

CHAPTER VII
OUTPUT AND OUTCOME
FRAMEWORK OF
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The progress in providing FHTCs to rural households in water quality affected areas was less resulting in disparity of water supply across districts. The rural households in the selected districts that were provided with tap connections did not receive sufficient quantity of water. Also quality issues in the water supply were noticed. A majority of FHTCs provided were outside the house in contravention to the guidelines which prescribed provision of FHTC within the house.

7.1 Introduction

Jal Jeevan Mission's primary output is providing all rural households with a Functional Household Tap Connection by 2024. The mission period was further extended up to 2028 in February 2025. In parallel, the Mission also strives to achieve four key measurable outcomes viz., (i) improved health conditions of rural communities, (ii) reduction in drudgery faced by women and girls and empowerment of women, (iii) reduced school dropout rates of upper primary level girls and (iv) increase in employment opportunities for rural communities.

7.2 Non-achievement of Primary Output

7.2.1 FHTCs not provided

One of the broad objectives of the JJM is 'to prioritise provision of FHTCs in quality affected areas, villages in drought prone and desert areas etc.' by March 2021. Of the selected districts, the ground water of the entire districts of Nagapattinam and Ramanathapuram were not suitable for drinking purpose and was classified as brackish and saline in nature. Yet, it was noticed that the progress in these districts was much lower compared to other districts and the achievement in providing FHTCs to these districts stood at 46 *per cent* and 31 *per cent* respectively, as of June 2024. It is pertinent to note that even after a lapse of four years after launch of the scheme, these districts could not register the desired progress in ensuring coverage of rural households under JJM.

Theni District has been reported as '*Har Ghar Jal*'. However, during JPV, Audit noticed (March 2025) that in Agamalai VP, none of the 1,622 households were provided with FHTC. The population depended on either natural water source (aquifers, river falls etc.) or public taps.

In the beneficiary survey involving 1,427 respondents, 147 respondents stated that they were not provided with FHTCs under the scheme, out of which 143 belonged to Nagapattinam and Ramanathapuram Districts.

Government replied (July 2025) that in Ramanathapuram and Nagapattinam districts the three major MVS were under implementation. Upon completion, the balance FHTCs in Ramanathapuram and Nagapattinam districts will be

provided for saturation of the districts. The reply indicated the fact that saturation was not achieved even after five years of roll out of JJM.

7.2.2 Insufficient and Irregular supply of water in FHTCs

JJM Operational guidelines mandates that a minimum of 55 lpcd of water is required to be supplied through every tap connection provided. To ensure the same, Audit obtained records of the water supplied to habitations¹ during 2019-24 in the selected districts and the details are given in **Table 7.1**.

Table 7.1: Quantity of water supplied to habitations during 2019-24

Districts	Number of habitations	Quantity of water supplied		Percentage of habitations supplied with the required quantity
		Less than 55 lpcd	55 lpcd or above	
Coimbatore	1,200	1,096	104	8.67
Nagapattinam	980	980	0	0
Salem	5,109	1,901	3,208	62.79
Theni	607	0	607	100
Viluppuram	2,284	1,191	1,093	47.85
Ramanathapuram	2,306	2,269	37	1.60
Total	12,486	7,437	5,049	40.44

(Source: Concerned DRDAs/TWAD Board)

From **Table 7.1** it was seen that none of the habitations in Nagapattinam District were supplied with 55 lpcd of water. Though Coimbatore District had reported 100 *per cent* achievement in providing FHTCs, it was noticed that only 8.67 *per cent* of habitations were supplied with quantity of water as per the prescribed norms.

Further, Audit enquiry regarding the water supplied to FHTCs, FGDs, JPVs (August/September 2024) and beneficiary survey revealed that shortfall in supply of water as detailed below:

