



SUPREME AUDIT INSTITUTION OF INDIA
लोकहितार्थं सत्यनिष्ठा
Dedicated to Truth in Public Interest

**Report of the
Comptroller and Auditor General of India
on Performance Audit on
Implementation of Jal Jeevan Mission
in Madhya Pradesh**



**Government of Madhya Pradesh
Report No. 5 of 2026
(Performance Audit - Civil)**

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CHAPTER V

CONCLUSION & RECOMMENDATIONS

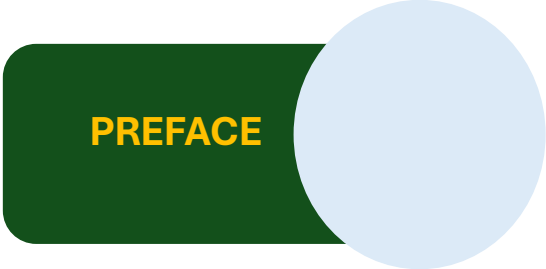
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PREFACE

This Report of the Comptroller and Auditor General of India for the year ending on 31 March 2024 has been prepared for Submission to the Governor of Madhya Pradesh under Article 151 of the Constitution of India, for being laid before the Legislature of the State.

The Report contains significant results of Performance Audit on 'Implementation of 'Jal Jeevan Mission in Madhya Pradesh', covering the period 2019-20 to 2023-24.

The instances mentioned in this Report are among those which came to notice in the course of test audit.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Executive Summary





Intake well

- Near Village Bari, Block
Begamganj, District Raisen,
Madhya Pradesh



Water Treatment Plant

Neelkhand, MVS, Raisen,
Madhya Pradesh

Executive Summary

Why this Audit

The Jal Jeevan Mission (JJM) is a flagship initiative by the Government of India launched on 15 August 2019 with the vision of ensuring “Har Ghar Jal” that is, providing every rural household with a Functional Household Tap Connection (FHTC) delivering safe and adequate drinking water.

Against the target of JJM to provide 100 *per cent* FHTCs to all rural households by March 2024, PHED was able to cover 60.90 lakh rural households by December 2024 despite the fact that 13.53 lakh households already had tap connections, out of a total of 1.11 crore.

Madhya Pradesh lagged in JJM progress with state coverage of only 69 *per cent* as against the national JJM progress of approximately 80 *per cent* FHTC coverage.

The audit of JJM was undertaken to uphold accountability, transparency, and ensure effective implementation of the mission in strict accordance with the established guidelines of JJM.

What we found

Audit findings in this report emerged out of the scrutiny of test check of records in respect of implementation of JJM in selected eight Public Health Engineering Department (PHED) divisions and Project Implementation Units (PIU) of MP Jal Nigam for the period 2019-2024, including beneficiary survey of 32 villages to validate/support audit findings.

PLANNING ISSUES

There were systemic issues in planning, undermining the Mission’s decentralized, demand-driven and bottom-up planning process, leading to delays in the ‘Har Ghar Jal’ intended deadline (March 2024). These include absent or delayed baseline surveys in multiple villages due to incomplete Implementation Support Agency (ISA) appointments, leading to inaccurate assessments and cost escalations in the Single Village Schemes.

Community engagement was superficial and did not help in sensitization of the rural community resulting in near-zero financial participation (community contributions)

Scheme Snapshot



Targeted 1.12 crore Functional Household Tap Connections by March 2024 under Har Ghar Jal



55 Litre Per Capita Per Day to be provided every household. (estimated on five-member basis)



Ensure Quality of water and Source Sustainability



Scheme Sustainability through community participation and sense of ownership

and diminished sense of agency and ownership. Village Water and Sanitation Committees (VWSCs) were largely non-functional, and Village Action Plans did not identify sustainability and quality of source. District Action Plans and State Action Plans did not flow from VAPs, resulting in unrealistic Annual Action Plans (AAPs) with data discrepancies and neglected priorities like SC/ST-dominated, drought-prone, and arsenic/fluoride-affected areas. Result was a top-down planning process disconnected from grassroots realities.

Directives of Apex Committee and NGT for providing potable piped water via FHTCs to all arsenic and fluoride affected areas by December 2020 were not observed as Electrolytic Defluorination Unit were installed in only 18 villages out of 33 fluoride-affected villages in Dindori District by December 2021 while piped water continued to be supplied without de-fluoridation, despite high fluoride levels in remaining 15 villages.

Schemes were arbitrarily adopted without hydrogeological studies, resulting in subsequent shift from Single Village Schemes to Multi Village Schemes in few areas, causing wasteful expenditure. Convergence for water recharge and greywater management was ignored, exacerbating long-term risks.

We identified systemic deficiencies in infrastructure creation, contract management, and fund utilization. Execution was sluggish, with only 27 *per cent* of Multi-Village Schemes and 58 *per cent* of Single-Village Schemes completed as of September 2024. Delayed award of works, unrealistic assessments, and non-utilization of funds annually, resulted in non-release of central grants and shortfall in allocation of state share.

Estimations were flawed, causing cost escalations in SVSs, avoidable expenditures, inflated tenders, unwarranted executions/estimations, and richer specifications. Non-issuance of physical/final completion certificates in SVSs indicated premature handover, corroborated by Joint Physical Inspections which indicated with seven of 28 inspected sites as non-functional. Liquidated damages were not recovered from contractors.

JJM funds were parked outside PFMS, and idle balances were maintained in accounts. Community contributions were negligible, burdening both Centre and State with additional costs. JJM funds were diverted on inadmissible activities reflecting lack of management oversight. Both Implementation Support Agencies and Third-Party Inspection Agencies were belatedly appointed and did not perform as per their expected deliverables, rendering the expenditure infructuous, while compromising on Missions' objectives such as water quality monitoring, community engagement, redundant VAPs and unverified executions.

The 100-Days Campaign for public institutions suffered from partial coverage and delays leaving schools/Anganwadis underserved.

E-Jal shakti portal displayed FHTCs provided to the households of those villages in the test checked districts wherein water supply had not commenced, or scheme had not been completed. Though 11,94,063 private/own source tap connections were not the actual beneficiaries of JJM tap connections, same were also included in the JJM FHTCs in the JJM portal.

Key monitoring lapses include dashboard misreporting of FHTCs, wide variations between planned and executed FHTCs in SVSs, and non-adoption of technological interventions like Internet of Things and Hydro-Geo-Morphological Maps, leading to inaccurate progress tracking and poor infrastructure planning. Non-functional FHTCs remained undetected.

Drinking Water Quality Monitoring & Surveillance (DWQM&S) framework, which provided a comprehensive mechanism for monitoring the quality of drinking water was not adhered to. Out of the funds up to two *per cent* earmarked for DWQM&S, Government spent only 0.38 *per cent* and diverted 1.62 *per cent* for construction activities. Water quality monitoring was severely compromised by inadequate infrastructure. NABL accreditation for critical parameters like *E. coli* and total coliform was lacking in the district and sub-divisional labs and only partial testing was carried out.

Water quality testing under JJM is inadequate, as State, district, sub-divisional and laboratories at Water Treatment Plant are not testing all the prescribed parameters, including critical chemical, heavy metal and pesticide indicators. This limited and incomplete testing weakens public health safeguards and does not provide assurance that the water supplied to rural communities meets prescribed potable water standards.

There was a shortfall in testing frequency in laboratories of PHED, State Lab and Jal Nigam, as district labs conducted 58 to 99%, State Lab 22–48%, and Jal Nigam Water Treatment Plant (WTP) labs merely 11–19% of the prescribed water quality tests. Despite significant test failures for iron, arsenic, *E. coli* and other parameters, cross-verification remained limited (around one-fourth to one-half at State Lab level) and remedial actions were largely absent. These gaps weaken quality assurance, expose rural populations to health risks and undermine the core objective of providing safe drinking water under JJM.

Despite identification of uranium contamination in several districts, uranium and virological parameters were not tested and samples were not sent to approved laboratories. Further, in multiple villages affected by nitrate, fluoride and hardness, water supply schemes were implemented without adopting remedial treatment measures, compromising drinking water safety.

Under Kaushal Vikas Prashikshan Yojana, 11,271 people (22%) were trained in the areas like masonry, plumbing, fitting, electricity, *etc.*, against the target of 50,000 at a cost of ₹ 402.10 lakh (23%) out of ₹ 1,712.62 lakh approved by the Government of MP, affecting the operation of completed rural water supply schemes.

JJM implementation in Madhya Pradesh has high risk of both scheme and source failure as evidenced by significant sustainability issues detected by Audit – both in scheme as well as in source. O&M costs were not recovered from the beneficiaries, water supply remained un-metered, community participation was not encouraged through skill development and creating adequate pool of Field Test Kit users. Source vulnerabilities were evident in shift of SVSs to MVSs due to source depletion without recharge measures, over-allocation from dam dead storage risking future sustainability and increased allocation/extraction beyond the carrying capacities of the reservoirs. Beneficiary surveys of 629 households across 32 villages corroborate these findings, highlighting non-functional schemes and reliance on old sources, eroding community ownership and long-term viability.

These systemic failures not only expose rural populations to health hazards like waterborne diseases and chemical toxicity but may also lead to source failures and diminished public trust, ultimately hindering the success implementation of JJM in Madhya Pradesh.

All the above issues indicate that urgent action is needed to improve planning, transparency, and service delivery for JJM Implementation in Madhya Pradesh.

What We Recommend

Audit recommends the following actions to address systemic deficiencies:

1. Planning with Source Sustainability and Long-Term Viability	After preparation of VAPs, integrate greywater management and source sustainability, detailed estimates in the Detailed Project Reports (DPRs) with ground realities. DWSM should aggregate VAPs into DAPs and subsequently SWSM will consolidate into SAP for macro level planning.
2. IEC activities for Sustainable Community Participation	The Department should review its Information, Education and Communication (IEC) activities, considering the negligible community contribution and the lack of O&M cost recovery from beneficiaries for long-term scheme sustainability which is crucial to ensure that future schemes are operationally viable.
3. Timely Deployment of ISAs	The Department should ensure timely deployment of Implementation Support Agencies so they could do their assigned work as defined in the JJM guidelines.
4. IoT for Monitoring and Transparency	The Department should compulsorily implement IoT-based system as per mandates of JJM Guidelines to ensure scheme sustainability and functionality and uploading of functional and non-functional tap connection data to the JJM portal.

5. Ensure Household and Institutional Taps

The Department should provide the tap connection at any one location inside the house, out of the three prescribed locations. Tap connections must be provided to all the public institution on priority.

6. Strengthen Lab Infrastructure and Accreditation

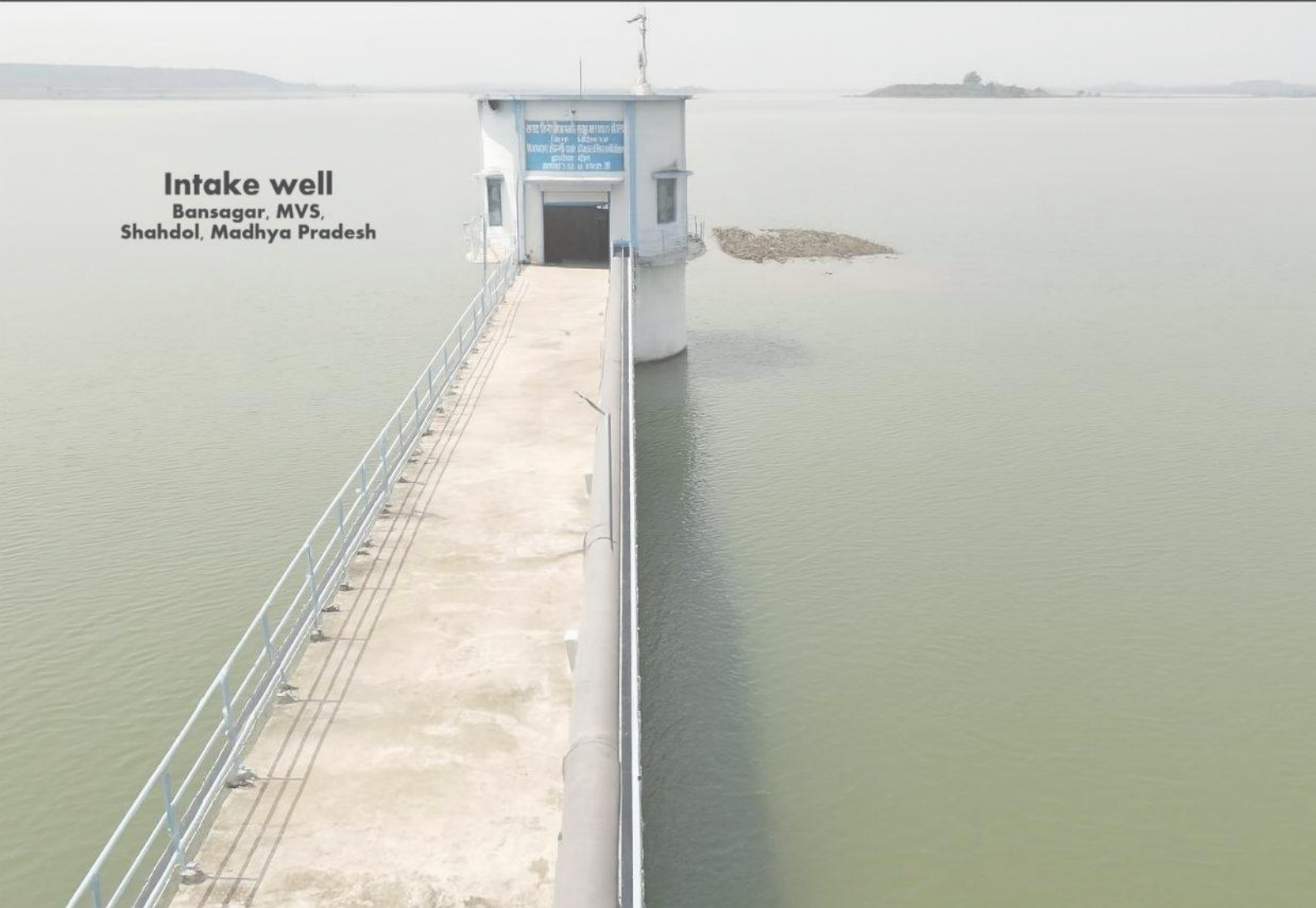
The Department needs to equip State, District, and sub-divisional water quality laboratories with NABL accreditation for all parameters as stipulated in DWQM&S, adequate lab personnel and necessary apparatus to test the potability of water; They should cross-verify samples and send samples to third-party for verification of parameters that cannot be tested in-house.

Chapter-I

Background & Audit Framework



Intake well
Bansagar, MVS,
Shahdol, Madhya Pradesh



Overhead Tank
Neelkhand, MVS, Raisen, Madhya
Pradesh



CHAPTER I: BACKGROUND & AUDIT FRAMEWORK

1.1 Introduction and historical context

Timelines of Rural Water Supply Schemes

1972 to 2009

Accelerated Rural Water Supply Scheme

This was a centrally sponsored scheme aimed at providing piped water supply alongside other sources like handpumps or borewells to unserved and partially served rural areas. Target: 40 lpcd.



2009 to 2019

National Rural Drinking Water Programme

This replaced the above programme, aiming to provide piped water supply with household tap connections public tap, and handpumps to rural habitations. Initially targeting 40 lpcd, the target was revised to 55 lpcd in the 12th Five Year Plan (2012-2017).



2019 to 2025 (ongoing)

Jal Jeevan Mission

Jal Jeevan Mission was launched on 15 August 2019, aiming to provide prescribed quality water in adequate quantity (minimum 55 lpcd) to every rural household by March 2024. The Scheme which was initially planned for completion by March 2024 is ongoing and the revised target for achieving 100 per cent saturation is March 2028.



BACKGROUND:

Several schemes/initiatives have been launched and implemented by the Government of India for supplying drinking water to rural areas since 1972.

The Accelerated Rural Water Supply Programme (ARWSP) was launched in 1972 to cover all rural habitations with access to minimum 40 lpcd of drinking water with the source situated within 100 meters elevation in hilly areas and within 1.6 kilometre in the plains. The objective was to provide one handpump or standpost for every 250 persons.

The National Rural Drinking Water Programme (NRDWP) was launched in 2009 by modifying the earlier ARWSP, with the objective of providing safe and adequate drinking water in remote areas to enable all households to have access to safe and adequate drinking water within reasonable distance. Under NRDWP, the target was to ensure that at least 35 *per cent* of rural households were provided with piped water supply (household connection), while limiting dependency on public taps and handpumps to 20 *per cent* and 45 *per cent* respectively.

JJM, building upon the objectives of NRDWP, was launched in August 2019, aiming to provide safe, adequate, and regular drinking water to every rural household in India through functional household tap connections, with a goal of achieving universal coverage by March 2024 and promoting long-term water security. The mission emphasizes a community-based approach, integrating source sustainability measures like rainwater harvesting and greywater reuse, and fostering local ownership for managing water systems.

Details of household connections before launch of JJM (outcome of previous schemes) is given in the Table 1 below:

Table 1: Status of household connection before launch of JJM:

Total Households as on 01.04.2018	FHTCs provided till March 2019 (upto NRDWP)	Remaining households as on 31.03.2019	Total Households at the time of launch of JJM	FHTCs provided upto the launch of JJM (upto 15.08.2019)	Remaining Households on the date of launch of JJM
1,08,90,226	13,28,100	95,62,126	1,11,81,136	13,53,151 (12.10 <i>per cent</i>)	98,27,985

(Source: e-Jal Shakti portal)

1.1.1 Overview of Jal Jeevan Mission

The Jal Jeevan Mission (JJM) is a flagship initiative launched by the Government of India (GoI) on 15 August 2019 aimed at providing potable water to every rural household (through tap connections) across the country by March 2024. The target for completion of JJM has since been extended by the GoI to March 2028.

JJM's objectives are summarized as follows:

	Ensuring every rural household has a functional household tap connection (FHTC) providing clean and safe drinking water.
	Promoting the rejuvenation and conservation of water bodies like lakes, ponds, and rivers to ensure long-term availability.
	Encouraging local communities to take responsibility for the management and maintenance of water supply systems, ensuring long-term sustainability.
	Ensuring that water supplied is of good quality through proper filtration and treatment processes.

The **Table 2** below compares the key enhancements in the objectives of the Jal Jeevan Mission (JJM) over the National Rural Drinking Water Programme (NRDWP).

Table 2: Key enhancements in JJM over NRDWP

Area	NRDWP objective	Enhancement in JJM
Coverage of Households	Access to safe & adequate drinking water to all households within reasonable distance (40 lpcd upto March 2012 and 55 lpcd thereafter). Saturation meant coverage of habitations through tap connections, other water sources such tube wells and borewells.	Functional Household Tap Connection (FHTC) to every rural household at 55 lpcd and quality water as per BIS:10500 standards. Saturation meant coverage of every household through FHTC.
Priority Areas	Priority to Open Defecation Free (ODF) Gram Panchayats for piped water	Priority to quality-affected, drought-prone, desert areas, and Sansad Adarsh Gram Yojana villages
Institutional Coverage	Access to safe water for schools and anganwadis	FHTC to schools, anganwadi centres, Gram Panchayat buildings, health and wellness centres, community buildings
Community Involvement	Support for Panchayati Raj Institutions and local communities to manage water sources	Emphasis on voluntary ownership (cash, kind, labour), <i>shramdaan</i> , and community leadership
Capacity Building	Not explicitly covered	Human resource development in construction, plumbing, quality management, catchment protection, and O&M
Awareness Generation	Not specifically mentioned	Strong focus on awareness, stakeholder involvement, and making water everyone's business

As per NRDWP data, Madhya Pradesh achieved 100 *per cent* saturation at 40 lpcd and 88 *per cent* at 55 lpcd. However, since NRDWP coverage was only for habitations, in effect, only 13.53 lakh out of 111.81 lakh rural households (12.10 *per cent*) had access to tap water connections (Ref: Table 1) as on 15 August 2019, highlighting a significantly low coverage by tap connections, underscoring the need for JJM's accelerated mission-mode approach to ensure universal tap water access.

