sl. No.	States/ UTs	Total households	Households with tap water supply	Remaining Households with tap water supply	Households with tap water supply (%)	Remaining Households with tap water supply (%)
1.	Goa	2,63,003	2,63,003	0	100 %	0 %
2.	A & N Islands	62,037	62,037	0	100 %	0 %
3.	D&NH and D&D	85,156	85,156	0	100 %	0 %
4.	Haryana	30,41,314	30,41,314	0	100 %	0 %
5.	Telangana	53,98,219	53,98,219	0	100 %	0 %
6.	Puducherry	1,14,969	1,14,969	0	100 %	0 %
7.	Gujarat	91,18,449	91,18,449	0	100 %	0 %
8.	Punjab	34,18,055	34,18,055	0	100 %	0 %
9.	Himachal Pradesh	17,08,727	17,08,727	0	100 %	0 %
10.	Arunachal Pradesh	2,28,566	2,28,566	0	100 %	0 %
11.	Mizoram	1,33,060	1,33,060	0	100 %	0 %
12.	Bihar	1,66,29,634	1,60,34,628	5,95,006	96.42 %	3.58 %
13.	Uttarakhand	14,53,158	13,71,775	81,383	94.40 %	5.60 %
14.	Ladakh	40,808	37,737	3,071	92.47 %	7.53 %
15.	Nagaland	3,62,621	3,22,435	40,186	88.92 %	11.08 %
16.	Sikkim	1,33,147	1,18,038	15,109	88.65 %	11.35 %
17.	Maharashtra	1,46,71,918	1,25,66,986	21,04,932	85.65 %	14.35 %
18.	Lakshadweep	13,370	11,301	2,069	84.53 %	15.47 %
19.	Uttar Pradesh	2,65,58,350	2,20,01,070	45,57,280	82.84 %	17.16 %
20.	Tamil Nadu	1,25,23,917	1,03,36,107	21,87,810	82.53 %	17.47 %

Sl. No.	States/ UTs	Total households	Households with tap water supply	Remaining Households with tap water supply	Households with tap water supply (%)	Remaining Households with tap water supply (%)
21.	Tripura	7,48,890	5,99,022	1,49,868	79.99 %	20.01 %
22.	Jammu & Kashmir	18,70,131	14,95,592	3,74,539	79.97 %	20.03 %
23.	Manipur	4,51,566	3,55,354	96,212	78.69 %	21.31 %
24.	Chhattisgarh	50,00,502	39,08,906	10,91,596	78.17 %	21.83 %
25.	Assam	71,42,140	55,81,505	15,60,635	78.15 %	21.85 %
26.	Meghalaya	6,51,391	5,04,127	1,47,264	77.39 %	22.61 %
27.	Karnataka	1,01,14,753	77,36,354	23,78,399	76.49 %	23.51 %
28.	Andhra Pradesh	95,44,575	70,07,557	25,37,018	73.42 %	26.58 %
29.	Odisha	88,68,689	64,96,172	23,72,517	73.25 %	26.75 %
30.	Madhya Pradesh	1,11,82,457	69,55,142	42,27,315	62.20 %	37.80 %
31.	Jharkhand	62,29,531	33,10,139	29,19,392	53.14 %	46.86 %
32.	Kerala	70,82,559	37,28,303	33,54,256	52.64 %	47.36 %
33.	Rajasthan	1,07,00,495	52,25,774	54,74,721	48.84 %	51.16 %
34.	West Bengal	1,75,12,824	84,01,916	91,10,908	47.98 %	52.02 %
<b>Total</b>		<b>19,30,58,981</b>	<b>14,76,77,495</b>	<b>4,53,81,486</b>	<b>76.49 %</b>	<b>23.51 %</b>

Note. official website of ejalshakti.gov.in (Retrieved from <https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx>)

Table 2 explains the number of households with tap water connections in India. Comparing all the states in India, Rajasthan and West Bengal performance regarding tap water connection is very poor as their less than 50 percent households have tap water connections in their home. While

some other states and union territories like Goa, Andaman & Nicobar Island, Dadra & Nagar Haveli and Daman & Diu, Haryana, Telangana, Puducherry, Gujarat, Punjab, Himachal Pradesh, Arunachal Pradesh, and Mizoram have 100 percent tap water connections in all the households.

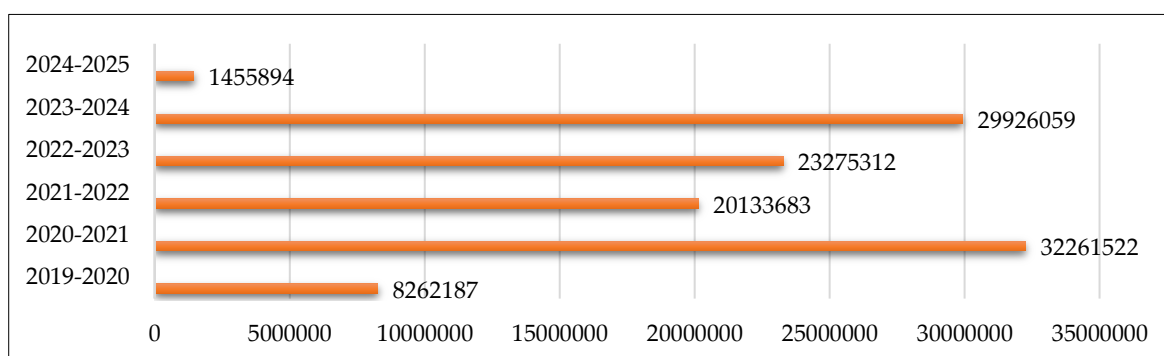


Figure 1. House Holds provided with tap water supply from the F.Y 2019-2020 to 2024-2025

Note. official website of ejalshakti.gov.in (Retrieved from

<https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx>)

(Note - \* Amount in the financial year 2024-2025 as on date 15th May, 2024.)