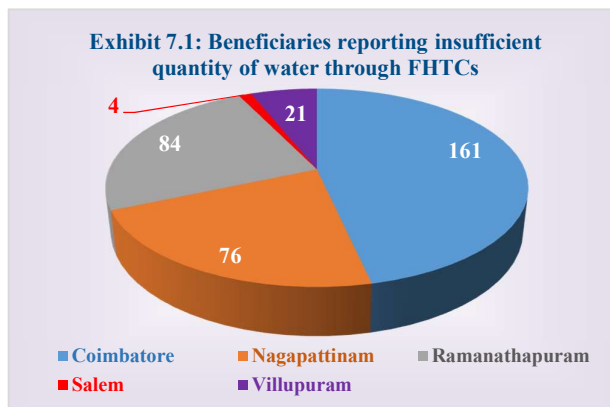
- In Nagapattinam, three² selected VPs of Vedaranyam block could not supply 55 lpcd of water. Of these, the water supplied in Kodyakkarai VP was as low as 17 lpcd.
- In Ramanathapuram, all 10 selected VPs reported that water was not supplied in required quantity and supply was made only once in four to seven days thereby forcing the public to buy water.
- In Salem, the beneficiaries who participated in FGD stated that water was supplied once in three days.

¹ As per JJM Operational Guidelines, habitation is defined as a group of minimum 20 households and/or 100 persons.

² Kodyakkarai, Marudhur North and Mollaikarai VPs.

- In Coimbatore, none of the VPs in Kinathukadavu block received regular supply of water as the supply from the ‘CWSS 295 habitations scheme’ was inadequate, which is further commented in **Paragraph 2.5.2.2**.

The above observations were further substantiated during beneficiary survey by 346 beneficiaries (out of 1,280 provided with FHTCs) that they did not receive sufficient quantity of water (**Exhibit 7.1**). Also, 98 beneficiaries stated that they did not receive water on a daily basis. Of these, 88 beneficiaries belonged to Coimbatore District.



Government replied (April 2025) that after completion of Retrofitting works and New MVS works in Ramanathapuram and Nagapattinam districts, water will be supplied at 55 lpcd to all the habitations in the districts. The reply is not tenable as the fact remained that the objective of supplying a minimum of 55 lpcd was not achieved even after five years of roll out of JJM.

7.2.3 Non-supply of water as per prescribed quality parameters

As per the JJM Operational Guidelines, the water supplied must meet the BIS:10500:2012 drinking water standards concerning bacteriological parameters. During field visit, Audit collected water samples from 43 habitations³ randomly selected in six districts and got them tested in TWAD Board’s District Water Testing Laboratories, wherein all five samples taken at habitations of Coimbatore District and two samples pertaining to Ramanathapuram District did not meet the above Guidelines. The issues noticed in testing of water quality are discussed in **Paragraph 5.3**.

Further, Audit questionnaire through beneficiary survey and FGDs in the selected districts revealed that 209 out of the 1,280 beneficiaries provided with FHTCs expressed dissatisfaction⁴ on the quality of water received by them. Out of the above 209 beneficiaries, 123 beneficiaries belonged to Ramanathapuram District.

Quality issues were noticed during JPV in some habitations of the selected districts such as Viluppuram, Ramanathapuram and Theni as beneficiaries expressed that the water supplied was not potable.

³ Coimbatore - 5; Nagapattinam - 3; Ramanathapuram - 13; Salem - 8; Theni - 4 and Viluppuram - 10.

⁴ Coimbatore - 25; Nagapattinam - 14; Ramanathapuram - 123; Salem - 4 and Viluppuram - 43.

Government replied (April 2025) that quality issues in Ramanathapuram District was on account of ground water quality issues and after completion of New MVS and CWSS works implemented by TWAD, uniform quality and quantity of drinking water would be supplied. However, the reply was silent on the deficient quality of water noticed in Coimbatore and Theni districts.

7.2.4 Other issues in coverage of FHTCs

7.2.4.1 Incorrect location of FHTC delivery points in households

JJM Operational Guidelines envisaged that FHTC may be provided to every household with JJM funding for one tap out of three delivery points (taps) viz. kitchen, washing & bathing area and toilet.

Audit scrutiny revealed that, as of September 2024, out of 2,69,645 FHTCs provided in the selected districts, 2,59,613 FHTCs (96 per cent) were installed outside the beneficiary's house in contravention of the guidelines. The details are given in **Appendix 7.1**. This position was corroborated during JPV conducted across 12 selected blocks in selected districts (**Exhibit 7.2**).

Exhibit 7.2: FHTC provided in open space without concrete stand post



This deviation from the guidelines not only fails to provide the intended benefit to the people at large but also leaves these connections outside the house vulnerable to civic problems.