Component wise saturation plan for NRDWP and JJM is given in **Table 3** below:

Table 3: Component wise saturation plan		
Component	NRDWP Targets	JJM Targets
Timeline	Phase I: By 2017 Final: By 2022 ¹	Originally by 2024 ongoing
Funding Pattern	50:50 (Centre: State)	50:50 (Centre: State)
Household Coverage	Ensure by 2017 that at least 50 <i>per cent</i> of rural households are provided with piped water supply ² ; at least 35 <i>per cent</i> of rural households have piped water supply with a household connection; less than 20 <i>per cent</i> use public taps and less than 45 <i>per cent</i> use handpumps or other safe and adequate private water sources.	100 <i>per cent</i> Functional Household Tap Connections (FHTCs)
Saturation	The NRDWP assessed saturation by evaluating accessibility.	JJM measures saturation based on FHTC.

The NRDWP laid the groundwork for improving rural water supply infrastructure, with a strong emphasis on ensuring access to safe and adequate drinking water, which was further strengthened and expanded under the JJM through its focus on providing tap connections to every rural household.

1.1.2 Organizational structure of JJM

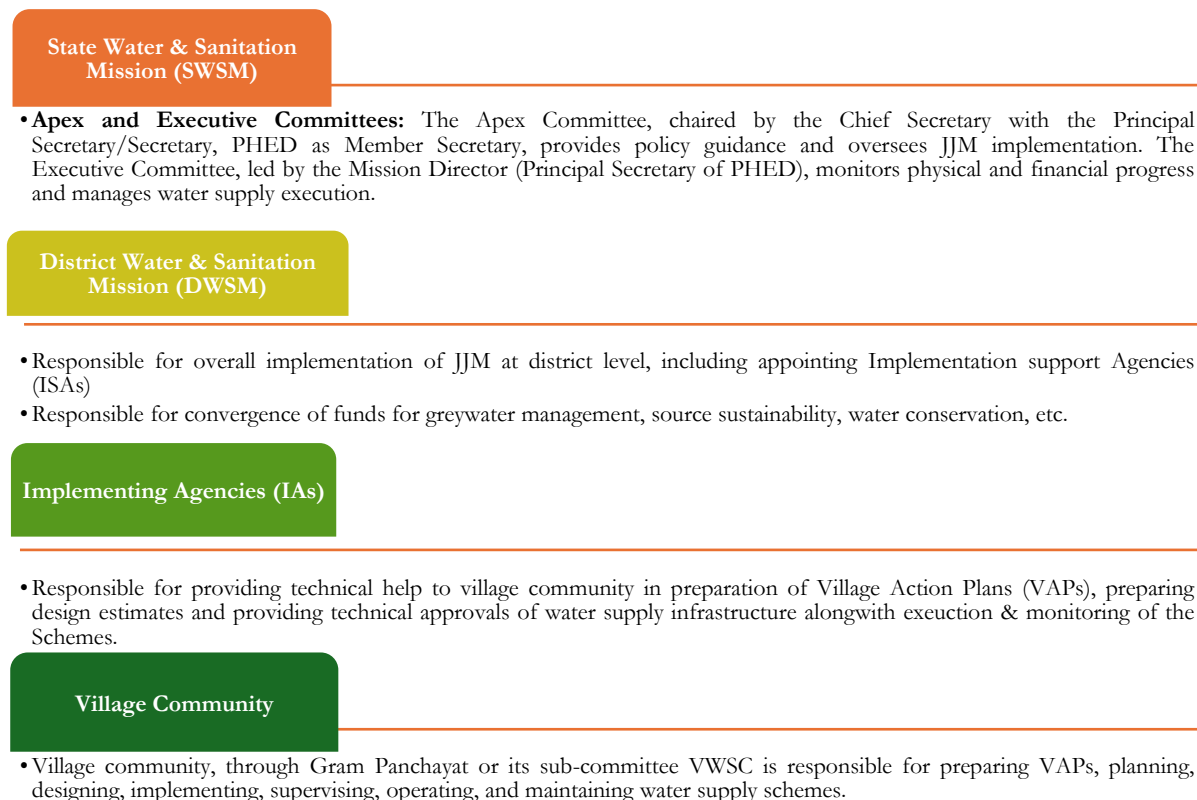
In Madhya Pradesh, the JJM is being implemented by the Public Health Engineering Department (PHED) and the Madhya Pradesh Jal Nigam Maryadit (Jal Nigam), a Government Company under PHED. The PHED is responsible for implementing Single Village Scheme (SVS) that utilize groundwater, while the Jal Nigam is implementing Multi Village Scheme (MVS) that rely on surface water sources such as rivers and dams. The PHED is administratively headed by a Principal Secretary at the Government level. The Engineer-in-Chief (E-in-C) is the head of PHED who is assisted by Chief Engineers (CEs), Superintending Engineers (SEs), and Executive Engineers (EEs). The Jal Nigam is headed by a Managing Director (MD) who is assisted by a Project Director, Chief General Manager and General Managers.

Organizational structure for implementation of JJM in the State is given in the following **Chart 1**:

¹ Ensure by 2022 that at least 90% of rural households are provided with piped water supply; at least 80% of rural households have piped water supply with a household connection; less than 10% use public taps and less than 10% use handpumps or other safe and adequate private water sources.

² Here Piped Water Supply does not mean providing tap connection at the households of individual

Chart-1: Organisational structure for implementation of JJM



1.1.3 Status of Implementation of the JJM Scheme

Jal Jeevan Mission (JJM) was launched to provide 100 *per cent* FHTCs to all rural households by March 2024. The Jal Jeevan Mission (JJM) started with 13.53 lakh households already having tap connections, out of a total of 1.11 crore. This indicates that in case of Madhya Pradesh, 98.28 lakh households were to be covered by the target date (Ref: Table 1). Against this target, the PHED was able to provide FHTCs to 60.90 lakh rural households as of 9 December 2024 (Balance left to be provided; 37.38 lakh). The annual progress of coverage of FHTCs under JJM is detailed in Table 4 below:

Table 4: Progress of household connections in Madhya Pradesh

Year	FHTC to be provided	FHTC provided during the year	Balance FHTCs to be provided	Progress during the year (in <i>per cent</i>)
2019-20	98,27,985 ³	4,19,152	94,08,833	4.26
2020-21	94,08,833	19,86,546	74,22,287	21.11
2021-22	74,22,287	10,89,412	63,32,875	14.68
2022-23	63,32,875	8,90,863	54,42,012	14.07
2023-24	54,42,012	11,30,228	43,11,784	20.76
2024-25 (up to 9 th December 2024)	43,11,784	5,73,832	37,37,952	13.30
Total		60,90,033		61.96

(Source: e-Jal Shakti portal)

³ 1,11,81,136 -13,53,151 = 98,27,985 (Total FHTC in MP – FHTC provided before 15 August 2019)

In Madhya Pradesh, the Mission is being implemented through Multi Village Schemes (MVSs) and Single Village Schemes (SVSs). Detailed breakup of FHTCs under both MVSs and SVSs in Madhya Pradesh is given in **Table 5** below:

Table 5: Status of MVS, SVS and their FHTC conversion

Multi Village Schemes			Single Village Schemes		
Schemes	FHTCs		Schemes	FHTCs	
	Provided	Balance		Provided	Balance
147	15,52,416	24,72,431	27,336	61,34,686	10,03,912

(Source: Information provided by the Department)

Single Village Schemes: as the name suggests, are meant to provide FHTCs to single villages where water source is ground water. SVSs are implemented by PHED.

Multi Village Schemes: are meant to provide FHTCs to multiple villages where water source is surface water. The schemes are meant to provide linkages and in village infrastructure for drawing water from identified water reservoirs. MVSs are implemented by Jal Nigam.

Schematic diagrams to explain the structure and functionality of the two types of schemes are given in **Chart 2** and **Chart 3** below.

Chart 2: Schematic Diagram of Single Village Schemes

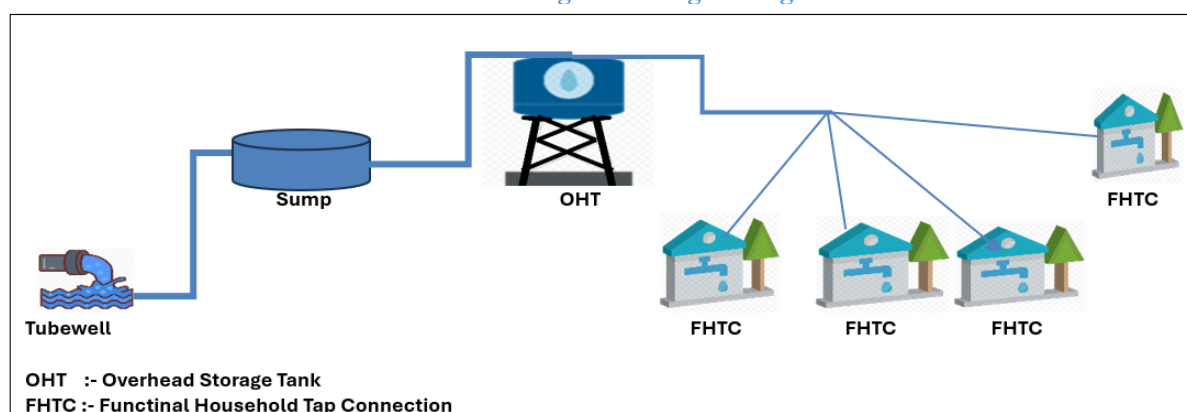
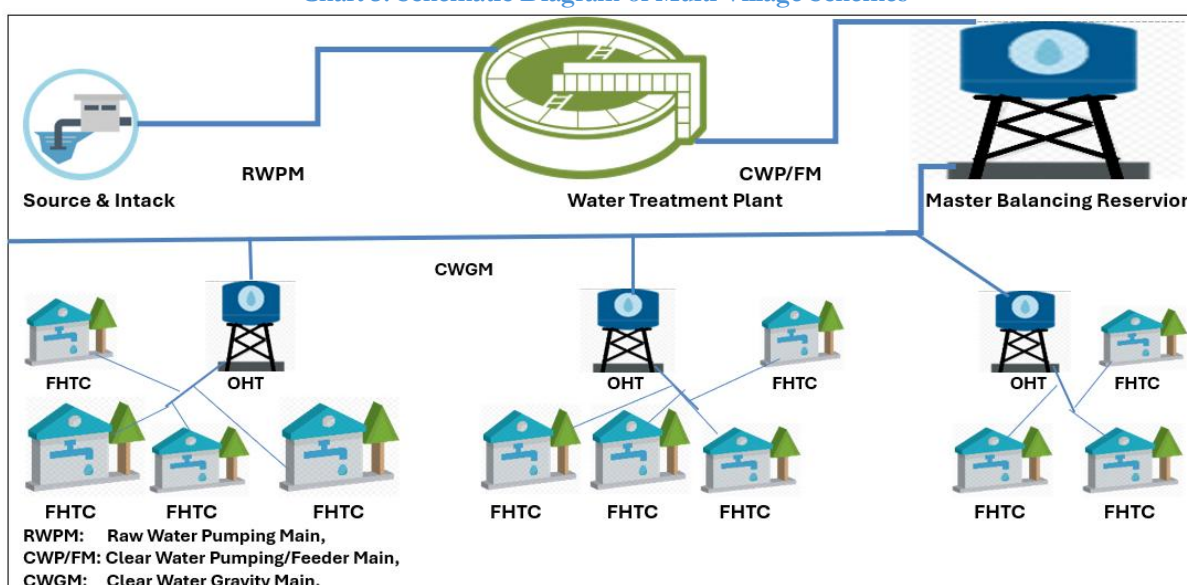
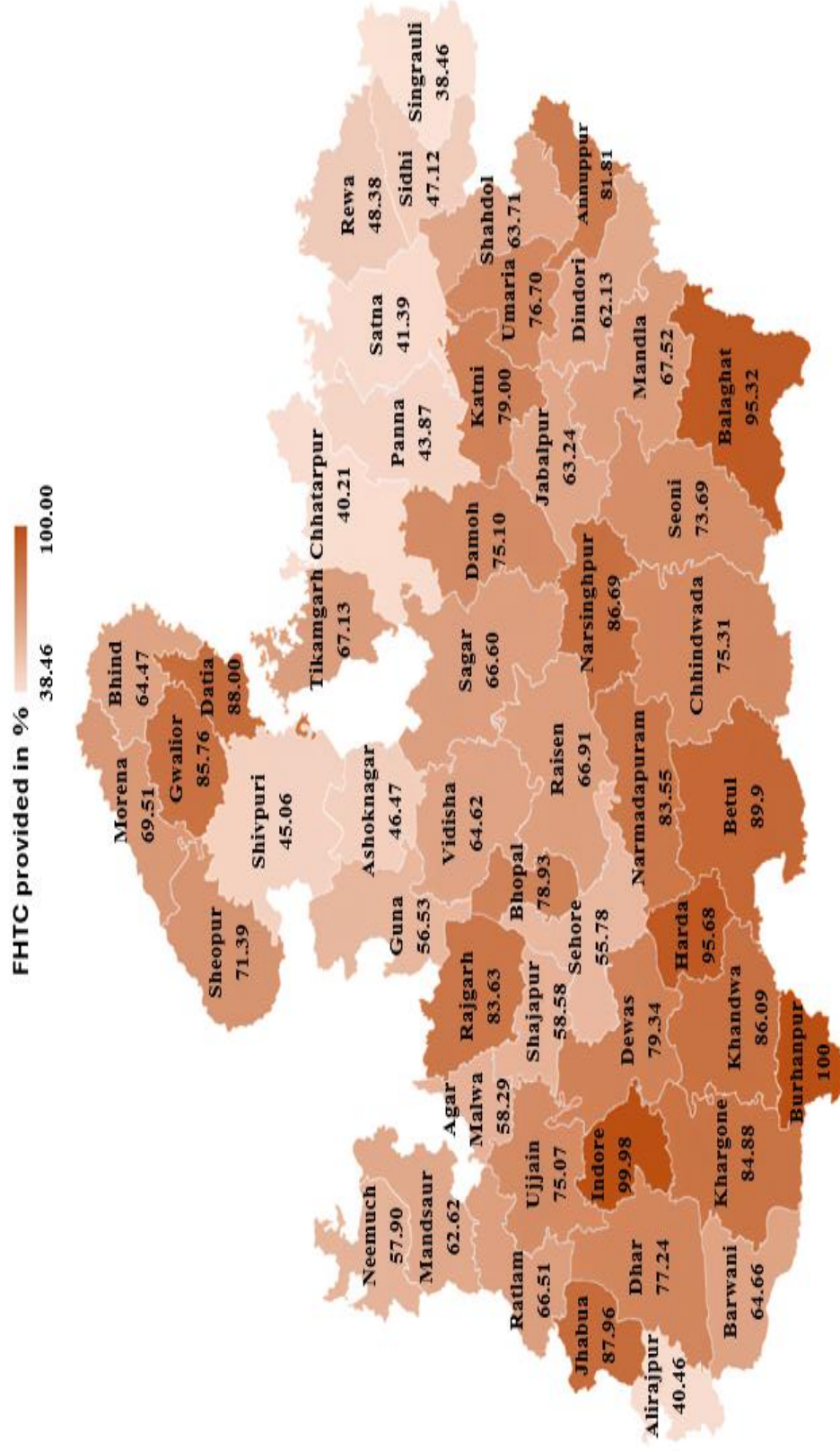


Chart 3: Schematic Diagram of Multi Village Schemes



The **Chart 4** depicts the status of achievement of FHTC in Madhya Pradesh:

Chart 4: District-wise diagrammatic representation of Functional Household Tap Connections in *per cent* in Madhya Pradesh



(Source: Information provided by the Department as of March 2025)

Note: FHTCs of Niwari District is included in Tikamgarh District.

As of March 2025, national JJM progress stood at approximately 80 *per cent* FHTC coverage (15.57 crore households out of 19.36 crore rural households), but Madhya Pradesh lagged significantly with a total state coverage of only 69 *per cent* (0.77 crore households out of 1.12 crore rural households). Key underachievers were the northeastern border districts of Chhatarpur (40 *per cent*), Panna (44 *per cent*), Satna (41 *per cent*), Singrauli (38 *per cent*), Sidhi (47 *per cent*) and Rewa (48 *per cent*).

Audit further observed that the coverage/achievement of SVS, ranged between 64 *per cent* and 100 *per cent* whereas the performance of MVS ranged between seven *per cent* and 100 *per cent*. Pace of progress of MVS, highlights serious underperformance especially in districts⁴ such as Alirajpur, Ashoknagar, Guna, Shivpuri, Dindori, Agar Malwa, Mandla, Rewa, Ratlam, Sheopur, Jabalpur and Barwani districts. Poor progress in these districts is a pointer towards critical execution delays likely stemming from weak planning & coordination. In 32 out of 48 districts, where MVS is being implemented, the coverage of FHTC was below 50 *per cent* and the Department could not meet the March 2024 timelines as stipulated in the JJM guidelines.

1.1.4 Availability of fund and expenditure on JJM

The expenditure of JJM is to be shared between the GoI and the Government of Madhya Pradesh (GoMP) in the ratio of 50:50. However, the GoMP directed that expenditure of the JJM schemes should be booked in the ratio of 90:10 (central and state contribution in the ratio of 45:45 and rest community contribution 10 *per cent*). The details of year wise receipt and expenditure under JJM fund during the period from 2019-20 to 2023-24 are given in **Table 6** below.

Table 6: Details showing availability of funds and expenditure

(₹ in crore)							
Year	Opening Balance	Receipts (from Centre)	Receipts (from State)	Total available fund	Total Expenditure (in <i>per cent</i>)	Unspent/ Closing Balance (in <i>per cent</i>)	Bank interest earned and remitted to GoI
1	2	3	4	5=2+3+4	6	7=5-6	8
2019-20	0.01	571.60	315.00	886.61	615.40(69)	271.21(31) *	0.00
2020-21	244.96	960.09	1,381.84	2,586.89	1,890.69(73)	696.20(27)	2.14
2021-22	696.20	3,837.59	3,795.93	8,329.72	4,742.11(57)	3,587.61(43)	34.78
2022-23	3,587.61	2,820.50	2,714.69	9,122.80	7,042.82(77)	2,079.98(23)	84.44
2023-24	2,079.98	5,419.90	5,353.54	12,853.42	12,779.11(99)	74.31(01)	55.55
Total		13,609.68	13,561.00		27,070.13		

(Source: Data provided by the Department)

* Unspent amount of central receipt of ₹ 244.96 crore has been brought forward to the next year and unspent amount of ₹ 26.25 crore of State receipt lapsed due to transaction from state treasury in 2019-20.

⁴ Alirajpur (7.69 *per cent*), Ashoknagar (11.88 *per cent*), Guna (13.92 *per cent*), Shivpuri (15.38 *per cent*), Dindori (16.12 *per cent*), Agar Malwa (22.84 *per cent*), Mandla (17.95 *per cent*), Rewa (18.29 *per cent*), Ratlam (19.29 *per cent*), Sheopur (19.75 *per cent*), Jabalpur (18.93 *per cent*), and Barwani (24.96 *per cent*)

1.2. Audit Framework

1.2.1 Audit Objectives

Audit was carried out to ascertain whether:

- ⚙ Programme objectives have been successfully achieved;
- ⚙ Efficient institutional framework is in place for planning, implementation, and post operational management of the scheme;
- ⚙ 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.