Figure 1 depicts about financial year wise (From 2019-2020 to 2024-2025) tap water supply connections provided to households in India. Since from the inception of the JJM

scheme, financial year 2020-2021 has the highest number of households (3,22,61,522) have tap water connections in their house.

Table 3. Financial year wise funds drawn under JJM scheme

Financial Years	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Amount (in Crores)	9,951	10,916	40,010	54,744	69,886	6,021*

Note. official website of ejalshakti.gov.in (Retrieved from

<https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx>)

(Note - \* Amount in the financial year 2024-2025 as on date 15th May, 2024.)

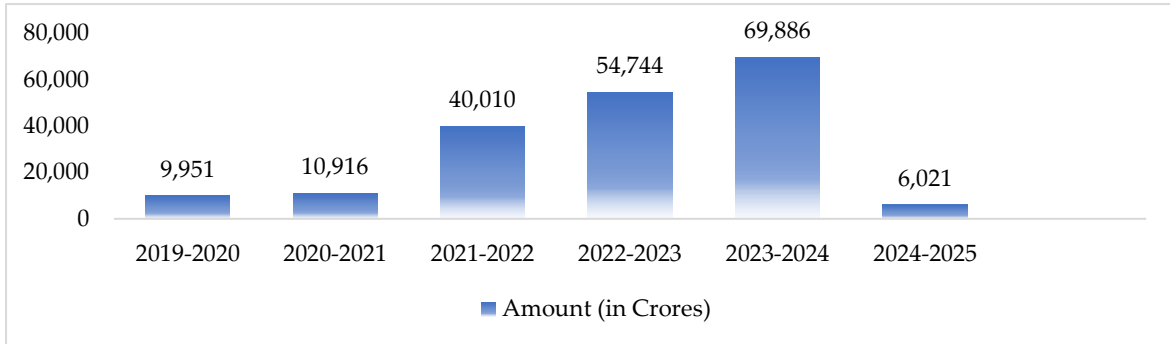


Figure 2. Bar diagram shows financial year wise funds drawn under JJM scheme

Note. Compiled work of the researcher.

Table 3 and figure 2 demonstrate about financial year wise fund drawn under JJM scheme. The highest amount of funds drawn in the financial year 2023-2024 which is amounted Rs. 69,886 crores. There is continuous growth in the financial year wise funds drawn under JJM scheme.

## 6. SWOT ANALYSIS OF JJM SCHEME

Through SWOT analysis of Jal Jeevan Mission (JJM) scheme provides an opportunity for better planning and implementation of the scheme in India. The SWOT analysis of the scheme is as under –

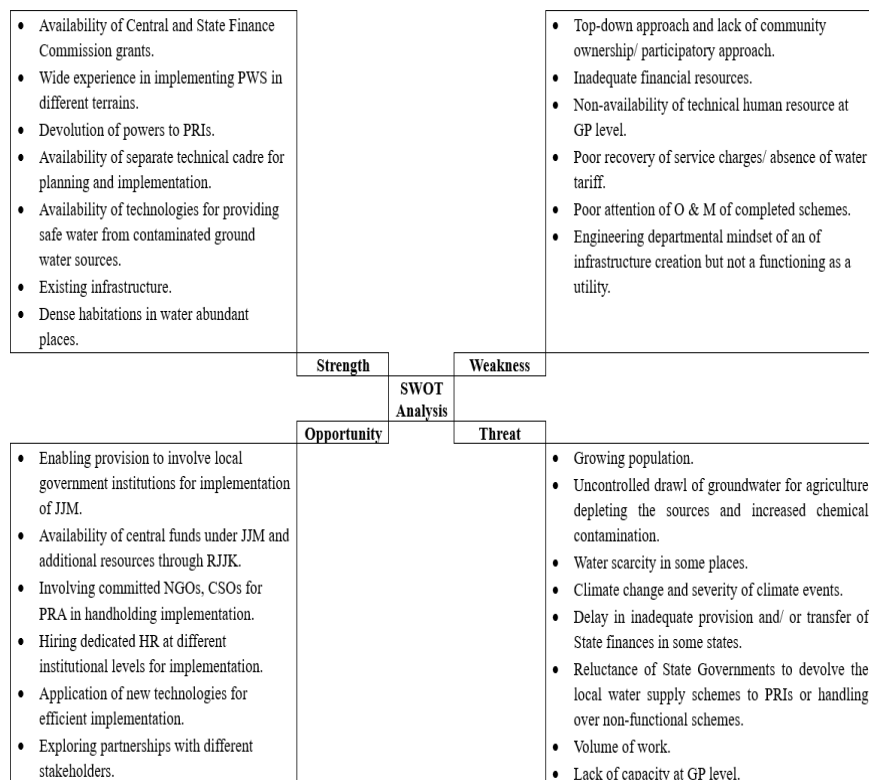


Figure 3. SWOT analysis of JJM Scheme in India

Note. Compiled work of the researcher.

## 7. CONCLUSION

The Jal Jeevan Mission (JJM) was started with the intention of providing a Functional Home Tap Connection (FHTC) to every rural home by the year 2024. The JJM scheme has a great potential for the rural upliftment through the proper and adequate distribution of water to each household in rural areas. The study is carried out to understand the overview of JJM scheme through SWOT analysis and the present

status of this scheme. The study's findings indicate that the greatest number of households with tap water connections occurred in the financial year 2020–21, while the highest amount of funds was taken out of the JJM scheme in the financial year 2023–24. Through SWOT analysis, certain vulnerabilities and threats were identified in the JJM scheme; if these are addressed, the scheme has the potential to become a potent tool for both rural and economic development.

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