Government replied (April 2025) that the tap connections were provided outside the households due to (i) lack of space to install taps, (ii) beneficiaries' request and (iii) ease of usage on account of small size of rural houses. The reply is not tenable as installation of taps at open and vulnerable points affect the safety and maintenance of the asset created.

7.2.4.2 Water tap connections to schools and Anganwadi centres

As per Para 3.3 of JJM Operational Guidelines, one of the objectives of JJM is to provide functional tap connection to Schools, *Anganwadi* centres, GP buildings, Health centres, wellness centres and community buildings. The details of JJM tap connections of schools and *Anganwadi* centres in the State, as of November 2024 is given in **Table 7.2**.

Table 7.2: JJM tap connections of schools and *Anganwadi* centres as of November 2024

	Tamil Nadu		Selected districts	
	Rural Schools	Provided with FHTCs	Rural Schools	Provided with FHTCs
Rural Schools	38,855	38,848	6,340	6,339
<i>Anganwadi</i> Centres	40,242	40,191	6,628	6,624

(Source: JJM Dashboard)

From **Table 7.2**, it was seen that nearly all the rural schools and *Anganwadi* centres have been provided with FHTCs as per the data uploaded in JJM dashboard. Whereas, during test-check of rural schools in JPV, Audit noticed that two rural schools and one *Anganwadi* centre of Salem District⁵ were not provided with FHTCs though JJM dashboard indicated provision of tap connections to them.

Further, Mission Director reported in October 2024 that 1,626 Panchayat Union Schools and 6,444 *Anganwadis* in the State have not yet been provided with water tap connections. Out of these, 1,564 *Anganwadis* belong to the six selected districts. This was contradictory to the data uploaded in Dashboard.

Government replied (April 2025) that in respect of three selected districts viz., Nagapattinam, Ramanathapuram and Viluppuram, the BDOs/VP presidents have been instructed to provide pipe connections immediately. It was also stated that all rural schools and *Anganwadis* in the remaining three selected districts have now been provided with tap connection. The reply indicated that the information uploaded in JJM dashboard was not accurate.

Recommendation 16: The Government should take steps to bring in all the schools and *Anganwadi* centres within the purview of JJM so as to provide FHTCs to all of them.

7.3 Outcomes of JJM

7.3.1 Sustainable Development Goal - 6

The Sustainable Development Goals (SDGs) framework is a unique articulation of public interest on a global scale wherein the 2030 Agenda for Sustainable Development was adopted by 193 members of the United Nations General Assembly in 2015. At the core of this 2030 Agenda are the 17 Global Goals and their 169 targets driven by the principle of ‘Leaving no One Behind (LNOB)’.

The SDG Global Target 6 - Clean water and Sanitation - calls for access to safe and affordable drinking water, sanitation facilities and hygiene for all by 2030.

⁵ Government Panchayat Union Primary School in Kaveripuram VP and Government Panchayat Union Primary School and *Anganwadi* (in same campus) of Navapatti VP in Kolathur Block.

In particular, Target 6.1 of SDG-6 aims to achieve universal and equitable access to safe and affordable drinking water for all by 2030.

The GoI has also aligned itself with the global commitment to sustainable development to achieve the 2030 Agenda and the target is to provide piped water connection under Jal Jeevan Mission. In order to achieve the SDG-6 goal, GoI implements various⁶ programmes and initiatives including JJM. The performance of the State under SDG-6 is given in **Table 7.3**.

As per NITI Aayog's SDG India Index 2023-24, 81.87 *per cent* of rural households in Tamil Nadu are getting safe and adequate drinking water within premises through Piped Water Supply.

Table 7.3: Performance of Tamil Nadu under SDG-6

Year / Period	SDG-6 score		Ranking amongst the States
	India	Tamil Nadu	
2018	63	66	9
2019-20	88	90	8
2020-21	83	87	11
2023-24	83	87	11

7.3.2 Achievement in Key measurable Outcomes of JJM

In order to ensure socio-economic wellbeing of rural households, JJM strives to achieve the four key measurable outcomes as stated in **Paragraph 7.1**. To assess the progress, Audit conducted beneficiary survey, JPVs and FGDs wherein the achievements in outcomes were discussed.