1.2.2 Audit Criteria

Audit criteria were derived from the following:

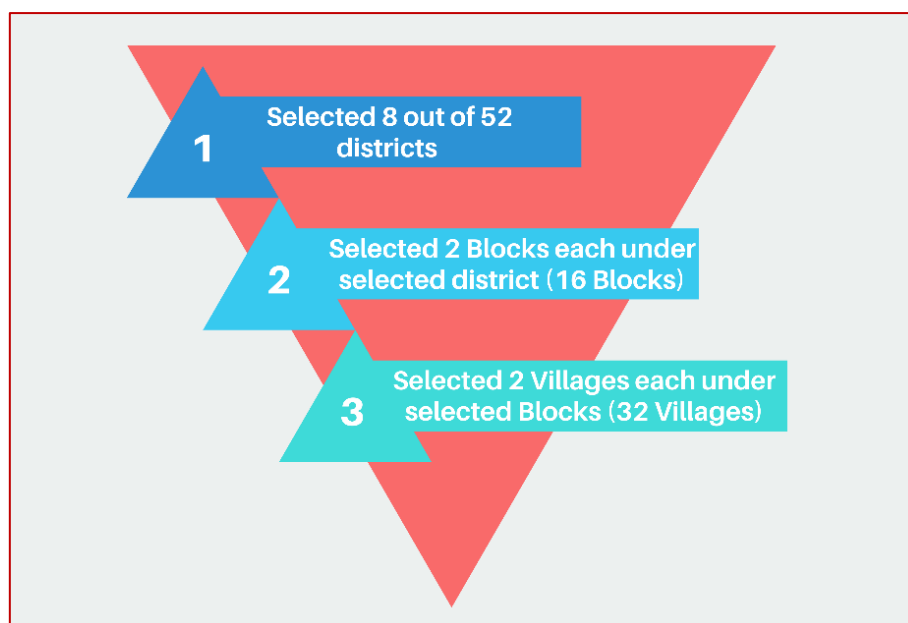
- ⚙ Operational Guidelines for Implementation of JJM, and Water Quality Monitoring & Surveillance Framework;
- ⚙ General Financial Rules, 2017;
- ⚙ Orders issued by the Government of Madhya Pradesh facilitating implementation of the above-mentioned guidelines;
- ⚙ Provisions of Madhya Pradesh Store Purchase Rules;
- ⚙ Orders issued by the GoI pertaining to devolution of powers as envisaged in 73rd Amendment Act of the Constitution of India.

1.2.3 Scope and Methodology of Audit

The Performance Audit covered the period of implementation of JJM from 2019-20 to 2023-24. Out of 55 Districts of MP, eight Districts⁵ (15 *per cent*) were selected through stratified random sampling. Selection process is visualised as follows in **Chart 5** below:

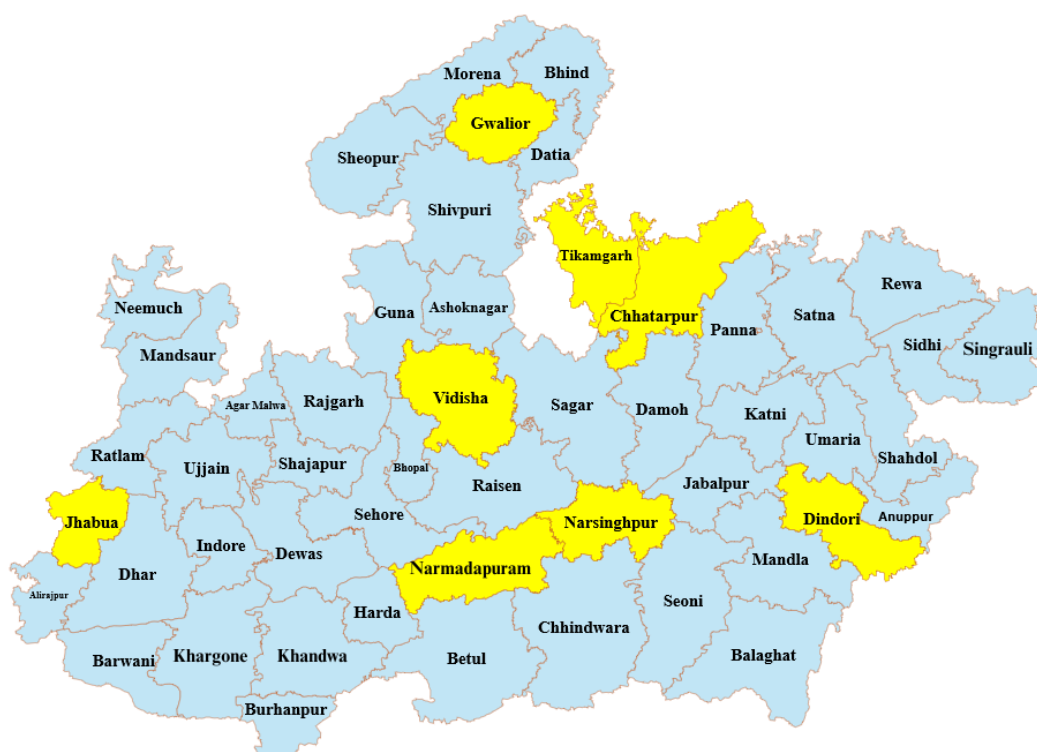
⁵ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

Chart 5: Sample Selection process



In addition, survey of 20 beneficiaries from each of the 32 selected villages was also conducted.

Chart 6: Selected sampled districts of Madhya Pradesh



The records of MD, Jal Nigam and the Divisions (district units) of PHED were examined between August 2024 and October 2024. The records of the E-in-C were also examined (July 2024). Audit scrutinised 28 agreements of SVS covering 144 villages and four

agreements⁶ of MVS covering 1,009 villages. Audit observations are derived from data and evidence collected from the auditee units, as well as from other governmental and third-party sources. Additionally, photographs taken during physical verifications, along with the outcomes of beneficiary surveys and joint physical inspections, have been used to substantiate the audit observations.

1.2.4 Stakeholder Engagement Process during the PA

The Office of the Pr. Accountant General (Audit-II), Madhya Pradesh, Bhopal systematically engaged with the stakeholders, *i.e.*, the PHE Department at every stage of the PA process to ensure transparency and better coordination.

An Entry Conference was held on 13 August 2024 with the Secretary to the GoMP, PHED and the MD, Jal Nigam, wherein the scope and objectives of the PA and the sample selection was explained. The PHED assured full co-operation for successful conduct of the PA. As a part of the audit exercise, beneficiary surveys were also carried out during field audits (August 2024 to October 2024), to gauge the effectiveness of the scheme.

The draft Audit Report was forwarded to the GoMP (PHED and Finance) in March 2025, and an Exit Conference was held on 13 June 2025 with the Principal Secretary to the GoMP, PHED and the MD, Jal Nigam, wherein the audit findings and recommendations were discussed. The Principal Secretary, PHED accepted the recommendations with the assurance that the same would be considered in the JJM implementation process.

Replies wherever provided, either during the Exit Conference or at other stages of the PA, have been duly considered and aptly incorporated in the Report.

1.2.5 Acknowledgement

We acknowledge the cooperation extended by the officers/ officials of PHED and Jal Nigam in providing information and explanations on the subject matter of the Performance Audit which enabled us to present this Report.

⁶ The records of MD, Jal Nigam and the Divisions (district units) of PHED were examined between August 2024 and October 2024. The records of the E-in-C were also examined (July 2024). In addition to these four MVS, 12 more MVSs were also examined on summary basis at the HQ of Jal Nigam.

Chapter-II

Planning





Borewell



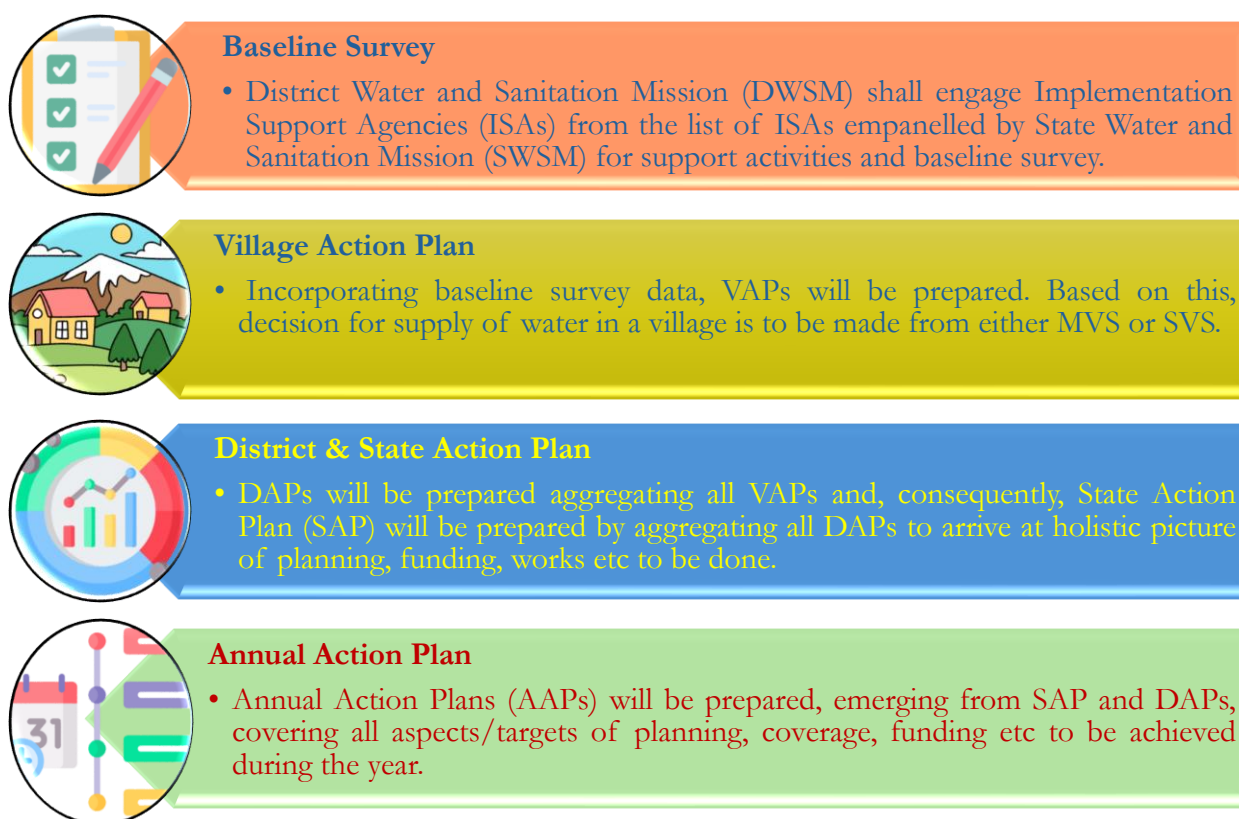
Disinfection Unit

CHAPTER II: PLANNING

2.1 Introduction

Jal Jeevan Mission (JJM) emphasizes a decentralized, demand-driven, and community-managed approach to water supply. Focus is on bottom-up three-tiered planning approach through Village Action Plans (VAPs), District Action Plans (DAPs), and State Action Plans (SAPs) to ensure '*Har Ghar Jal*' (supply of potable water to every household through FHTCs), promote sustainable water supply systems with a focus on source sustainability, foster community ownership through participatory planning and integrate water quality monitoring and infrastructure maintenance. The planning process has a strong focus on grassroots involvement, as they were-the end users.

Chart 7: Stages of Planning



Audit analysed each of the Action Plans as well as the overall planning process and the deficiencies noticed at each planning level are highlighted below:

2.2 Planning deficiencies

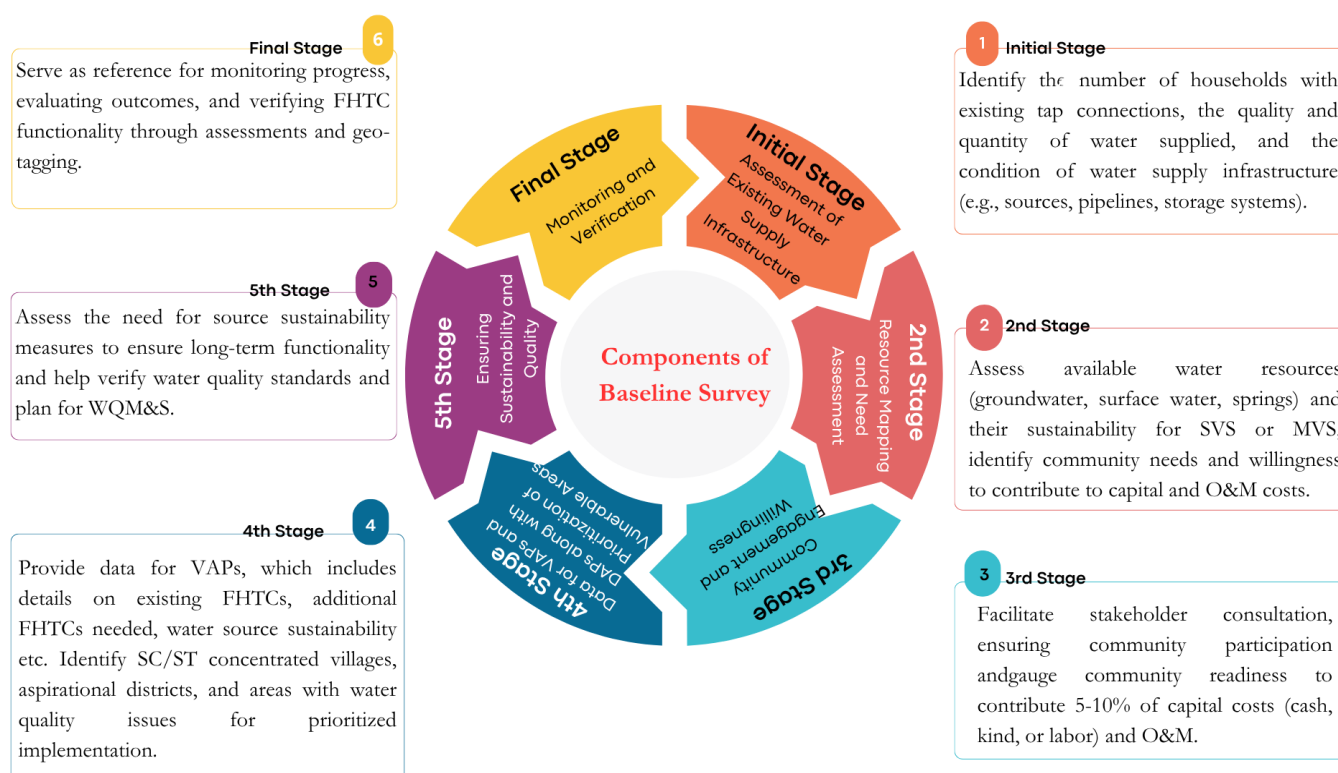
2.2.1 Implementation Support Agencies (ISAs) and Baseline Surveys

As per Para 5.5 of the JJM Guidelines, Implementation Support Agencies (ISA) are to be appointed for each village, right from the initiation of the JJM scheme, for undertaking baseline survey and carrying out other functions (detailed in Paragraph 3.11).

Further, as per the JJM Guidelines:

- State Water and Sanitation Committees were to empanel partner NGOs/Voluntary Organisations/SHGs as ISAs (Para 5.2 of JJM Guidelines).
- District Water and Sanitation Committees were to engage ISAs from the empanelled list and monitor their performance (Para 5.3 of JJM Guidelines).
- Once an ISA is selected by DWSM, it has to prepare the action plan for the villages it is allotted for the entire scheme cycle with the help of PHED/ Rural Water Supply Department and clearly specifying quarterly outputs. Payment to ISA was linked to the time schedule and outputs on quarterly basis. (Para 5.5 of JJM Guidelines).
- A Village Action Plan (VAP) will be prepared by Gram Panchayat based on baseline survey. Every baseline survey should include an assessment of the number of available FHTCs before implementing JJM. (Para 3.5 of JJM Guidelines).

Chart 8: Components of baseline survey:



Baseline surveys are foundational to JJM's success, ensuring accurate planning, community participation, equitable coverage, and sustainable water supply.

Audit noticed the following:

- Out of 4,576 SVS schemes in eight test checked districts, PHED appointed ISAs in 3,910 SVS only. As such, the baseline surveys for 666 villages (14 *per cent* of total villages) were not conducted as detailed in [Appendix 1](#).
- The ISAs for Payli and Bansujara (Tikamgarh) MVSs were appointed in September 2022 and March 2023 after the award of the work to the contractor (December 2018 & September 2022) by Jal Nigam. The ISAs did not reverify the data of available tap connections under the existing water supply scheme even after their appointment for these schemes, therefore assessment at ground level was not carried out. The ISAs were not doing the task/ work as specified in the JJM Guidelines.

Owing to non-conducting of baseline surveys or delayed appointment of ISAs, the planning at the grassroots level was not accurate. This reflected in the increased cost of 853 SVSs of eight districts from ₹ 668.67 crore to ₹ 997.12 crore, which has been discussed in [Paragraph 3.5.1](#).

During Exit Conference, the Principal Secretary PHED, while accepting the facts (June 2025) directed the Engineer-in-Chief to complete the balance work of baseline survey.

The action is neither tenable nor synchronised with ground realities or JJM's objectives as baseline surveys post award of work or post completion stage defeats the very purpose of conducting these surveys. Many of these completed projects suffer from sustainability and quality issues placing the entire Mission at considerable risk of failure.

2.2.2 Village Action Plans

As per Para 3.6 of JJM Guidelines, the Gram Panchayat or its sub-committee (VWSC/*Paani Samiti*/user groups, *etc.*), with support from ISA, PHED, and District Water Sanitation Mission (DWSM), was required to prepare a VAP. This VAP, based on a baseline survey, resource mapping, and community needs (including land availability, willingness to contribute for the capital and O&M cost), was to be submitted to DWSM for further action.

Deficiencies noticed in VAPs are as follows:

DEFICIENCY	IMPACT
PHED: VAPs were prepared for only 5,199 out of 7,317 villages of eight districts ⁷ (40.80 <i>per cent</i> to 99.44 <i>per cent</i>) as detailed in Appendix 2 .	The failure to prepare VAPs for 28.95 <i>per cent</i> of villages under PHED and for 42.14 <i>per cent</i> in Jal Nigam indicates significant gaps in planning. This also hindered monitoring and evaluation as there were no performance indicators to review achievement.
Jal Nigam: VAPs were not prepared in 17 out of 119 villages in the Bansujara (Badamalhera) MVS, in eight villages out of 90 villages in the Payli MVS (Jabalpur)	

⁷ Chhatarpur, Dindori, Jhabua, Narsinghpur, Tikamgarh, Vidisha, Narmadapuram and Gwalior. However, VAPs have been fully prepared in case of Gwalior and Narmadapuram.

DEFICIENCY	IMPACT
and in none of the 109 villages of Sagad Hinotiya MVS (Vidisha), VAPs were prepared.	
VAPs were prepared with limited community involvement. Notably, 31 <i>per cent</i> of villages lacked Gram Panchayat resolutions (for SVSs) as detailed in Appendix 3 . VAPs for MVS villages lacked essential information for designing effective water supply systems to address current and future needs. MVS planning resolutions lacked necessary details such as community contribution willingness, convergence details, grey water management, <i>etc.</i>	Limited community engagement in VAPs reduced sense of ownership. This is attributed to negligible community contribution (₹ 27 lakh contributed against the collectable amount of ₹ 241.74 crore towards community contribution), as discussed in Paragraph 3.8.2 .
In 47 out of 144 SVS villages (33 <i>per cent</i>), VAPs were prepared retrospectively after the preparation of DPRs and floating of the NITs as detailed in Appendix 4 . In one MVS (Bansujara Tikamgarh) involving 120 villages VAP was prepared (between April 2023 and October 2023) after the work had already commenced in August 2022,	This indicates that the VAPs were reduced to a perfunctory document and did not reflect bottom-up planning and grassroots realities. Significant variations were noticed in planned and actual execution of FHTCs as discussed in Paragraph 4.1.1.2 .
The parameters of water quality have either not been disclosed or partially disclosed in the VAP (in SVS schemes) resulting in poorly planned water schemes that may not address water quality requirement and weaken JJM's goal of safe drinking water for all.	The State government fell short in prioritizing villages suffering from deteriorating water quality, leaving residents exposed to serious health and environmental risks as detailed in Paragraph 2.3.3.2 .

During Exit Conference, the Principal Secretary, PHED while admitting the facts stated that instructions based on audit findings will be issued to field offices to address the identified deficiencies.

The reply is silent on reasons for not preparation of VAP. Any action taken thereafter to prepare VAPs or correct the deficiencies in the VAPs will have no impact on the already completed or undergoing schemes (*no new schemes are envisaged in Madhya Pradesh as schemes for all the districts have already been identified*).

2.2.3 District Action Plans and State Action Plans

Para 3.6.1 of JJM Guidelines provides that:

- ♻ The District Action Plans (DAP) incorporating all the VAPs of the villages in a district will be prepared by the DWSM. Further, as per Para 5.3, the District Water and Sanitation Mission (DWSM) will be responsible for the overall implementation of JJM in the districts.
- ♻ The State Water and Sanitation Mission (SWSM) will prepare and finalise the State Action Plan (SAP) based on DAPs and will be responsible for the implementation of JJM in the State. Based on the SAP, Annual Action Plans (AAPs) were to emerge, which would specify the targets for FHTCs planned for the next financial year, fund requirements, support activities planned, *etc.*

Audit noticed that the DAPs and SAPs were not prepared in compliance with JJM Guidelines. The significant impact of non-formation of DAPs and SAPs are given below:

Impact of non-formation of District Action Plans:

SAPs did not flow from DAPs	Comprehensive SAP was not prepared for the whole State, resulting in inefficient resource allocation and overall lack of systematic planning for the entire State.
AAPs prepared were not based on ground realities	Districts were to prepare holistic plans, based on assessment of fund requirement vis-à-vis FHTC requirements (consequence of VAPs). This was not done. As such, AAPs which were prepared were not based on ground realities. (Deficiencies pertaining to AAPs are discussed in Paragraph 2.2.4)
Arbitrary determination of targets by PHED	FHTC targets were to be determined in DAPs, flowing from VAPs. In the absence of DAPs, targets were arbitrarily determined by E-in-C, which could not be achieved as they were not derived from bottom-up planning process.
Convergence deficiencies	DWSM did not identify the sources of convergence ⁸ with other schemes such as Finance Commission grants, MGNREGA, Integrated Watershed Management Programme, MPLAD, MLALAD Schemes, etc., to meet the requirements emerging from the VAPs.
Water Quality Monitoring & Surveillance activities	Quarterly plans were not formulated for establishing new laboratories, obtaining timely NABL accreditations and implementing mobile lab facilities. This directly threatens the health of communities by not assuring the quality of supplied tap water.

State Action Plan:

DEFICIENCY	IMPACT
AAPs not derived from SAP	AAP was not prepared for 2019-20, while the AAPs for 2021-22 and 2022-23 AAPs were delayed. AAPs were not derived from SAP and due to absence of a clear annual roadmap, unrealistic targets for FHTCs were likely fixed, because of which State could not achieve the annual FHTC. (Deficiencies pertaining to AAPs are discussed in Paragraph 2.2.4)

Due to non- preparation of DAP and SAP by aggregating all VAPs, the whole VAP preparation exercise became futile. Besides, the benefits that were to be derived from planning by DWSM (and SWSM) before implementation of the scheme remained unachieved.

During the exit conference, the Principal Secretary, PHED emphasized the crucial role of DWSM meetings for successful implementation of the JJM and stated that directives would be issued to all districts to ensure that these meetings are convened monthly. The Principal Secretary, PHED further stated that instructions would be issued to rectify the identified deficiencies.

The reply is silent on reasons for not preparing DAPs and SAP. The preparation of SAP post JJM mission period would be ineffective because it is a matter of pre-planning stage. (*no new schemes are envisaged in Madhya Pradesh as schemes for all the districts have already been identified*).

2.2.4 Annual Action Plans

The Annual Action Plans (AAPs) as mandated by Para 3.6 and 7.5.3 of the 2019 JJM Guidelines, serve as critical operational frameworks derived from the State Action Plan (SAP). AAPs are intended as yearly operational blueprints, specifying district-wise physical targets for FHTCs, coverage of villages/Gram Panchayats/blocks/districts, financial allocations,

8 With other schemes such as Finance Commission grants, State schemes, Mahatma Gandhi National Rural Employment Guarantee Schemes (MGNREGS), Integrated Watershed Management Programme (IWMP), Members of Parliament Local Area Development Scheme (MPLAD), Member of Legislative Assembly Local Area Development Scheme (MLALAD), etc.

convergence with other schemes, support activities (e.g., community engagement, water quality monitoring), and timelines. AAPs must align with JJM's principles of equity, inclusiveness, community participation, and sustainability with approval from the National Jal Jeevan Mission (NJJM) based on consultations. Funds are released based on prior AAP performance.

However, analysis of Madhya Pradesh's AAPs from 2020-21 to 2023-24 indicated pervasive deficiencies in preparation, execution, and responsiveness to central guidance, resulting in underachievement, fiscal inefficiencies, and delayed universal coverage.

2.2.4.1 Poor Planning in AAPs

AAPs in Madhya Pradesh consistently exhibited fundamental flaws that led to misaligned end resource allocation and suboptimal outcomes. The absence of an AAP for 2019-20, following the late issuance of JJM guidelines in December 2019, resulted in achievement of 4.19 lakh FHTCs without targeted benchmarks, setting a precedent for unstructured implementation. Subsequent AAPs compounded this through over-optimistic/unrealistic projections which were misaligned with the ground realities. For instance, the AAP for 2020-21 targeted 26.27 lakh FHTCs, achieving only 19.87 lakh (75.64 *per cent*), while the 2021-22 AAP planned 22.01 lakh but delivered only 10.89 lakh (49.48 *per cent*). By AAP 2023-24, cumulative achievement was merely 55.16 lakh against 95.32 lakh planned, with yearly rates dipping to 41.79 *per cent*. Village/GP/block/district analysis in the 2020-21 AAP showed over 70 *per cent* in low-coverage categories, yet plans did not prioritize them adequately.

A critical flaw was the unreliability of data. In the 2023-24 AAP, there was a discrepancy of eight lakh households between the State's figures and the national JJM dashboard. This points to inadequacies in data validation and reporting, which are essential for credible planning.

Planning for Multi-Village Schemes (MVSs) was particularly inefficient, with the AAP 2021-22 outlining a plan wherein MVS projects were targeted for implementation in 2023-24. Since MVS have long gestation periods of 24-30 months, positing of the MVS at such a late stage itself indicated that the GoMP was never in a position to achieve universal saturation by the original deadline, *i.e.*, March 2024. In reality, 29 MVS schemes were launched in AAP 2023-24, with the last targeted completion date being July 2026. Analysis of past performance of the Department in completion of MVS projects indicates an average completion period of 80 months⁹ for turnkey projects, which poses inherent risks of delays extending even beyond the since revised target date of March 2028. The Department ignored low-hanging fruits, such as retrofitting existing piped water supply (PWS) schemes in 29,626 villages where household coverage was only 40.93 *per cent*, violating JJM's equity mandate to prioritize incomplete schemes.

The 100-days campaign for public institutions was extended haphazardly to the last quarter of 2021-22 ([further discussed in Paragraph 3.10](#)), leading to standalone schemes delayed by

9 Bansujara (Badamalhera) – Delay 1,901 days, Payli – Delays 1155 days, Sagad Hinotiya- Delays 1,971 days
Average Delay = (1,901 days + 1,155 days + 1,971 days) / 3 = 1,676 days = 56 Months
Average Completion period = 24 Months (Stipulated) + 56 Months (Average Delay) = 80 Months.

103-402 days across 4,173 projects in eight districts, incurring additional costs instead of integrating with ongoing household connections.

Priority areas were neglected in the AAPs. Out of 59,288 SC/ST-dominated habitations, only 11,307 were planned for 2021-22. Drought Prone Area Programme (DPAP) achievement was 18.63 *per cent* in 2020-21, with 80 *per cent* deferred; and only 43 of 79 Sansad Adarsh Gram Yojana (SAGY) villages targeted for saturation.

Due to these gaps, 10,423 villages were not included in the AAP 2021–22 saturation plans, and by the end of the mission period in March 2024, 19.95 lakh households were still left out.

2.2.4.2 Poor Execution of AAPs

The AAPs also indicated execution deficiencies resulting in persistent underperformance and missed convergence opportunities. Financial planning was imprudent as the 2021-22 AAP's ₹5,241 crore outlay omitted mandatory community contributions—a non-negotiable JJM component for sustainability—placing undue burden on public funds. Out of the ₹ 1,766 crore available under 15th FC grants for source strengthening and greywater management, only ₹450 crore was provisioned, missing out on synergising with rural development programs. Quarterly targets were unrealistic. For instance, the AAP 2022-23 aimed for 20 lakh FHTCs (6,030 daily average), but prior averages were 5,450, leading to shortfalls in 2021-22.

Project Management Unit (PMU) onboarding was delayed, Implementation Support Agencies (ISAs) appointed for only 3,910 of 4,576 Single Village Schemes (SVSs), and Village Water and Sanitation Committees (VWSCs) formed in just 50 *per cent* of villages (13,560 planned in 2021-22, leaving 26,199 uncovered). Village Action Plans (VAPs) covered only half of 51,674 villages, and Third-Party Inspection Agencies (TPIAs) were limited to 28 for 20 lakh FHTCs, compromising quality assurance. Water Quality Monitoring & Surveillance (WQM&S) was underfunded (<one *per cent* allocation against two *per cent* guideline), with Field Test Kit (FTK) testing restricted to once per village annually, neglecting community empowerment. Delays in SVSs and MVSSs were widespread, exacerbated by COVID-19 disruptions and supply chain issues, indicating failure of the AAPs to incorporate risk mitigation in the planning process.

2.2.4.3 Limited Oversight by GoI and Unaddressed Deficiencies

JJM's decentralized model entrusted the States with AAP implementation, with GoI providing support through implementation guidelines, consultative handholding, and fund support. The flaw in this model was that it lacked rigorous follow-up on deficiencies identified in the AAPs. For instance, despite consistent underperformance the absence of enforcement mechanisms by GoI—such as conditional fund releases or penalties—has allowed delays without accountability. As such, the original target date of March 2024 (for universal saturation) has since been revised to March 2028, with consequent costs overrun.

Further, dependency/reliance on self-reported data via IMIS (e-Jal Shakti dashboard), inadequate third-party inspections or linkage of FHTCs with Aadhaar number has perpetuated inaccuracies, as seen in discrepancy between State's saturation figures and the national JJM dashboard (discussed in previous paragraph 2.2.4.1).

Audit further observed that the GoI repeatedly flagged crucial deficiencies in GoMP's AAPs through Records of Discussion¹⁰ and directives, yet these were not addressed, indicating systemic failures.

2019-20	No AAP prepared
2020-21	No directions/instructions issued by GoI
2021-22 AAP review	GoI advised reworking the saturation timeline (misaligned with 2022-23 deadline, spilling 20.92 lakh FHTCs to 2023-24), prioritizing retrofitting/augmentation of PWS schemes for equity, maximizing SC/ST/PVTG/DPAP/SAGY coverage (e.g., only 20 <i>per cent</i> DPAP planned), mandating community contributions, expediting PMU/ISA/TP IA engagement, increasing support activities to five <i>per cent</i> (from 2.5 <i>per cent</i> or ₹ 161.79 crore), enhancing WQM&S to two <i>per cent</i> with frequent FTK testing and community involvement, updating VWSC/VAP details on IMIS, and completing the 100-days campaign promptly.
2022-23	No directions/instructions issued by GoI
2023-24 AAP review	GoI emphasized HGJ certification, 15th FC convergence, and data reconciliation.

Despite these explicit instructions, Madhya Pradesh did not revise plans, boost priority area coverage, form remaining VWSCs, engage adequate ISAs/TPIAs, or improve testing protocols, *etc.* This is evident from the deficiencies noticed during this audit, which have been discussed subsequently (Paragraphs 2.3.2, 3.11 & 3.12).

2.3 Other Significant Planning Issues

2.3.1 Poor planning resulting in arbitrary adoption of SVS and MVS Projects

As per JJM guidelines (Chapter 6), Central Ground Water Board (CGWB) has identified a list of Q&Q (Quantity & Quality) Blocks which have prescribed quality of groundwater in sufficient quantity. Villages where ground/ spring water is available in conformity with the Q&Q, Single Village Schemes (SVS) are implemented. The blocks where groundwater is not in conformity with the Q&Q, are selected for Multi Village Schemes (MVS). Before implementation of JJM in Madhya Pradesh, State Water Sanitation Mission (SWSM) should prepare a State Action Plan to adopt SVS and MVS on the basis of the list of Q&Q Block with timelines to cover all the villages. Further SWSM should conduct proper hydrogeological assessment to ensure long-term sustainability of the scheme.

Audit observed that the SWSM did not prepare a holistic statewide plan to adopt SVS and MVS on the basis of the list of Q&Q Blocks available, nor did they carry out block wise study to assess water availability and source sustainability. Audit observed that the SWSM approved the SVSs without hydrogeological assessment or on the basis of the list of Q&Q Blocks.

As per Kanpur IIT study report it was observed that Bundelkhand region of Madhya Pradesh has a complex terrain made up of hard rocks and alluvial plains. Most of the region has an impermeable subsurface and faces harsh climatic conditions, making groundwater availability highly uncertain and the current static water level¹¹ is below 40 metre below ground level (mbgl), the region is gradually moving towards the semi-critical category up to 200 mbgl.

¹⁰ Recorded minutes of discussions on AAPs.

¹¹ It refers to the level at which water stands in a well when no water is being extracted from the aquifer.

There were 1,082 villages in Chhatarpur and 674 villages in Tikamgarh district (both under Bundelkhand region, a water scarce area of Madhya Pradesh). The breakup of MVSs and SVSs planned/taken up in these districts is as follows:

Schemes	Chhatarpur District	Tikamgarh District
MVS planned	878 villages	201 villages
SVSs planned	204 villages	473 villages
Total	1,082 villages	674 villages

Audit, however, noticed that 248 villages - Chhatarpur (170) and Tikamgarh (78) - that were earlier taken up under the SVS had since been shifted to MVSs. This indicates that the source sustainability in these 248 villages was doubtful due to which, they had to be migrated to MVSs, which was a result of arbitrary adoption of schemes under JJM for villages without ascertaining the Q&Q blocks or hydrogeological status. The Department has not provided any reason(s) for selecting of SVS in these villages, despite the entire region being water scarce, rendering the expenditure towards creating water source in these villages has proven wasteful (under SVS).

The matter was reported to the Government, and the reply is still awaited (August 2025).

2.3.2 Poor involvement of the rural community

Para 5.4 of the JJM Guidelines stipulates that Gram Panchayat and/or its sub-committee, *i.e.*, VWSC/ Paani Samiti/User Group, *etc.*, will play a lead role in planning, implementation, management, operation, and maintenance of in-village water supply infrastructure.

Audit noticed the following shortcomings in participation of the rural communities in planning and implementation of JJM:

Non-formation of VWSCs	VWSCs were formed in 5517 villages (76.14 <i>per cent</i>) against 7,245 villages in eight selected districts as detailed in Appendix 5 .
Shortfall in VWSC meetings	Out of 32 villages test checked by Audit, in 20 villages, the VWSCs did not conduct four mandatory meetings in a year as required under the JJM Guidelines.
Community consent for capital contribution lacking	Gram Panchayats/VWSCs did not take the consent of 80 <i>per cent</i> of the community for contribution of the capital cost of the project by five /10 <i>per cent</i> as where applicable in any of the test checked 32 villages.

Thus, the lack of effective community engagement by VWSCs undermined JJM's vision of a community-driven approach, risking unsustainable schemes and poor sense of agency/ community ownership, which threatens the long-term success of JJM.

The matter was reported to the Government, and the reply is still awaited (August 2025).

2.3.3 Non-prioritization of villages for providing FHTCs

2.3.3.1 SC/ST majority areas and Drought-Prone areas

Para 3.3 (ii) of the JJM guidelines mandates prioritizing schemes for provisioning of FHTCs in quality affected areas, drought prone and desert areas. Additionally, GoI order

(29 September 2020) mandated a 100 *per cent* FHTC Coverage Plan in priority areas including SC/ST majority.

Audit noticed that the three districts (Chatarpur, Gwalior and Vidisha) did not prioritise SC-ST majority villages during the planning and implementation of JJM schemes. Consequently, 520 SC/ST villages, with a total of 3,72,745 population were not prioritized for piped water supply.

Further, GoMP identified 17,285 villages as Drought-Prone and Desert Areas (DPDAs) villages in the AAP 2020-21. However, in the AAP for 2023-24, the Department did not show any achievement under DPDAs. As such, Audit is unable to comment on the performance of the Department with regard to prioritising supply of piped water to DPDAs.

2.3.3.2 Arsenic and Fluoride affected Villages

Minutes of the meeting of the 16th Apex Committee of SWSM (3 March 2020) directed the PHED to provide potable piped water via FHTCs to all arsenic and fluoride affected areas by December 2020, in compliance with the National Green Tribunal's directive¹².

Audit observed in Dindori District that Electrolytic Defluorination Unit (EDF)¹³ were installed (December 2021) in 18 villages out of 33 fluoride-affected villages while in the remaining 15 villages, piped water continued to be supplied without de-fluoridation, despite high fluoride levels, violating Apex Committee and NGT directives.

During Exit Conference, the Principal Secretary PHED directed (June 2025) E-in-C, PHED to take corrective measures in fluoride affected villages of Dindori district.

Further development had not been intimated (July 2025).

2.3.4 Convergence

Para 3.6 of JJM Guidelines stipulated that based on VAPs and DAPs, the SAP will be planned for convergence for source sustainability and greywater management measures. Para 5.3 of JJM Guidelines, includes ensuring funds for these works via convergence, making them a prerequisite for DPR clearance. Para 6.3 of JJM Guidelines emphasizes convergence with various Central and State schemes for water conservation, ground water recharge, rainwater harvesting and greywater management to achieve water security.

Audit observed in the eight test checked districts that the PHED DPRs lacked provisions for water security, sustainability, and greywater management to be implemented through convergence. Consequently, sustainability works were not executed. The Department did not develop any plan for establishing recharge structures for water sustainability. Moreover, DWSMs did not prepare year-wise financial plan by pooling resources such as Central and State Funds, and other programs for rural drinking water supply. Further, "greywater management" was also not included in the DPRs and agreements in four¹⁴ MVSs executed by Jal Nigam.

12 NGT order dated 28.01.20: Original Application No. 384 of 2019: Mrs. Sunita Pandey & Another vs Union of India & Ors

13 Electrolytic Defluorination, a water treatment technique used to remove excess fluoride from water.

14 Sagad Hinotiya, Bansujara (Badamalhera), Bansujara (Tikamgarh) and Payli MVS

These issues indicate lapse in formulation of strategy for water resource management and effective financial planning through convergence, pointing to serious failures in the implementation of the scheme that will directly affect the long-term availability of water in these villages.

During Exit Conference, the MD Jal Nigam as well as the E-in-C, PHED stated (June 2025) that water conservation efforts were the responsibility of other departments.

The replies are not tenable because PHED, being the nodal department for the implementation of JJM, is responsible for coordination amongst various departments for convergence leading towards water conservation, greywater management, *etc.*

2.4 Conclusion

The audit of Jal Jeevan Mission in Madhya Pradesh has identified systemic breakdowns in planning, undermining the Mission's decentralized, demand-driven and bottom-up planning process, leading to delays in the 'Har Ghar Jal' intended deadline (March 2024). Foundational flaws include absent or delayed baseline surveys in multiple villages due to incomplete Implementation Support Agency appointments, leading to inaccurate assessments and cost escalations in the Single Village Schemes.

Community engagement was superficial and did not help in sensitization of the rural community resulting in near-zero financial participation (community contributions) and diminished ownership. Village Water and Sanitation Committees (VWSCs) were largely non-functional and Village Action Plans did not identify sustainability and quality of source. District Action Plans and State Action Plans did not flow from VAPs, resulting in unrealistic Annual Action Plans (AAPs) with data discrepancies and neglected priorities like SC/ST-dominated, drought-prone, and arsenic/fluoride-affected areas. Result was a top-down planning process disconnected from grassroots realities.

Schemes were arbitrarily adopted without hydrogeological studies resulting in subsequent shift from SVSs to MVSs in few areas, causing wasteful expenditure. Convergence for water recharge and greywater management was ignored, exacerbating long-term risks.