- During FGDs in the selected VPs, beneficiaries stated that there was significant reduction in women's hardships wherever water was provided to their homes.
- The members of community such as school headmasters, health inspectors and Village nurses also stated that their children could spend time learning in school.

7.3.2.1 Reduced dropout of upper primary school girls

In the beneficiary survey conducted by Audit, 1,280 beneficiaries stated that they were provided with FHTCs. None of the beneficiaries reported drop-out of school going girls in their households, both in the 'classes 1 to 5' group and 'classes 6 to 8' group. Audit obtained the data on drop-out of School Going Children in the primary and middle school level. It was noticed that the drop-out rate at these level was negligible (in the range of 0.01 *per cent* to

⁶ (a) Swachh Bharat Mission; (b) AMRUT 2.0 Scheme; (c) PM Krishi Sinchayee Yojna (PMKSY); (d) Mission Amrit Sarovar; (e) Jal Shakti Abhiyan; (f) Atal Bhujal Yojana; (g) National River Conservation Programme (NRCP); (h) Namami Gange - Integrated Ganga Conservation Mission and (i) National Perspective Plan (NPP).

0.2 per cent) in all the selected districts owing to the initiatives of the State Government in Education Sector.

7.3.2.2 Reduced drudgery of women

In the FGDs held in the two selected blocks of Ramanathapuram District, the representatives of rural communities stated that women had to collect water from distant areas (ranging from 500 metre to 1 kilo metre) and added that the burden would be alleviated only if potable water was supplied to doorsteps.

Thus, even after four years of the roll out of JJM, Ramanathapuram district had not recorded progress in achievement of FHTCs and lagged in achievement of one the key outcomes viz., reduction in drudgery faced by women

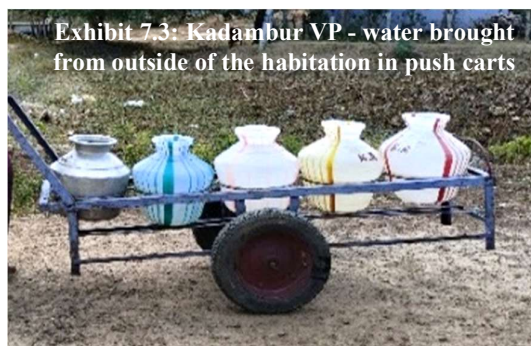
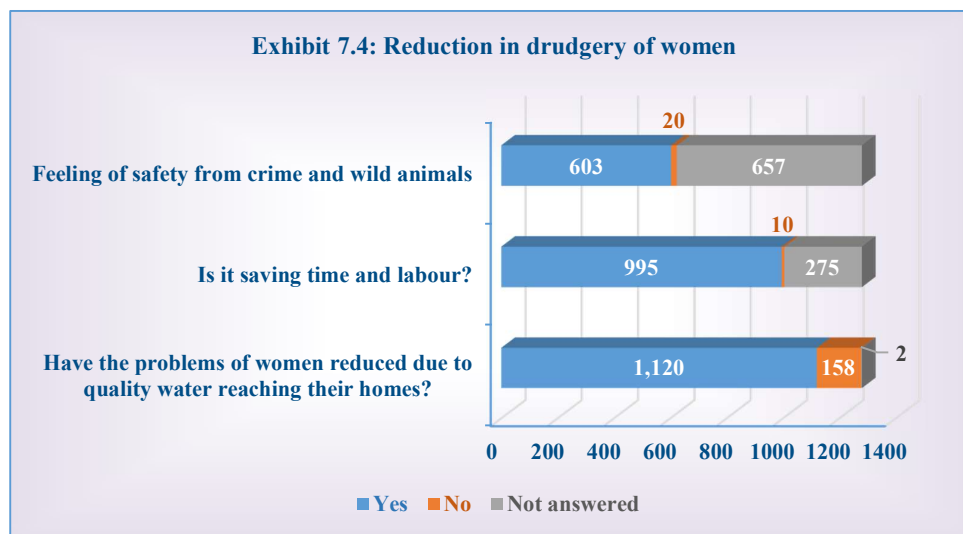
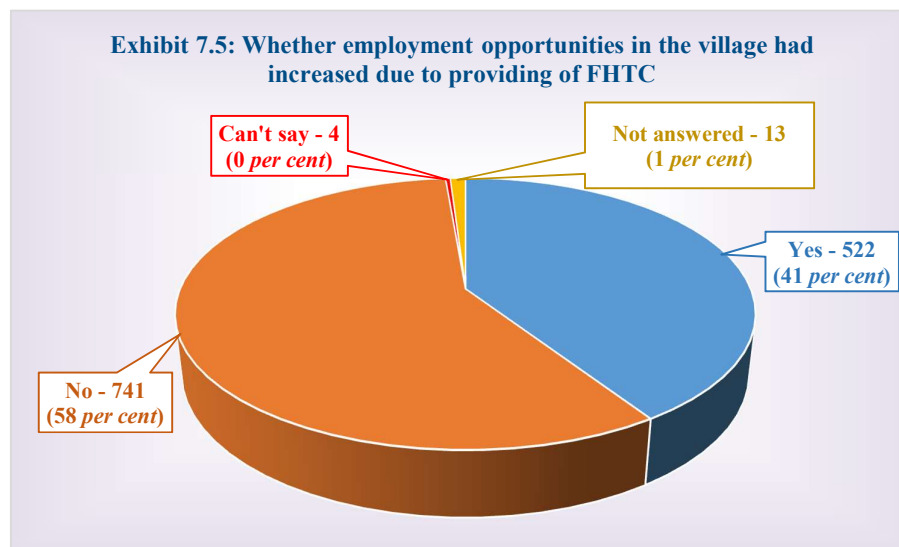