2.5 Chapter Recommendations

It is recommended that the GoMP may:

1. achieve 100 *per cent* VAP coverage in all remaining villages at the earliest using ISAs.
2. form/activate VWSCs in all villages, spread awareness (and make efforts to realise five-10 *per cent* community contributions) for capital/O&M via IEC campaigns and sensitize locals on water quality testing and source protection as per JJM handbooks.
3. conduct mandatory hydrogeological assessments for all new/ongoing schemes, revive traditional water bodies (e.g., lakes, springs), and implement recharge measures like rainwater harvesting.

The above recommendations have been suitably condensed in the concluding chapter.

Chapter-III Implementation





Sumpwell

Master Balancing Reservior



CHAPTER III: IMPLEMENTATION

For the purpose of this audit, in eight test checked districts, we scrutinised 144 SVSs¹⁵ (out of 4,570 SVSs) implemented by PHED and four MVSs (comprising 1,009 villages) out of 24 MVSs implemented by Jal Nigam. The irregularities noticed in the execution of SVS by PHED and MVS by Jal Nigam are mentioned in the succeeding paragraphs.

3.1 Progress of the Schemes

Audit noticed slow progress in creation of the infrastructure in all the eight districts. The district-wise progress of MVS and SVS as of September 2024 is described in **Table 7** below:

Table 7: Status of creation of water supply infrastructure in selected eight districts

District	Multi Village Scheme					Single Village Scheme			
	No. of Schemes	No. of Villages	No. of Schemes Completed	No. of Villages	No. of ongoing Schemes	No. of Villages	Total	Completed	Ongoing
Madhya Pradesh	147	35,126	39	2,340	108	32,786	27,336	15,739	11,597
Selected eight districts									
Chhatarpur	6	878	1	119	5	759	204	54	150
Dindori	3	897	0	0	3	897	448	144	304
Gwalior	2	212	0	0	2	212	455	235	220
Jhabua	5	311	0	0	5	311	716	276	440
Narmadapuram	0	0	0	0	0	0	858	329	529
Narsinghpur	1	63	0	0	1	63	894	563	331
Tikamgarh	1	201	0	0	1	201	473	136	337
Vidisha	6	1,547	1	109	5	1,438	522	256	266
Total	24	4,109	2	228	22	3,881	4,570	1,993	2,577

(Source: Records of PHED and Jal Nigam)

It can be seen from the table that out of 147 MVS schemes, only 39 schemes (27 *per cent*) have been completed while in case of SVSs, 15,739 out of 27,336 SVS schemes (58 *per cent*) have been completed (September 2024). The test checked districts were far behind the State average (8 *per cent* achievement in MVSs and 44 *per cent* achievement in SVSs). The reason for delay in achieving the target in MVS was delay in award of MVSs and taking up the schemes without assessing the ground reality.

3.2 Non-release of funds due to slow financial progress by SWSM

GoI releases JJM funds in tranches after assessing the utilization of fund by the States/ UTs. Releases are planned in consonance with ‘Just in Time’ principle of the Ministry of Finance so as to avoid any undue parking of funds. GoI provides funds in two instalments every year with each instalment having two tranches as detailed below:

¹⁵ One agreement contains more than one SVS.

1 st Instalment	50 per cent of total allocation for the fiscal year
	• 1st Tranche: 50 per cent of 1st Instalment after subsuming excess OB • 2nd Tranche: 50 per cent of 1st Instalment (after 80 per cent of 1st tranche is exhausted)
2 nd Instalment	50 per cent of total allocation for the fiscal year (based on 60 per cent utilisation of central funds)
	• 1st Tranche: 50 per cent of 1st Instalment after subsuming excess OB • 2nd Tranche: 50 per cent of 1st Instalment (after 80 per cent of 1st tranche is exhausted)

Audit noticed that:

- The State Government could not release its share at par with GoI during the period 2019-23 (41 per cent shortfall in release of State share).
- The Department could not utilize 80 per cent of the available funds in any of the years. Due to non-utilisation of 80 per cent of available fund by the State, GoI allocated funds were not released. This deprived the GoMP of ₹ 9,297.11 crore, being the allocated share not released during 2019-24, as detailed in **Table 8** below:

Table 8: Details of Central and State Share from which Scheme was deprived

(₹ in crore)								
Sl. No.	Year	Receivable Central share	State's share to be released by State	Central share released	State share released by State	Total Expenditure (in per cent)	Scheme deprived from Central Share	Scheme deprived from State Share
1	2	3	4	5	6	7	8=3-5	9=3-6
1	2019-20	571.00	571.00	571.60	315.00	615.40(69)	-0.60	256.00
2	2020-21	1,280.13	1,280.13	960.09	1,381.84	1,890.69(73)	320.04	-101.71
3	2021-22	5,116.79	5,116.79	3,837.59	3,795.93	4,742.11(57)	1,279.20	1,320.86
4	2022-23	5,641.02	5,641.02	2,820.50	2,714.69	7,042.82(76)	2,820.52	2,926.33
5	2023-24	10,297.85	10,297.85	5,419.90	5,353.54	12,779.11(99)	4,877.95	4,944.31
Total		22,906.79	22,906.79	13,609.68	13,561.00	27,070.13	9,297.11	9,345.79

(Source: Records of PHED)

The matter was reported to the Government, and the reply is still awaited (July 2025).

3.3 Non-issuing of physical completion certificates

As per Clause 35.1 of the General Conditions of the Contract, a Completion Certificate in the prescribed format mentioned in Contract Data (Annexure-U) shall be issued by the Engineer-in-Charge after physical completion of the work. As per Clause 35.2 after final payment to the contractor, a Final Completion Certificate in the prescribed format in Contract Data (Annexure-V) shall be issued by the Engineer-in-Charge.

Audit noticed (between August 2024 and October 2024) that in seven SVSs under four districts¹⁶, the schemes were completed and handed over to the Gram Panchayats, but physical and final completion certificates were not issued by the Engineer-in-Charge despite expiry of three to 28 months ([Appendix 6](#)).

16 Jhauba, Narmadapuram, Narsinghpur and Tikamgarh.

Issuance of such certificates is a mandatory procedural requirement that should have been fulfilled prior to the completion and handover of the schemes to the Gram Panchayats. In the absence of these certificates, premature handing over of incomplete schemes to achieve the targets, cannot be ruled out. JPI/Beneficiary survey supports this assertion, as seven out of 28 SVSs, physically inspected by Audit, were found to be non-functional, belying the Government claims of having achieved 100 *per cent* saturation in these villages.

The EEs replied (August to October 2024) that physical completion certificates shall be issued. Further development has, however not been intimated (July 2025).

3.4 Non recovery of liquidated damages (LD)

As per Clause 15 (Compensation for delay) of Part-I General conditions of Contract of SVS and Clause 13 of the “Conditions of Contract” of MVS, the time allowed for carrying out the work, shall be strictly observed by the contractor. Failure of the contractor to adhere to the timelines and/or milestones shall attract penalty at the rate of 0.05 *per cent* per day of delay, limited to a maximum of 10 *per cent* of the contract price.

Audit noticed (between August 2024 and October 2024) in the eight districts¹⁷ that:

- The contractors (SVS works) did not complete 30 agreements in the stipulated period. The works were delayed by 136 days to 1,262 days. In 27 agreements, time extension cases were either not prepared or sanctioned, and LD was not imposed, while in the remaining three cases, lesser LD was imposed. This resulted in non/short imposition of LD of ₹ 5.09 crore (Appendix 7).
- Payli, Sagad Hinotiya and Bansujara MVSs were completed with delays of 1,155 days, 1,971 days, and 1,901 days, respectively. Against the total leviable LD of ₹ 95.92 crore, no amount was recovered in Sagad Hinotiya and Bansujara MVSs while in Payli MVS, only ₹ 8.46 crore was withheld (against ₹ 64.54 crore). This resulted in non/short imposition of LD of ₹ 87.46 crore (Appendix 8).

While accepting the facts, the E-in-C PHED clarified in the exit conference, that instructions have been issued to field offices regarding finalisation of time extensions for projects with delayed completion and LD would be levied accordingly. However, responsibility should be fixed for delay in finalisation of time extension.

Further progress in this regard is awaited in audit.

3.5 Deficiencies in estimations

3.5.1 Extra burden on state exchequer for cost increment due to unrealistic cost estimation

Para 7.5 of JJM Guidelines stipulated that every State has to prepare a five-year State Action Plan wherein annual target of FHTCs, and corresponding financial requirements will be projected. All Schemes sanctioned under JJM shall be implemented without cost and time

¹⁷ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

overrun. In case of any cost escalation beyond the approved cost, it will have to be borne by the concerned State and UTs with legislature and no additional expenditure out of Central share will be permitted.

It was noticed (between August 2024 and October 2024) in eight districts¹⁸ that 853 SVSs were approved at the cost of ₹ 668.67 crore but during execution, additional amount of ₹ 328.33 crore was required to be incurred for completion of the schemes. Proposal for obtaining revise AA had been submitted by the concerned Districts of which approval was pending at Government level. The reason for such increase in the cost was increase in number of FHTCs, additional quantity and extra items in respect of estimates. Therefore, in accordance with the provisions of Para 7.5 of the JJM Guidelines PHED, GoMP will have to bear the entire additional cost of ₹ 328.33 crore, as detailed in [Appendix 9](#). The additional cost would be increased substantially if we consider the entire 52 districts of State on Macro level. In the absence of revised AA, these schemes are under incomplete stage after incurring huge expenditure and the future of the schemes is uncertain. Further, Audit is unable to understand regarding the arrangement of such huge amount for complete the scheme by the State Government.

The EEs replied (August to October 2024) that cost increased due to various reasons such as existence of sources at distant locations, inclusion of new habitations and FHTC for which revised estimates were submitted for approval. No other reply was given by the Department in the Exit Conference.

The reply confirms the fact that costs increased due to unrealistic estimation inclusion of new habitation, as stated in para, indicates that baseline surveys were deficient as already observed, which put on extra burden on State Government.

3.5.2 Extra cost due to providing FHTCs without ensuring minimum road crossing

As per technical specification forming part of the agreement, pipelines may be laid on the side of the street where the population is dense. Accordingly, DPR and BOQ of schemes were prepared for providing FHTCs without road crossing in majority of the cases in the interest of economy.

As per SOR of PHED, the item '*providing FHTCs with road crossing*' was costlier (₹ 2,120 per FHTC) compared to the item '*providing FHTCs without road crossing*' (₹ 2,030 per FHTC).

Audit noticed (between August 2024 and October 2024) that provision of greater number of FHTCs with road crossing in comparison with those without road crossings was made in the BOQs of seven agreements across four districts¹⁹. Out of 4,600 FHTCs, 3,635 FHTCs (79 *per cent*) were provisioned with road crossing whereas 965 FHTCs (21 *per cent*) was provisioned without road crossing. During execution it was found that total provided FHTC was reduced from 4,600 to 3,081 FHTCs *i.e.* 2,669 FHTCs (87 *per cent*) with road crossing and 412 FHTCs (13 *per cent*) without road crossing. Hence during execution, FHTCs with road crossing increased from 79 *per cent* to 87 *per cent*.

¹⁸ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

¹⁹ Chhatarpur, Narmadapuram, Narsinghpur and Tikamgarh.

In another seven agreements where lesser provision of FHTCs with road crossing in comparison of without road crossing was made in the BOQ of three districts²⁰. Out of 6,392 FHTCs, 2,670 FHTCs (42 *per cent*) was provisioned with road crossing whereas 3,722 FHTCs (58 *per cent*) was provisioned without road crossing. During execution it was found that 4,673 FHTCs (88 *per cent*) with road crossing and 658 FHTCs (12 *per cent*) without road crossing were executed. Hence during execution, FHTCs with road crossing increased from 42 *per cent* to 88 *per cent*.

These deviations indicate that the Department did not adhere to the JJM guidelines and technical specifications concerning techno-economic feasibility and execution. The disproportionate execution of FHTCs with road crossings, beyond the provisioned quantities, resulted in an extra expenditure of ₹ 0.44 crore, as detailed in [Appendix 10](#).

During exit conference, the Principal Secretary directed the Engineer-in-Chief to examine the issue at a macro level.

Further progress in this regard is awaited in audit (July 2025).

3.5.3 Invitation of tender on inflated estimate

Jal Nigam has adopted the SOR issued by Urban Administration and Development Department (UADD) (2012 & 2021) for all the civil works.

During scrutiny of DPRs of Payli and Bansujara (Tikamgarh) MVSs, Audit noticed that provisions for “Cement Concrete (CC) Road restoration work by CC M-30²¹ were made in the DPRs. Instead of adopting the rate as per Item No. 6.5 of SOR 2012 & Item No. 6.2 of SOR 2021 as applicable to CC pavement, the rate applicable for CC sub-structure (Item No. 15.20 SOR 2012) & (Item No. 18.14.1 SOR 2021) was applied, which was more expensive. This inflated the cost by ₹ 3.75 crore as detailed in **Table 9** below:

Table 9: Details of inflated estimate in DPR

(Amount in ₹)					
Scheme	Qty. of M-30 (in Cu.M.)	Rate of M-30 UADD SOR 2012 & 2021 (Water Supply works)	Rate of M-30 UAAD SOR 2012 & 2021 (Road works)	Difference in rate	Amount
1	2	3	4	5	6=2*5
Payli	22,717.34	5,738 ²²	4,698 ²³	1,040	2,36,26,034.00
Bansujara (Tikamgarh)	54,237.00	5,839 ²⁴	5,583 ²⁵	256	1,38,84,672.00
Total					3,75,10,706.00

(Source: DPR of Payli and Bansujara (Tikamgarh)MVS)

Preparation of the estimate (PAC) by adopting the rate for M-30 for sub-structure²⁶ instead of M-30 for CC road work, resulted in inflated estimation amounting to ₹ 3.75 crore.

20 Gwalior, Narsinghpur and Vidisha.

21 M30 refers to a grade of concrete where 'M' denotes the mix and '30' indicates the characteristic compressive strength of the concrete, measured in N/mm² (Newtons per square millimeter) after 28 days of curing.

22 SOR UAAD 2012 Vol-I Item 15.20 (iii) - ₹ 5,738 + Item 15.16.1 - ₹ 703 = ₹ 6,441

23 SOR UAAD 2012 Vol-III (Road) Item 6.5 - ₹ 4,698

24 SOR UAAD 2021 Vol-I Item 18.14.1 ₹ 5,839

25 SOR UAAD 2021 Vol-III (Road) Item 6.3 - ₹ 5,583

26 Substructure is the part of the building underneath the ground, while the superstructure is everything that is above ground.

On this being pointed out in audit the Nigam replied that for all the MVS, tenders were floated on EPC mode and item rates have no significance as contractors calculated their own cost for work and give final rates. Hence a higher rate of a particular item has no significance as specifications given in tender are referred by contractors to execute the work and calculate their cost of work for arriving at the cost of work.

The reply is not tenable because the DPR of the scheme is also available to the contractor after purchasing tender documents. Estimates are the drivers of quotes as the contractors refer to the PAC while quoting the rates; consequently, a higher PAC leads to a higher rate.

3.5.4 Unwarranted provision of *murrum* bedding in laying of pipeline

As per Clause 8.4.20 of 'General Brief Specifications' of Agreement, where rock or boulders are encountered during excavation for laying of pipeline, the trench shall be trimmed to a depth of at least 100 mm below the level at which the bottom of the pipe is to be laid and with non-compressible material like sand or *murrum* of adequate depth to provide bedding for laying of pipe.

Audit noticed in Gandhi Sagar-I MVS that excavation in all kinds of soil and ordinary rock was provided for laying of pipeline in the estimates. This indicates that hard rock was not likely to be encountered in the entire length of laying of pipeline, however, the Nigam provisioned for *murrum* bedding for laying of pipeline in the estimate without its requirement. This resulted in undue financial benefit of ₹ 5.41 crore (detailed in **Table 10** below) to the contractor due to provision of unwarranted item of *murrum* bedding in laying of pipeline.

Table 10: Details of unwarranted provision of *murrum* in laying of pipeline

						(Amount in ₹)
Component	Item	Quantity (in Cu. M.)	Rate	Estimated amount	Payment <i>per cent</i> made up to 27 th RA bill	Paid amount
Distribution line	<i>Murrum</i> bedding	1,47,465.59	478	7,04,88,552	76.77	5,41,14,061

The Nigam replied that in the agreement it is mentioned that DPR may not be depicting real picture of work. It is tentative idea of project scope. Hence *murrum* bedding is taken as if hard rock is found on site during construction phase.

The reply is not tenable because the estimate for providing *murrum* bedding was taken as assumption basis without actual requirements, which resulted in undue financial benefit of ₹ 5.41 crore.

3.5.5 Excess quantity of CC road restoration was included in the estimate

Audit noticed in Gandhi Sagar-1 and Vaidhan-1 MVS that the excess provisioning of CC road restoration measuring 26,558.92 Cu. M. was done as compared to the quantity provisioned for demolition of CC road, as only the dismantled quantity of CC road was required to be restored. This resulted in undue financial benefit of ₹ 8.57 crore (detailed in **Table 11** below) to the contractor due to provision of excess quantity of CC road restoration in estimate.

Table 11: Details of excess quantity of CC road restoration

(Amount in ₹ & Quantity in Cu.M.)							
Component	Quantity of CC demolishing	Quantity of CC restoration	Excess Quantity	Rate	Amount	Payment per cent made up to 27 th RA bill	Amount
1	2	3	4=3-2	5	6=4*5	7	8=6*7
Gandhi Sagar 1							
CWPM	61.99	191.2	129.21	4,755	6,14,394	62.28	3,82,645
CWGM	2,058.45	3,087.68	1,029.23	4,755	48,93,989	73.94	36,18,615
Distribution	49,770.21	73,733.98	23,963.77	4,219	10,11,03,146	76.77	7,76,16,885
Total	51,890.65	77,012.86	25,122.21		10,66,11,529		8,16,18,145
Vaidan 1							
Component	Quantity of CC demolishing	Quantity of CC restoration	Excess Quantity	Rate	Amount	Payment per cent made up to 30 th RA bill	Amount
1	2	3	4=3-2	5	6=4*5	7	8=6*7
Distribution	57,46.89	7,183.60	1,436.71	4,698	67,49,664	60.42	40,78,147
Grand Total			26,558.92				8,56,96,292

The Nigam replied that in DPR of Gandhi Sagar-1, CC and BT demolishing both has been taken and restoration will be done by CC on both the kind of pavements. Hence total demolishing (CC+BT) in DPR provided in 1,03,808.08 Cu. M. (in which average depth of demolition taken as 0.20 meter) and total restoration has been taken 77,053.66 Cu.M. (in which average depth of restoration taken as 0.15 meter). In case of Vaidan-1 MVS, it was stated that normally the rural roads in villages are constructed by the Gram Panchayats and the depth of concrete does not remain same, hence average of depth of CC is taken 20 cm, but while restoration a uniform depth of cement concrete is required to be laid irrespective of previously laid depth of concrete. So, for restoration of road work by CC 15 cm M15 and 10 cm M30 is taken.

The replies are not acceptable as:

- In case of the DPR of Gandhi Sagar-1, provisioning for restoration of BT road by the CC was irregular.
- While preparing the DPR for Vaidan-1, the quantity of CC restoration was provisioned more than the quantity of CC demolished.

Inclusion of excess quantity of CC road restoration in the DPR thereby inflated the estimates.

3.5.6 Provision of richer specifications of CC road restoration

As per brief specification for HDPE and DI pipe for distribution network forming part of the agreements of the Multi Village Schemes, for road cutting and restoration of concrete/BT roads, estimates are based on conventional methods and contractor shall make such concrete/BT roads same again in 'as it was condition'. Further, M-30 grade CC is a richer and costlier specification as compared with M-15 and M-20 grade CC.

During scrutiny of DPRs of five MVSs (Satna Bansagar, Baxwaha, Gopi Krishna, Madikheda, Kundaliya) it was noticed that an item 'cutting of concrete road portion and making good the same by M-15 or M-20 grade including supply of extra quantities of materials' was included

in the estimates. However, in other six MVSs, the said item was provisioned (in the estimate) for execution with M-30 grade CC for entire length of distribution network (where the restoration work was to be done). Since M-20 grade cement concrete was sufficient for traffic plying on the village roads, provisioning of the more expensive M-30 in the estimates resulted in inflation of estimates by ₹ 10.77 crore as detailed in **Table 12** below:

Table 12: Details of provision of richer specification of CC road

(Amount in ₹ & Quantity in Cu.M.)						
Sl. No.	Scheme	Qty. of M-30 (in Cu.M.)	Rate of M-30 including road cutting	Rate of M-20 including road cutting	Diff. in rate	Amount (in ₹)
1	2	3	4	5	6	7=3*6
1	Mohanpura	47,473.97	6,441	5,757	684	3,24,72,195
2	Madia	54,168.33	6,441	5,757	684	3,70,51,138
3	Jabera-Tendukheda	7,399.99	6,441	5,757	684	50,61,593
4	Indwar-1	16,581.93	6,167	5,757	410	67,98,591
5	Payli	22,717.34	6,441	5,757	684	1,55,38,428
6	Damoh Patera	15,695.23	6,441	5,757	684	1,07,35,537
Total						10,76,57,482

No evidence was recorded to indicate that the work was actually taken up using M-30 and hence undue benefit cannot be ruled out.

In reply (October 2024), the MD Jal Nigam stated that all rural roads were nowadays constructed with M-30 mix. Further, the distribution network was laid in the village areas, where in recent years, majority of the roads were CC.

The reply is factually incorrect as road restoration was to be done with the same CC grade with which it was constructed. The Nigam did not submit any evidence to prove that the previous road was M-30 grade CC and that restoration has indeed been done using M-30 grade CC. For instance, Audit collected evidence of grade of CC road restoration after implementation of Payli MVS, DPR of which had provision for restoration of road by M-30, but road restoration work was carried out by M-20 in the entire scheme.

3.6 Deficiencies in tendering

3.6.1 Invitation of tender on PAC including GST

Estimate of Gopi Krishna and Rajghat, Multi Villages Scheme were prepared based on Integrated Standard Schedule of Rate (ISSR) of Urban Administration and Development Department (UADD) dated 12th May 2012. An amendment was issued by UADD vide letter dated November 2017, whereby the rates of ISSR were reduced by 10 *per cent* (with immediate effect) on account of implementation of GST. The letter further mentioned that in future, for the estimates prepared using ISSR, the prevalent GST rates must be added separately. Therefore, the Probable Amount of Contract (PAC) of tenders were to be calculated after reducing the amount arrived at using the ISSR by 10 *per cent*.

Audit observed that based on the revised instructions (November 2017), the cost of the Gopi Krishna MVS and Rajghat MVS was wrongly derived from the DPR (based on prevailing ISSR) as follows:

Formula to be applied	Incorrect Formula applied
Reduce PAC by 10 <i>per cent</i>	- First reduced 10 <i>per cent</i> from the PAC, then - Applied 12 <i>per cent</i> GST to the revised/reduced PAC, then - Reduced an additional 10 <i>per cent</i> from the inclusive GST PAC.
For original PAC of ₹ 100	For original PAC of ₹ 100
Formula to be applied = 90 <i>per cent</i> of ₹100 = ₹ 90	Formula applied = 90 <i>per cent</i> of ₹ 100; and then added 12 <i>per cent</i> GST i.e. ₹ 90 * 112 <i>per cent</i> = ₹ 100.80
Revised PAC = ₹ 90	Reduction of 10 <i>per cent</i> of ₹ 100.80 = ₹ 90.72
	Revised PAC = ₹ 90.72

Adoption of incorrect formula for calculation of PAC resulted in inflated PAC of ₹ 392.24 crore and ₹ 1,649.63 crore in Gopi Krishna and Rajghat MVS for invitation of tender against actual of ₹ 389.13 crore and ₹ 1636. 54 crore, respectively, as detailed in [Appendix 11](#). This discrepancy led to a total inflation of ₹ 16.20 crore in the PACs, (₹ 3.11 crore: Gopikrishna MVS, and ₹ 13.09 crore: Rajghat MVS).

Government response is awaited (July 2025).

3.6.2 Unauthorized opening of the financial offers of tender

The E-in-C, at the time of adoption of e-procurement in the PHED, had issued an order (December 2018) regarding formation of Tender Committee for opening of tenders after implementation of new e-procurement portal *i.e.*, www.mptenders.gov.in developed by NIC. The details of constitution and powers of Tender Committee were as follows:

Type of Office	Amount of tender for invitation of tender	Members of the committee constituted for opening of tender
Divisional Office	Up to ₹ one crore	1. Executive Engineer, 2. Divisional Accountant, 3. Assistant Engineer posted at District Headquarters, 4. Senior Accounts Clerk & 5. Employees posted in Technical/Tendering Section
Zonal Office	₹ one crore to ₹ five crore	1. Superintending Engineer (Procurement), 2. Executive Engineer (Procurement) 3. Account Officer, 4. Headquarters Superintendent & 5. Assistant Engineer/Sub-Engineer (Procurement)
E-in-C Office	More than ₹ five crore	1. Superintending Engineer (Procurement), 2. Executive Engineer (Procurement) 3. Joint Director (Finance), 4. Assistant Engineer/ Sub-Engineer (Procurement) & 5. Draftsman

The tenders as per the amount mentioned in Column Number 2 will be published on the online portal by the respective office and at the time of creation of tender on the portal, the members of the committee mentioned at Column Number 3 of the respective office will be nominated/ selected for opening of the tenders. The GoMP, PHED (August 2020) issued an order revising the limit for invitation of tenders by Divisional Offices to ₹ five crore.

Further, as per Clause 20.1 of the Instruction to Bidders, information relating to examination, evaluation, comparison, and recommendation of contract award shall not be disclosed to the bidders, or any other person not officially concerned with such process until final decision on the bid.

Audit noticed (between August 2024 and October 2024) that in 22 tenders of eight districts²⁷, the financial bids were above ₹ one crore and hence beyond the competency of the EEs. However, the same were opened by the EEs in their offices and sent to the higher authorities i.e., SE/ CE for approval only, violating the confidentiality of the bidding process. The SE/ CE did not take any action against the EEs for violation of the bidding process.

The EEs replied (August to October 2024) that tenders were opened in compliance of GoMP, PHED order (August 2020) by which it was directed that tenders up to value of ₹ five crore were to be invited and settled at the divisional level.

The reply is misleading because as per the order dated August 2020, Divisional offices were only allowed to invite tenders up to the value of ₹ five crore and not adjudicate and decide on them. For that the limit had already been prescribed by the E-in-C in December 2018 as per which, the EEs were not competent.

3.7 Deficiencies in Contract Management

3.7.1 Systemic deficiency resulting in lack of uniformity in average FHTC cost

According to Para 7.1 of the JJM Guidelines, the average cost per household, which has been used to calculate the total funding requirement, is taken to ₹ 25,000 for single village schemes that rely on treated groundwater and for an MVS the per household average cost shall be ₹ 47,000.

Audit noticed (between August 2024 and October 2024) in the eight districts²⁸ that the Department did not follow the prescribed norms of per FHTC for SVSs. Approved cost of 3,060 SVSs out of 4,570 SVSs exceeded the earmarked maximum cost of ₹ 25,000 per FHTC for SVS as shown in [Appendix 12](#). This resulted in extra cost of ₹ 6.47 crore on FHTCs in 3,060 SVSs. Despite the cost overruns, no mechanism was established to report these deviations to the Government of India (GoI). Such discrepancies could inflate the overall JJM budget and necessitate additional funding.

In 106 SVSs, per FHTC cost exceeded ₹ one lakh, with the highest recorded at ₹ 3.28 lakh in Mahudiyada SVS of Jhabua District, indicating significant deviations from approved norms.

Audit noticed in four MVSs being executed by the Jal Nigam that the above limit for FHTCs (₹ 47,000) was not adhered to. The average per FHTC cost in these four schemes ranged from ₹ 63,734 per FHTC (in case of Sagad Hinotiya MVS) to ₹ 90,033 per FHTC (Bansujara Tikamgarh MVS). Reasons for the deviation from the FHTC costs as per JJM guidelines were not recorded. Increased cost of FHTC resulted in extra cost amounting to ₹ 586.67 crore on FHTCs as detailed in [Appendix 12](#).

These cost escalations were due to the failure of the Department to prepare and evaluate three alternative techno-economic options, as mandated by JJM guidelines. Additionally, neither the

27 Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

28 Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

proposed options nor the associated costs were presented to Gram Panchayats for approval, violating JJM norms.

During Exit Conference, the Department clarified that due to the dispersed nature of the areas, it is not feasible to cap the amount, and these figures represent a targeted amount rather than a maximum fixed by the Government of India (GoI). The Engineer-in-Chief added that the cost was increased due to the rise in pipeline costs, exacerbated by scattered habitations.

The reply is not tenable because the cost of FHTC as per JJM was prescribed as ₹ 25,000 and ₹ 47,000 respectively for SVS and MVS which indicates that all extraneous factors had been accounted for to arrive at the costs. Estimates worked out by the Nigam should have accounted for the wide deviations, if so warranted, which was not done.

3.7.2 Unwarranted execution of FHTCs

As per Para 3.6.1 of the JJM Guidelines, the VAP prepared by Gram Panchayat shall *inter alia* contain existing status of village water supply, so that the existing infrastructure could be utilised in retrofitted schemes. Further as per Para 3 of the Manual for Preparation of DPR for Rural Piped Water Supply Scheme, the useful design life is 20 years.

Audit noticed (September 2024) that in Rampura SVS of Tikamgarh, the old scheme was completed (April 2014) and still functional with 164 household connections and had not completed its useful design life. However, the PHED undertook the retrofitting scheme for Rampura village with a total of 165 households without using the infrastructure of the existing 164 connections. The work was shown as completed/*Har Ghar Jal* Certified and payment amounting to ₹ 33.60 lakh was made to the contractor. Since 164 out of total 165 connections were functional, retrofitting was not required in these cases. Therefore, expenditure of ₹ 33.60 lakh on this scheme was unwarranted.

In reply, the EE said (August to October 2024) that existing tubewells were dried and FHTCs were damaged, therefore new FHTCs were provided.

The reply is not acceptable because it does not address the fact that the existing scheme and FHTCs were within the design period and should have been in utilisable condition.

The matter was reported to the Government, and the reply is awaited (June 2025).

3.7.3 Unauthorised execution and payment of extra items and quantities

As per Clause 21 of General Conditions of Contract read with Contract Data, all the extra items and extra quantities will be sanctioned by the competent authority as mentioned below:

Competent authority		Extra quantities	Extra items	Substitute items
Executive Engineer		Up to 10 <i>per cent</i>	---	---
Superintending Engineer (SE)	Engineer	Up to 20 <i>per cent</i> up to the maximum of ₹ 20.00 lakh but the total cost should not exceed 10 <i>per cent</i> of AA	Up to ₹ 20.00 lakh but the total cost should not exceed 10 <i>per cent</i> of AA	Up to ₹ 20.00 lakh but the total cost should not exceed 10 <i>per cent</i> of AA
Chief Engineer (CE)		Full authority (up to 10 <i>per cent</i> of AA)	Full authority (up to 10 <i>per cent</i> of AA)	Full authority (up to 10 <i>per cent</i> of AA)

Audit noticed (between August 2024 and October 2024) in six agreements in four districts²⁹, the extra/substituted items and quantities beyond 10 *per cent* of agreement quantities were executed and paid without the approval of the SE/CE. This resulted in unauthorised execution of items and quantities of ₹ 1.12 crore *as shown in Appendix 13*. The district wise abstract of unauthorised execution and payment is described in **Table 13** below:

Table 13: Abstract of unauthorised execution and payment of extra items and quantities

(Amount in ₹)						
Sl. No.	District	Agreement No.	Extra quantities		Extra items	
			No.	Amount	No.	Amount
1	Dindori	110/2021-22	3	3,69,767.00	-	-
2		52/2020-21	3	18,41,928.00	-	-
3	Gwalior	57/2022-23	9	54,86,679.00	2	3,98,655.00
4		48/2020-21	4	4,99,729.00	1	2,54,405.00
5	Jhabua	77/2020-21	1	4,53,183.00	-	-
6	Tikamgarh	75/2020-21	5	19,12,100.00	-	-
Total			25	1,05,63,386.00	3	6,53,060.00

The EEs replied (August to October 2024) that approval from the competent authority would be taken before final payment.

The reply is not acceptable because work shall be executed, and payment shall be made only after the approval of competent authority.

3.7.4 Excess payment to contractors

As per Clause 4.017 of Madhya Pradesh Works Department Manual, the Measurement Book is the basis of all accounts of quantities of work done. It must contain such a complete record of facts as to be conclusive evidence in the court of law. The description of the work/materials must be lucid to enable easy identification and check. It forms the basis for payment to be made.

Audit noticed (between August 2024 and October 2024) in 22 agreements out of 38 agreements across eight districts³⁰ that, excess payment was made to the contractors on account of various irregularities as detailed in **Table 14** below:

Table 14: Statement showing excess payment to the contractors

Details of Irregularities	(₹ in lakh)		
	No. of Agreements	No. of Districts	Amount
Incorrect rate for refilling of excavated available soil (Chhatarpur, Dindori, Gwalior, Jhabua, Narsinghpur, Tikamgarh & Vidisha)	11	7	10.86
Non-recovery of rate of flat cable (Chhatarpur, Dindori, Gwalior, Narsinghpur & Tikamgarh)	9	5	27.35
Excess quantity of supply & laying of HDPE pipe (Gwalior & Tikamgarh)	3	2	33.63
Incorrect Measurements (Gwalior & Tikamgarh)	5	2	8.62
Payment without measurements (Tikamgarh)	2	1	16.37

²⁹ Dindori, Gwalior, Jhabua and Tikamgarh.

³⁰ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

Details of Irregularities	No. of Agreements	No. of Districts	Amount
Excess quantity of road restoration (Chhatarpur, Gwalior & Vidisha)	3	3	12.12
Non-construction of FHTC standpost and platform (Gwalior)	3	1	14.96
Double payment of supply of HDPE due to laying HDPE pipe through HDD method (Narsinghpur)	1	1	6.05
Advance payment without execution of work (Tikamgarh)	1	1	2.7
Incorrect deduction of previous payment from next RA bill (Narmadapuram)	1	1	1.72
Separate payment of MDPE pipe (Gwalior)	1	1	0.37
Total			134.75

(Source: Records of PHED)

These cases indicate poor control and lack of due diligence in recording measurements and processing bills for payment and resulted in excess payment of ₹ 1.35 crore ([Appendix 14](#)) to the contractor.

During exit conference, the E-in-C assured that he would verify the facts, and action would be taken accordingly.

Further progress in this regard is awaited in audit (July 2025).

3.7.5 Inadmissible payment to the contractor on account of variation of allied work of pipeline

Engineering, Procurement and Construction (EPC) of Sagad-Hinotiya MVS in Vidisha was awarded (April 2017) in a Single Package on “Turn-key basis” by Jal Nigam to M/s Offshore Infrastructures Limited vide Agreement No. 01/2017-18 for completion within 24 months from the date of issue (April 2017) of the letter of acceptance. The contract amount of the scheme was ₹ 126.79 crore. Scheme was 95 *per cent* completed and ₹ 136.24 crore was paid to the contractor.

As per Clause-11 of the Agreement “variation will be permitted only in length and size of the pipeline and electric line and does not provide for variations in allied work (excavation, refilling, restoration of road *etc.*). This was also reiterated in the Breakup Schedule of Payment of the Agreement.

During audit, it was observed that Sagad Hinotiya, MVS out of four selected MVSs, the length of pipeline of various components viz. Raw/Clear Water Pumping Main (RWPM/CWPM), Clear Water Gravity Main (CWGM), Clear Water feeder Main (CWFM), Distribution Network (DN) increased during execution. The Jal Nigam approved 15 numbers of variation for various component. It was observed in variation No. 8, 10, 11 and 15 that along with the difference of cost of pipeline the Nigam also approved the cost of allied work. As the provisions of Clause 11 did not include payment for variation in the allied works the payment of ₹ 12.86 crore for the allied works was irregular and undue advantage to the contractor as detailed in **Table 15** below:

Table 15: Details of approved variations with allied work in Sagad-Hinotiya MVS

Variation No.	Component of Scheme	(Amount in ₹)		
		Variation approved for payment		
		Pipeline	Allied Works	Total
08	CWGM (Pipeline & allied work)	60,74,200	32,79,467	93,53,667
10	CWPM (only for allied work) ³¹	00	3,24,021	3,24,021
11	Distribution Network (only for allied work) ³²	00	4,19,31,390	4,19,31,390
15	Distribution Network (Pipeline & allied work)	8,58,18,525	8,30,50,948	16,88,69,473
Total		9,18,92,725	12,85,85,826	22,04,78,551

(Source: Variations approved by the Jal Nigam)

During review of other MVSs the following were also noticed:

- ☹ Agreements of four other MVSs (Damoh-Patera, Jabera-Tendukheda, Indawar-1, Payli), had the similar clause for variation, but in these works, when length of pipeline increased, difference in the cost of pipeline only was paid.
- ☹ Out of six variations approved by the Nigam in Mohanpura MVS, four were positive (₹ 9.13 crore) and two were negative (₹ 17.27 crore excluding allied work). The cost of the allied work of ₹ 11.73³³ crore was not considered in negative variation in Distribution Network and CWGM, resulting in undue benefit to the contractor.
- ☹ Similarly, in case of Payli MVS³⁴, one positive variation of CWPM of ₹ 28.71 crore and three negative variations of CWGM, RWPM and Distribution Network aggregating ₹ 71.33 crore was approved by Jal Nigam between September 2020 and March 2022. While the variations in CWPM, CWGM, and RWPM were considered and paid, a negative variation of ₹ 15.93 crore in Distribution Network was not considered in the contractor's bills. Thus, the contractor was given undue financial benefit of ₹ 15.93 crore.

In reply, Jal Nigam stated (October 2024) that, Annexure 'H' of the Agreement does not specify that no separate excavations and other allied works would be admissible. Hence the approval of the variation was as per the agreement. For Payli MVS, it was stated that payments are made in slabs and that the last slab for an amount of ₹ 15.67 crore still remains unpaid to the contractor, which is almost equal to the amount of negative variation.

The reply is factually incorrect and unacceptable as the Clause 11 of the agreement clearly states variation is allowed only for the length and size of the pipeline, indicating that no payments will be made for any allied item. Further, the reply was silent on the negative variation not considered for allied works, even when the same was considered for all positive variations (Mohanpura MVS). In case of Payli MVS the reply is misleading because the payment components of the work are allocated based on specific percentages of the total lump sum contract and hence payments are made in slabs. Negative variations leading to decrease in

³¹ Variation for pipeline of CWPM had already been approved in variation no. 02.

³² Variation for pipeline of DN had already been approved in variation no. 06.

³³ The cost of allied work of negative variation is workout average cost of allied work on prorated basis from DPR of ₹ 11.73 crore (₹ 3.92 crore in CWGM and ₹ 7.81 crore in Distribution Network)

³⁴ Agreement executed in December 2018 stated that variation will be permitted only in length and size of the pipeline and electric line.

the total amount for a component should have been adjusted for each stage accordingly. However, Nigam has disbursed payments for all stages of the distribution network without accounting for the reduction resulting from the negative variation.

3.7.6 Irregular payment for execution of HDPE pipes without testing by CIPET

As per Para 3.5 (xxxvi) of JJM Guidelines, materials to be procured for use in construction by the contracting agency should adhere to the relevant Indian Standards. Further, as per Clauses 40, 41 & 42 of the Special Conditions of Contract (SCC), the quality of material (HDPE pipe) used in construction work should be checked by a Central Institute of Plastic Engineering and Technology (CIPET) at the factory before delivery of materials at site. Further payment for such materials could be made only after the Third-Party Inspection (CIPET, in this case) report.

Audit noticed (between August 2024 and October 2024) in three agreements across two Districts³⁵ that the work of HDPE pipes worth ₹ 86.07 lakh was executed ([Appendix 15](#)), without ensuring mandatory quality checks of pipes by CIPET, in violation of provisions. As such, the quality of the materials brought on site and utilised could not be validated by the Department.