Exhibit 7.3. The response of 1,280 beneficiaries provided with FHTCs during the survey conducted by Audit is given in Exhibit 7.4.



7.3.2.3 Increased employment opportunities

The Beneficiary Survey revealed that the beneficiaries of the scheme did not perceive a significant impact on their employment opportunities on account of provision of FHTCs to their households. While 41 per cent of the beneficiaries reported an increase in employment opportunities on account of increased time availability, 58 per cent felt no change in the employment opportunities (Exhibit 7.5).



7.3.2.4 Reduced waterborne diseases and healthy rural communities

Of the key measurable outcomes, the reduction in waterborne diseases is vital for the long term development of the rural communities. As measurable improvement in this aspect can be attributed to a variety of factors including robust health care system with focus on preventive health care measures, awareness initiatives and proper sewage/waste disposal, correlating the reduction in waterborne diseases with provision of FHTCs alone cannot be conclusively established. In the beneficiary survey, while admitting that they could not recollect the frequency of waterborne diseases before the start of the Scheme, 594 beneficiaries (46.40 *per cent*) felt that there was reduction in water-borne diseases like vomiting, diarrhoea, jaundice, cholera etc. due to the provision of giving quality water to homes through JJM.

Audit compared the data on the water-borne diseases in the selected districts and the State provided by the Directorate of Public Health and Preventive Medicine against the progress of provision of FHTCs in the districts at the start of the Mission period (2019-20) and at the end of 2023-24.

Table 7.4: Data on prevalence of water-borne diseases *vis-à-vis* FHTCs provided in selected districts.

District	Total number of people affected		Percentage of FHTCs provided (JJM Dashboard data)	
	2019-20	2023-24	2019-20	2023-24
Coimbatore	0	2,355	39.65	100
Nagapattinam	625	1,233	5.20	38.05
Ramanathapuram	580	7,329	9.80	28.23
Salem	12	3,405	7.52	80.20
Theni	0	3,052	24.31	100
Viluppuram	2,886	13,096	1.05	81.17
State Total	28,548	1,12,884	15	82

(Source: Data furnished by Directorate of Public Health and Preventive Medicine and JJM Dashboard)

From **Table 7.4**, it was observed that there was no reduction in the number of people affected with water-borne diseases even in districts with high achievement in provision of FHTCs. Though the increase in the water-borne diseases could be due to a variety of factors including improved reporting practices, providing water of prescribed quality through FHTCs would aid in ensuring better health standards in the State in the long-term.

Government replied (July 2025) that in Ramanathapuram, since there was no potable local source of water, the entire district was completely dependent on the new MVS and Retrofitting of existing CWSS works which were under progress. On completion, it would be possible to achieve all the key measurable outcomes.



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The 14 January 2026

Countersigned



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Comptroller and Auditor General of India

New Delhi
The 27 January 2026