The EE, Gwalior replied (October 2024) that action would be taken before final bill after scrutiny while EE, Tikamgarh replied (September 2024) that CIPET report was submitted.

Reply is not acceptable because in case of Gwalior payment for untested HDPE pipes was made despite the mandatory requirement for CIPET testing prior to their delivery of pipes at site. In case of Tikamgarh, CIPET report was submitted without evidence and hence unsubstantiated.

3.7.7 Short/Non deduction of royalty

As per Clause 7 of the Special Conditions of Contract in SVSs read with Clause 1.4 of the Detailed Notice Inviting Tender issued for the MVSSs, royalty paid receipts for the utilised material or 'No royalty due certificate from the concerned district collector' shall be submitted with the bill for payment, otherwise royalty shall be deducted from the bill and it shall not be obligatory upon the Department to refund the same.

Audit noticed in SVSs (between August 2024 and October 2024) in the eight districts³⁶ that the consumption statement for the minerals consumed in construction of schemes was not being prepared. Audit could not ascertain quantity of minerals consumed in OHT, sump well and pump house in the absence of detailed measurement being job work in BOQ/SOR. However, in 'CC road restoration' alone in 23 agreements of eight districts, an amount of ₹ 1.24 lakh was recovered on account of royalty against the recoverable amount of ₹ 14.14 lakh. Reasons for short deduction of royalty was not available in the records. This resulted in short deduction of royalty of ₹ 12.90 lakh as shown in [Appendix 16](#).

Audit noticed in the MVSSs of Sagad Hinotiya, Bansujara (Badamalhera), Bansujara (Tikamgarh) and Payli that these schemes had various major components (intake well, water

³⁵ Gwalior and Tikamgarh.

³⁶ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

treatment plant, OHT, *etc.*) in which minor minerals (sand and metal) were used. The consumption statement of material was, however, not found prepared in MBs. The 'No Royalty Due' Certificate as mentioned above was also not found appended with the bills of the contractor. In the absence of this certificate, the amount of royalty on sand and metal should have been recovered from contractor's bills, however, the entire payment was released. This resulted in undue financial benefit amounting to ₹ three crore to the contractors as detailed in [Appendix 17](#).

In exit conference, the MD Jal Nigam stated that the royalty amount has already been withheld. No response was given by the Department regarding reduction/non deduction of royalty by PHED. However, The EEs of PHED replied that royalty shall be deducted from final bill.

The reply is not acceptable as the amount withheld on account of royalty should have been deposited with the Mining Department. Further, development in case of other EEs is awaited (July 2025).

3.7.8 Loss to the Government on account of hard rock

General Note 7 of the SOR stipulates that hard rock available from excavation shall be used for conversion into coarse aggregates or for other construction material and shall be issued to the contractor on the rate as decided by the competent authority. Further, as per Para 4.6 of the agreement, rubble available from excavation of hard rock, shall be the property of the contractor, for which recovery of ₹ 65 per Cu.M. of the quantity of hard rock excavated shall be made from the Running Account Bills.

Audit noticed in the estimates of the MVSs of Sagad-Hinotiya, Bansujara (Badamalhera), Bansujara (Tikamgarh) and Payli that 5,05,287 Cu. M. of hard rock was to be excavated for execution of different components of the scheme. But the hard rock was not accounted for in the records and issued to the contractor nor any amount recovered from the RA Bills of the contractor. The cost of the estimated hard rock which should have been recovered from the contractor amounted to ₹ 3.28 crore as detailed in [Appendix 18](#).

During exit conference, the MD Jal Nigam while accepting the facts stated that the recovery process had been initiated.

Further progress in this regard is awaited (July 2025).

3.8 Deficiencies in Fund Management

3.8.1 Operation of Single Nodal Account by SWSM

Para 7.9 of JJM Guidelines establishes a structured fund flow mechanism through Single Nodal Account (SNA). As per the process flow of JJM fund transfer:

- GoI releases central share to state treasury.
- State Government transfers funds to SWSM in the SNA account (PFMS linked bank account) within 15 days with matching state share.
- SWSM then allocates funds among districts within two weeks based on approved District Action Plans (DAP).

- DWSM implements works through designated agencies as per the DAPs and fund available at the district level, through *Gram Panchayat* and/or its sub-committee, *i.e.* VWSC/ Paani Samiti/ User Group or PHED, as the case may be. Subject to due satisfaction of quality and quantity of work performed, the DWSM/ SWSM will arrange to make the payments to the concerned agency.

The following were noticed in operation of the SNAs:

- Against the above provision, the SWSM wrongly issued financial limits directly to the concerned Executive Engineer of the division, bypassing the DWSM. As a result, financial planning and monitoring by DWSMs were sidelined, with divisions handling all financial management in the schemes. This nullified the scope of financial planning and monitoring by the DWSMs and left the whole financial management to the Divisions.
- The expenditure for each head *i.e.*, coverage³⁷, support and WQM&S was finally booked by the Divisions, and total expenditure was booked in the ratio of 50:50 to central and state share, instead of the applicable share of central, state and community contributions.
- The limit for withdrawal of JJM funds from SNA within a stipulated time was fixed by the E-in-C. The Jal Nigam in violation of E-in-C's instructions, withdrew the entire allocated amount (₹ 2,410.37 crore) from the SNA in lumpsum, parked the money in a separate savings account and made direct vendor payments, undermining financial discipline and transparency in scheme execution. Up to June 2022, all JJM related payments amounting to ₹ 2,394.72 crore have been made from that account, without using PFMS. This contravened the provisions of the guideline, obscuring transparency and oversight on payments.
- As per Rule 230(8) of GFR, 2017, the SNA of each Centrally Sponsored Scheme (CSS) shall ensure that the interest earned from the funds released should mandatorily be remitted to the Consolidated Fund of India (CFI). It was seen that interest for the fiscal years 2020-21 and 2021-22 was deposited in the subsequent fiscal years. Further, an excess interest amount of ₹ 10.47 crore was deposited in the year 2022-23 (₹ 23.31 crore instead of ₹ 12.84 crore), indicating that funds deposited in the SNA were not accurately reflected in the books of account. However, in the absence of bank reconciliations, reasons for excess payment or the accuracy of the calculations could not be ascertained by Audit.
- Even post PFMS implementation (July 2022 onwards), Jal Nigam continued to transfer security deposits (five *per cent* deduction from running bills as per agreement clause) to a separate savings account with MOD³⁸ facility, operating completely outside the PFMS framework contrary to the JJM Guidelines. Parking of funds outside PFMS defeated the entire purpose of mandating PFMS compliance for centrally sponsored schemes.

³⁷ Percentage of households provided with FHTCs at any point in time in a revenue village.

³⁸ MOD (Multi-Option Deposit) facility is an auto-sweep facility that links your savings or current account to a fixed deposit (Term Deposit), allowing you to earn higher interest on your surplus funds while maintaining easy access to them for immediate needs

- Review of the fund utilization by the Nigam from 2020-21 to 2023-24 indicated that the Nigam did not utilize the scheme funds efficiently, resulting in unutilized funds of ₹ 413.53 crore, ₹ 103.95 crore, ₹ 47.01 crore, and ₹ 142.67 crore at the end of 2020-21, 2021-22, 2022-23, and 2023-24, respectively. Thus, due to improper assessment of fund requirements and inadequate utilization of received funds resulted in idling of financial resources of the GoI/GoMP which too has a bearing on delays in JJM implementation in the State.

While PHED did not offer comments, MD, Jal Nigam stated that the payment system has since been rectified and now the entire amount spent from PFMS. The Department also stated that according to Ministry of Finance GoI, parking of funds outside from PFMS was allowed, especially for deduction of security deposit from the contractors.

The reply was silent on non-reconciliation of the books of accounts to correct discrepancies in the accounts, if any. Further, copy of MoF order allowing parking of funds outside PFMS was not provided to Audit, despite requests.

3.8.2 Proportionate capital cost not shared by the communities

Para 6.1.2 of JJM Guidelines provides that for in-village piped water supply infrastructure and related source development to be implemented by Gram panchayat and/ or its sub-committee, communities will contribute five *per cent* of the capital cost in cash and/ or kind and/ or labour in hilly and forested areas, NE and Himalayan states and villages having more than 50 *per cent* SCs and/or STs population; and 10 *per cent* of the capital cost in other villages.

Audit noticed that there was a deficiency in provisioning of community contribution in the guidelines. As community contribution could also have been given in the form of labour, but all the work was being done on contract basis where the labour is engaged by the contractor and is also paid by him. Thus, if a beneficiary wishes to contribute community contribution in the form of labour, the guidelines do not explain how he should contribute. Audit analysed community contribution collection from the beneficiaries as discussed below:

- The Audit observed in PHED that GPs/VWSCs/PHED had collected only ₹ 27 lakh against the recoverable amount of ₹ 241.74 crore towards community contribution (CC) in 4,570 villages covered in the selected eight districts, as detailed in [Appendix 19](#). Hence, the State Government will have to bear the additional cost of ₹ 241.47 crore due to inefficient community contribution planning and execution.
- Audit noticed in the eight selected districts that an expenditure of ₹1,767 crore (50 *per cent* from the central share and 50 *per cent* from the state share) was incurred on coverage, support and WQMS during the period from 2019-20 to 2023-24. In the above expenditure, ten *per cent* to be obtained from community contribution and 90 *per cent* was to be divided between central and state share. On the contrary, total expenditure was divided between central and state. This was in contravention of the prescribed norms³⁹ and had placed extra

³⁹ As per E-in-C's letter (May 2023), the expenditure of the JJM schemes should not be booked more the ratio fixed as 45:45:10 (central share: state share: community contribution).

burden of ₹ 89.52 crore and ₹ 87.18 crore on Central Government and State Government, as detailed in [Appendix 20](#).

- ❖ In Jal Nigam, the cost of in-village pipe water supply infrastructure of the Sagad Hinotiya, Bansujara (Badamalhera), Bansujara (Tikamgarh) and Payli MVS was ₹ 459.54 crore. Therefore, in accordance with the guidelines, community contribution of ₹ 45.95 crore (10 *per cent* of in-village infrastructure) should have been collected from the benefited villages as detailed in [Appendix 21](#). Against it, no community contribution was collected by the Jal Nigam.

During exit conference, the Principal Secretary while acknowledging the facts informed that the issue has already been considered and the GoMP approached to GoI for the guidance on the non-receiving of community contribution and consequently extra burden on State Government.

Further progress in this regard is awaited in audit (July 2025).

3.8.3 Inadmissible Expenditure

As per JJM operational guidelines Para 7.10 read with Annexure-IV, GoI has categorized some items, such as centage charges, cost escalation, purchase of land & vehicles and construction of residential buildings, payment of salary to permanent employees, expenditure beyond estimated/ approved cost of the schemes, *etc.* as inadmissible expenses.

Audit observed deviation from JJM guidelines resulting in several instances of inadmissible expenditure as discussed below:

Expenditure on 'Vikas Yatra'

JJM funds were transferred (Feb 2022) by eight divisions⁴⁰ under support activities to District Administration for the purpose of 'Vikas Yatra' in rural area and urban ward of State. Incidentally, audit noticed that the E-in-C directed to all districts for transfer of total amount of ₹ 22.00 crore to 52 districts for this purpose.

₹ 3.50 crore

Expenditure on salaries

Eight divisions diverted JJM funds towards payment of salary of District Coordinator/Block coordinator/Chemist/Lab Assistant between March 2022 to October 2022 who were employed by the department prior the initiation of scheme.

₹ 1.07 crore

Expenditure on tents, religious activities

The PHED, Gwalior transferred (October 2022) JJM funds to Zila Panchayat, Gwalior for Bhoomi Pujan, exhibition of JJM works, and also incurred expenditure towards hotel stays, conference, tent arrangements *etc.*, all of which was inadmissible.

₹ 0.48 crore

Expenditure without SWSM approval

Payment for execution of work of two PWSS⁴¹ was made by Tikamgarh PHED division from JJM fund without approval from the SWSM.

₹ 2.53 crore

⁴⁰ Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

⁴¹ ₹ 127.28 lakh for Deoraha PWSS and ₹ 126.03 lakh for Hira Nagar PWSS

Construction of Staff quarters

Jal Nigam included the work of construction of Staff quarters and office buildings in the agreements of Bansujara (Tikamgarh), Madia and Rajghat MVs which was not in accordance with the JJM guidelines.

₹ 4.53 crore⁴²

Total

₹ 12.11 crore

During Exit Conference while accepting the facts, the Principal Secretary directed the E-in-C to furnish reply to Audit. Further progress in this regard is awaited (July 2025).

In their reply, Jal Nigam stated (October 2024) that the expenses of office building and staff quarters were essential for the successful operations of critical components associated with the water supply infrastructure such as Intake, Water Treatment Plant (WTP), etc., as these structures are in remote areas.

The reply is not acceptable because construction of office building and staff quarters was not within the scope of JJM, and these funds should have been arranged for by the State.

3.8.4 Variation in component-wise expenditure

Para 7.3 of JJM Guidelines provides that up to five *per cent* and two *per cent* of allocated fund to a State/UT will be utilized for support activities⁴³ and Water Quality Monitoring & Surveillance (WQM&S) activities, respectively. Balance (93 *per cent*) will be utilized in 'coverage' to provide FHTCs to rural households.

Audit noticed that the Department (PHED and Jal Nigam) did not plan expenditure on coverage, support activities, and WQM&S activities in consonance with the prescribed limits as discussed below:

	In six Districts ⁴⁴ , expenditure on support activities was ₹ 14.12 crore (0.98 <i>per cent</i>) against the mandated amount of ₹ 71.78 crore, expenditure on WQM&S activities was ₹ 12.15 crore (0.85 <i>per cent</i>) against mandated amount of ₹ 28.71 crore, while the remaining support and WQ&MS activities funds were utilised on 'coverage' ⁴⁵ (Appendix 22).
PHED:	In Chhatarpur, PHED incurred excess expenditure of ₹ 2.50 crore on support activities and WQM&S activities against the prescribed norms by diversion of the fund of 'coverage' (Appendix 22). In Dindori, the Department incurred excess expenditure of ₹ 9.15 crore on 'coverage' and ₹ 2.66 crore on WQM&S activities against the prescribed norms by diversion of fund of 'support activities' (Appendix 22).
Jal Nigam:	Expenditure on support and WQM&S activities was ₹ 61.54 crore (0.46 <i>per cent</i>) and 'nil', instead of ₹ 675.40 crore (five <i>per cent</i>) and ₹ 270.16 crore (two <i>per cent</i>) respectively, despite huge gaps in implementation of JJM during 2019-20 to 2023-24. Nigam diverted the funds under these activities to 'coverage' (99.97 <i>per cent</i>) as against 93 <i>per cent</i> (Appendix 22).

42 Bansujara Tikamgarh, Madia, Rajghat (Cost of staff quarters ₹ 1.66 crore + ₹ 0.72 crore + ₹ 2.15 crore = ₹ 4.53 crore) and (Payment ₹ 0.06 crore + ₹ 0.12 crore + ₹ 0.00 crore = ₹ 0.18 crore)

43 Support activities include Information, Education and communication, HRD & training, public utility, leadership development and change management, skill development, etc.

44 Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

45 Coverage: Funds given for infrastructure component under FHTCs.

The limited expenditure on support activities and water quality monitoring reveals systemic gaps in the engagement of ISAs and TPIs, whose insufficient numbers have undermined essential functions (*issues pertaining to ISAs separately discussed in Para 3.11*).

Furthermore, the failure to establish adequately equipped water testing laboratories, coupled with a shortage of trained laboratory personnel and the absence of National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation for critical water quality parameters, has severely hampered the ability to conduct and monitor necessary water quality tests. This has compromised the safety and reliability of water supply systems, potentially exposing communities to health risks and undermining trust in water management initiatives. Additionally, the lack of investment in public awareness campaigns for regular maintenance for water quality and infrastructure exacerbates these issues, further limiting the effectiveness of water quality assurance and sustainable asset management.

During exit conference while accepting the facts, the MD Jal Nigam acknowledged that component-wise expenditure could not be meticulously maintained.

The reply is silent on the fact that due to delay or appoint of lesser number of ISA and TPI, not only the involvement of villagers in the scheme was not there but also the quality and quantity of work cannot be assured.

3.9 Avoidable expenditure on Supervision and Quality Control

The objective for deploying the Consultant is to engage qualified & experienced Supervision & Quality Control (SQC) personnel for day-to-day monitoring of the execution of multi village water supply scheme to ensure that high-quality construction is achieved and ensure that all works are carried out in full compliance with engineering design, technical specifications, and other contract documents within the stipulated period.

In this regard, audit noticed that due to non-completion of the schemes within the scheduled time, Nigam has paid avoidable expenditure amounting to ₹ 9.38 crore to SQC for the extended period from scheduled completion of three schemes, which could have been avoided. The Sagad Hinotiya, and Bansujara (Badamalhera) MVS were completed with a delay of 1,971 days & 1,901 days respectively and Payli, MVS was delayed 1,155 days from the date of their scheduled completion.

Audit also observed that for the execution of the scheme to ensure that high-quality construction, the contract of SQC has also been extended simultaneously till the completion of the scheme and an amount of ₹ 9.38 crore could not be recovered from the contractor due to clause of the agreement being silent about this matter. Moreover, many beneficiaries also who are located under these schemes, not getting the water which failed the ultimate objective of the GoMP of supply safe and adequate drinking water to each household of the villages covered under these Scheme.

The MD Jal Nigam replied (October 2024) that LD will be imposed after finalization of delay analysis before processing of final bill of execution part. Penalization as per provision of contract agreement will be done on the delay attributable to the contractor.

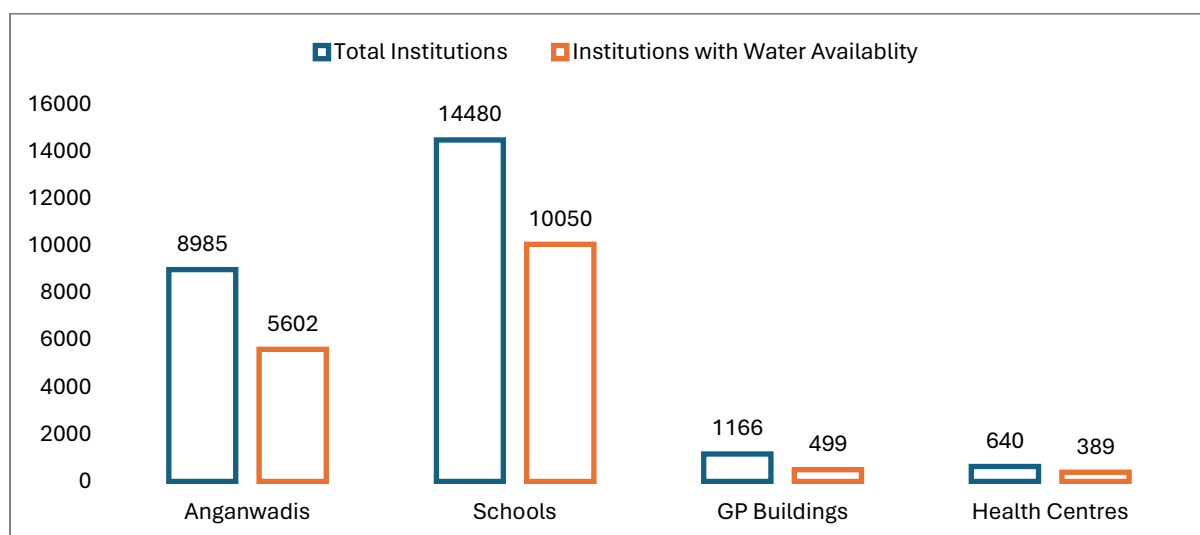
The reply is not acceptable because two works have been completed but the delay analysis was not done, and LD of only ₹ 8.46 crore was withheld by the Nigam against ₹ 95.92 crore despite the delay being attributable to the contractors.

3.10 Water Supply to Public Institutions through 100 Days Campaign

A special campaign was launched by the GoI (2 October 2020) to cover all Public Institutions of every village within the next 100 days through piped water supply. The timeline was later extended to 31 March 2021. As directed by the GoI, the State Government was to ensure completion of the targets in a campaign mode along with ensuring water supply to toilets and to conduct water quality testing in schools and anganwadi centres.

The status of achievement of providing tap connection to village public institution in eight selected districts are as shown in **Chart 9** below:

Chart 9: Status of availability of tap connection in Public Institutions



(Source: e-Jal Shakti Portal)

Audit noticed in the selected eight districts that the Department could not provide tap water supply to 4,430 Schools, 3,383 Anganwadi Centres, 667 Gram Panchayat Bhawan and 251 health centres (December 2024) despite extension of deadline by eight months due to non-prioritisation. The district-wise achievements are detailed in [Appendix 23](#).

Audit observed that as the campaign was to be conducted separately, the Department provided tap water connections to Schools and Anganwadis using existing pipelines, existing tubewells with single-phase motor pumps, or newly drilled tubewells with single-phase motor pumps. However, poor planning caused significant delays in commencing of 4,173 water supply schemes across eight districts of selected blocks, with delays ranging from 103 to 402 days ([Appendix 24](#)) preventing the mission from being completed within the targeted 100 days.

During Joint Physical Inspections with the departmental staff indicate potential deficiencies at the 16 Anganwadi and 15 Schools (absence of school in Kuneta village of Tikamgarh District) in selected four villages each of the four⁴⁶ districts as follows:

100 Days Campaign Requirements	Audit observations during field visit
Provide tap water connection to all schools, anganwadi centres, and other public institutions.	In eight schools and six Anganwadi, the absence or non-functional tap connections for water supply raises concerns about the accessibility of water for drinking and other essential needs.
Water testing and surveillance activities to ensure safe water in schools and anganwadi centres.	The absence of water quality testing neither by the FTK method nor sample forwarded to PHED by 14 Schools and 15 Anganwadi's indicate a lack of monitoring to ensure the safety and potability of the water supply.
Water supply to toilets built in schools and anganwadi centres.	In two schools, the lack of separate toilet facilities and non-availability of toilet facilities in eight Anganwadi is a significant concern, potentially impacting hygiene, privacy, and the overall well-being of students and staff. The unavailability or non-functional of tap connections within the toilet in 11 schools and 13 Anganwadi further exacerbates hygiene issues and hinders proper sanitation practices.
Separate tap connections for handwashing in schools and anganwadi centres.	The absence or non-functional state of separate tap connections for handwashing in ten schools and 13 Anganwadi severely compromises the ability to practice basic hand hygiene, increasing the risk of infection transmission.
Ensure functional overhead tanks for consistent water supply.	The absence or non-functional state of an overhead tank in seven schools and 11 Anganwadi may lead to inconsistent or unreliable water supply within the premises. Out of eight functional overhead tanks (OHTs) in schools, two have not been cleaned periodically.

These issues indicate that the campaign goals for providing potable piped water in schools and Anganwadis are not being met, which was crucial for the health, safety, and well-being of the users and objective of the mission.

During exit conference, the Principal Secretary, PHED while accepting the facts, directed E-in-C to examine the matter.

No further replies have been received (July 2025).

3.11 Deficiencies in support activities of Implementation Supporting Agency (ISA)

Implementation Support Agencies (ISAs) are required for proper implementation of Jal Jeevan Mission. The functions of ISAs have been enumerated in Para 5.5 of JJM guidelines. Under support activity in JJM, the ISAs will perform activities.

Release of payment to ISAs of the scheme were to be made as per the payment schedule mentioned in the agreement. Detail is as given below:

⁴⁶ Gwalior, Narmadapuram, Narsinghpur and Tikamgarh

Table 16: Payment Schedule for activity linked phases

Sl. No.	Phase	Activities	Payment structure
1	Pre-planning (2 months)	Office setup, firming of baseline data for FHTCs, Conducting Jan Sabha, facilitate constitution of VWSC/drinking water user group, Community mobilization, etc.	20 <i>per cent</i> of agreement cost
2	Planning (3 months)	Conducting of Gram Sabha meetings, Opening of Saving Account, VAP preparation, Community mobilization activities for participation in decision making, willingness for FHTCs, Community contribution etc.	20 <i>per cent</i> of total agreement cost
3	Implementation (7 months)	Trainings conducted for Gram Panchayat and VWSC functionaries on Rainwater Harvesting, Source Strengthening and Grey water Management, etc., Geo-tagging existing and new assets, community mobilization activities for water quality, rainwater harvesting etc.	30 <i>per cent</i> of total agreement cost
4	O&M	Training conducted for Gram Panchayat and VWSC functionaries on Operation & maintenance, Support for updating account registers etc.	30 <i>per cent</i> of total agreement cost

The Department allotted the work of Awareness Generation, Capacity Building and Community Mobilization to 26 ISAs in eight districts (SVS) and Jal Nigam engaged eight ISAs for the MVSs of Payli, Bansujara (Badamalhera), Bansujara (Tikamgarh) and Sagad Hinotiya. Issues pertaining to the ISAs are discussed below:

3.11.1 Delay/Non-engagement of ISAs for all the schemes

As per JJM guidelines, ISA shall be employed for each village, right from initiation of scheme, for baseline survey, VAP, VWSC, IEC and Behaviour Change Communication (BCC) activities *etc.*

Audit noticed in eight districts that 4,570 schemes of SVSs were approved by the SWSM, out of which 1,993 schemes were completed and remaining 2,577 schemes were in progress, but ISA were engaged for 3,910 villages only. Thus, support activities were not conducted in 660 villages.

Further, the State Level Scheme Sanctioning Committee (SLSSC) had approved in village infrastructures for the Payli MVS in November 2020. However, for awareness of villages, Nigam awarded contracts to five ISAs for 662 villages of this MVS in September and October 2022 *i.e.*, with the delay of 22-23 months from the date of approval. Therefore, the objective of appointment of ISAs for awareness generation, capacity building and community mobilisation could not be fulfilled.

It is evident that the GoMP did not carry out its designated responsibilities during the pre-planning, planning, and implementation phases, as stipulated in the JJM guidelines. This lapse undermines the very purpose of appointing an ISA, which is to provide essential support to the implementing agency and ensure effective execution of the mission.

3.11.2 Payment to the ISAs for activities not performed

As per payment schedule in the agreement, payments of the work shall be made in phases, at prescribed percentage of cost of the work, only after completion of the assigned activities.

Audit noticed in eight districts⁴⁷ that the 26 ISAs of SVSs (PHED) did not perform the activities as described in Paragraph 3.11. The PHED, however, made regular payments to the ISAs (total amount ₹ 7.42 crore up to October 2024).

Audit also noticed that despite non-execution of assigned activities in phase wise manner, payment ranging between 50 *per cent* to 107 *per cent* was released to 13 ISAs of eight Districts without completion of activities as per agreements. ISAs did not complete several of the activities linked to the payment schedule *i.e.*, community contribution collection, creating awareness on source sustainability, grey water management, water quality, water borne diseases, *etc.* Thus, release of payment without execution of works in terms of agreements resulted in irregular excess payment of ₹ 3.76 crore to ISAs, as detailed in Appendix 25.

Audit also noticed that the ISAs of four MVSs (Jal Nigam) did not perform the activities mentioned in the scope of work such as non-compilation of VAPs and submission to DWSMs for approval, geo tagging of existing and created assets, Aadhar linking of all FHTCs, holding monthly meetings of VWSCs to mobilize community engagement in construction of in village infrastructure *i.e.*, grey water reuse, water conservation measures for water quality/quantity *etc.*, and act as a co-ordination platform between DWSM and VWSC/Gram Panchayat/*Pani Samiti*.

During JPI, it was seen that the ISA did not visit 15 out of 32 surveyed villages. Beneficiary survey corroborated this as well.

It is evident from the above that the ISAs did not fulfil their responsibilities as outlined in the JJM guidelines. Consequently, the intended purpose of appointing ISAs to support the implementing agencies could not be achieved.

Audit also noticed that physical progress of Bansujara (Tikamgarh) MVS was almost 50 *per cent* but the ISA had not completed the work of village wise baseline survey (to be completed in three months), 100 *per cent* of VWSC bank account opening (to be completed in nine months), 100 *per cent* of conflict resolution during execution of the scheme (to be completed in six months), *etc.* The Nigam did not take any action against the ISA *viz.*, termination of contract and appointment of another agency and thus the purpose of appointing ISA to support the implementing agency was defeated.

3.11.3 Wasteful expenditure on preparation of VAP by ISAs

As per the Generic structure of the DPR of JJM Guidelines, the work is to be carried out according to the DPR prepared after conducting a baseline survey, community contribution, beneficiary willingness, *Gram Sabha* resolution, and approvals for the VAP and DAP. The execution of the above activities will be managed through ISAs.

47 Chhatarpur, Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha.

Audit noticed in all the selected district that works of 47 test checked out of 144 SVSs of eight districts were awarded and executed without this basic requirement of preparation of VAP but on the basis of departmental data and all the requirements of preparation of VAP were done post the award of contracts, thereby reducing them to a mere formality. Impact of this deficiency in execution was noticed during beneficiary surveys by Audit wherein availability of ground water was not ensured in seven out of 32 surveyed villages. This resulted in wasteful expenditure of ₹ 18.46 lakh to ISAs in these surveyed villages, as detailed in [Appendix 4](#).

Creating VAPs as a paper formality instead of ground based primary source documentation to augment planning, not only rendered them ineffective but also thus resulted in wasteful expenditure on preparation of the VAPs by the GoMP.

In the Exit conference, the Engineer-in-Chief PHED acknowledged that some lapses occurred due to the department's primary focus on implementing water supply in a mission-mode. However, he further stated that issues would be rectified now.

Further progress in this regard is awaited in audit.

3.12 Third Party Inspections

As per JJM Guidelines, SWSM is to empanel agencies for Third Party Inspections (TPI)', to check the quality of work executed by the agencies, quality of materials used for construction and quality of machinery installed in each of the schemes. For this purpose, joint site inspection with Gram Panchayat representative and PHED officials is mandatory during execution before release of payments. The TPI Agency should immediately be appointed to ensure the quality of work executed by the contractors.

Audit observed that:

-  In SVSs, no joint site inspections were conducted by the TPI agencies with Gram Panchayats before recording measurements. Consequently, payments were made to contractors without Gram Panchayat's acknowledgment, likely compromising the quality and quantity assurance of executed work. Similarly, in Jal Nigam, Gram Panchayats and VWSCs were excluded from supervision, third-party inspections, corrective measures, and action-taken reports, undermining the authenticity and quality of verification.
-  In PHED Tikamgarh, payment of ₹ 30.45 lakh was made to the TPI Agency even though work was executed and payment made to contractors before appointment of TPI Agency. Further, the Agency also received an inadmissible payment of ₹ 14.15 lakh for GST not permitted under NIT conditions. In seven districts⁴⁸, payments of ₹ 15.94 lakh were passed to the TPI agencies without detailed inspections. Consequently, payment of ₹ 38.58 crore was made to contractors for unverified work ([Appendix 26](#)). Similarly, in Jal Nigam, TPI agencies were appointed with delays (22-26 months) in case of three

48 Chhatarpur, Dindori, Jhabua, Narmadapuram, Narsinghpur Tikamgarh and Vidisha.

MVSs⁴⁹. Consequently, payment of ₹ 169.13 crore was made to contractors for unverified work which was executed before the appointment of TPI Agencies.

- ⚡ In Jal Nigam, TPI Agencies did not submit action-taken reports on restoration work for anomalies/deficiencies.
- ⚡ In the Bansujara MVS, five Field Quality Control Engineers of TPI Agency were appointed with delays ranging between 259 and 701 days. Due to the delay in appointment of key personnel, Audit was unable to derive assurance that inspections were carried out by the Agency with intended competence.

During Exit Conference, the Engineer-in-Chief acknowledged that some gaps had arisen due to Department's focus on executing the scheme on mission-mode. However, he assured that deficiencies would be rectified.

Further progress in this regard is awaited in audit (July 2025).

3.13 Conclusion

Audit identified systemic deficiencies in infrastructure creation, contract management, and fund utilization. Execution was sluggish, with only 27 *per cent* of Multi-Village Schemes and 58 *per cent* of Single-Village Schemes completed as of September 2024. Delayed award of works, unrealistic assessments, and non-utilization of funds annually, resulted in non-release of central grants and shortfall in allocation of state share.

Estimations were flawed, causing cost escalations in SVSs, avoidable expenditures, inflated tenders, unwarranted executions/estimations, and richer specifications. Non-issuance of physical/final completion certificates in SVSs indicated premature handover, corroborated by JPIs which indicated with seven of 28 inspected sites as non-functional. Liquidated damages were not recovered from contractors.

JJM funds were parked outside PFMS, and idle balances were maintained in accounts. Community contributions were negligible, burdening both Centre and State with additional costs. JJM funds were diverted on inadmissible activities reflecting lack of management oversight. Both ISAs and TPI Agencies were belatedly appointed and did not perform as per their expected deliverables, rendering the expenditure infructuous, while compromising on Missions' objectives such as water quality monitoring, community engagement, redundant VAPs and unverified executions.

The 100-Days Campaign for public institutions suffered from partial coverage and delays leaving schools/Anganwadis underserved.

49 Payli, Sagad Hinotiya and Bansujara (Badamalhera).

3.14 Chapter Recommendations

It is recommended that the GoMP may:

1. enforce timely ISA deployment and PFMS compliance for phased fund releases, with strict monitoring of cost escalations and inadmissible expenditure.
2. closely monitor project delays and recover inadmissible payments.
3. fix responsibility on the concerned officials of PHED and Jal Nigam for acts of omission and commission reflecting in the deficiencies pointed out by Audit.

The above recommendations have been suitably condensed in the concluding chapter.

Chapter-IV

Monitoring & Outcome



Overhead Tank



Standpost



CHAPTER IV: MONITORING & OUTCOME

JJM aimed to provide dedicated water supply to every rural household in India with a focus on sustainable water supply. Sustainability in JJM is critical to ensure long-term access to potable water and ensure success of the scheme.

In this Chapter, Audit assessed the performance of the PHED (and Jal Nigam) insofar as monitoring was concerned. We also evaluated JJM's intended outcome vis-à-vis on ground situation to determine scheme sustainability and its long-term viability. The findings are discussed in the succeeding paragraphs.

4.1 Monitoring

4.1.1 Dashboard misreporting

4.1.1.1 Incorrect reporting of FHTC without water supply

Para 11.1.2 of JJM guidelines stipulated that a real-time dashboard would capture all the essential monitoring parameters *i.e.*, the number of FHTCs provided so far, the number of FHTCs remaining to be provided, the number of functional and, non-functional tap connections. This data would be available in the public domain.

In test-checked 187 schemes in seven districts⁵⁰, wherein water supply had not commenced, or scheme had not been completed, *E-Jal shakti* portal displayed FHTCs provided to the households of the concerned villages. It was also noticed from the portal that 11,94,063 private/own source tap connections were also included in 75,31,890 JJM FHTCs (J-6 of JJM portal)⁵¹ in the progress of JJM even though they were not the actual beneficiaries of JJM tap connections.

This indicates that the Department provided incorrect data pertaining to FHTCs, thereby putting the credibility and integrity of the entire portal data at risk. Details are in [Appendix 27](#).

In the exit conference, the Principal Secretary stated that the matter will be investigated.

Further reply is awaited (July 2025).

4.1.1.2 Wide variation between planned and actual execution of FHTCs

Significant variations were noticed in planned and actual execution of FHTCs in test-checked 28 SVS schemes of eight selected districts ([Appendix 28](#)) as shown below:

FHTCs provisioned in VAPs	: 7,379
FHTCs in DPRs	: 6,512
FHTCs executed	: 5,778
FHTCs as per dashboard	: 7,142

50 Chhatarpur 62 scheme, Dindori 06 scheme, Gwalior 23 scheme, Jhabua 02 scheme, Narsinghpur 03 scheme, Tikamgarh 81 scheme and Vidisha 10 scheme.

51 J6 Form- It serves as a monitoring tool to track the progress of beneficiary tagging and verification for households receiving Functional Household Tap Connections (FHTCs) under JJM, ensuring accountability in providing safe drinking water to rural households.

Inaccurate data hinders progress tracking, identifying bottlenecks, and holding accountable parties responsible. This may lead to poor planning of water supply systems, resulting in undersized or oversized infrastructure that affects long-term sustainability, causing operational issues and service disruptions.

In the exit conference, the Principal Secretary stated that the matter will be investigated.

4.1.2 Adoption of Technological Interventions and Innovations

GoI suggested innovative technological interventions to be utilized during planning, implementation as well as monitoring of JJM, keeping in view that rural water supply sector faces several challenges in terms of terrain, availability of sufficient quality water and a host of other miscellaneous reasons.

Audit noticed the suggested interventions were not adopted in any of the eight districts as detailed below:

Table 17: Status of technological intervention and its uses

Sl. No.	Technological Interventions	Uses of Intervention	Status of adoption	
			PHED (SVS)	Jal Nigam (MVS)
1	Internet of Things (IoT)	Monitor the functionality of assets created under JJM	Not adopted.	Not adopted.
2	District Metering Area (DMA) with Supervisory Control and Data Access (SCADA) system	Monitoring treatment plants	Not Applicable.	SCADA installed. But working at Water Treatment Plant only, not connected with OHT.

(Source: Information provided by PHED and Jal Nigam)

The adoption of IoT could have ensured the monitoring of the functionality of the infrastructure including the level of storage in the OHTs. Due to non-adoption of IoT, non-functional SVSs in seven villages (seen during JPI) could not be monitored by the Department.

During exit conference, the Principal Secretary, PHED stated that the SCADA system is already operational in MVS. In case of SVS, no reply was offered by the PHED authorities. It was countered by the audit team that though SCADA system was installed, it was functioning only in the water treatment plant and was not connected to the OHT. No further reply was given by the PS PHED.

4.2 Water Quality Monitoring

JJM provides a Drinking Water Quality Monitoring & Surveillance (DWQM&S) Framework to provide a strategy for all stakeholders to ensure the supply of potable tap water to every household and village institution. The framework refers to a comprehensive mechanism for monitoring the quality of drinking water through regular testing, surveillance to detect contamination and prevent waterborne diseases with objective of ensuring safe drinking water at all times, empowering village-level functionaries to conduct testing using Field Test Kits (FTKs).

Para 5.1.2.2 of DWQM&S Framework recommends for separation between Water Supply Service Delivery and Water Quality Testing Services for which a Drinking Water Quality Commissionerate (DWQC) was to be formed. As per JJM guidelines, up to two *per cent* of funds can be used for DWQM&S.

Audit observed that:

- The Department had not established the DWQC.
- The GoMP spent only 0.38 *per cent* on DWQM&S, diverting the rest 1.62 *per cent* for construction activities under JJM. This led to the evaluation of an insufficient number of parameters, and the lack of accreditation from NABL for the necessary parameters compromising safe drinking water.

Deficiencies noticed water quality monitoring are discussed in succeeding paragraphs.

4.2.1 Inadequate Water Quality Monitoring Infrastructure

As per Para 5.1.4 of DWQM&S Framework, sub-division/block-level labs are designated core agencies to test 100 *per cent* of local water sources, once yearly for chemical⁵² and twice (pre- and post-monsoon) for bacteriological⁵³ parameters. Madhya Pradesh has 155 water testing labs (One State level in Bhopal, 51 district level, and 103 sub-division level labs).

Status of functioning laboratories in the eight test checked districts are as follows:

Table 18: Status of functioning laboratories

Sl. No	District	No. of district labs	No. of sub-divisions	No. of sub-divisional labs	No. of labs at WTP*
1	Chhatarpur	1	4	3	1
2	Dindori	1	3	2	-
3	Gwalior	1	2	1	-
4	Jhabua	1	3	1	-
5	Narmadapuram	1	4	3	-
6	Narsinghpur	1	3	2	-
7	Tikamgarh	1	2	1	-
8	Vidisha	1	4	2	1
Total		8	25	15	2

*Laboratory established at WTPs of Sagad Hinotiya (Vidisha) & Bansujara Badamalhera (Chhatarpur) MVS

Audit observed that in the eight selected districts, 25 labs (23 departmental and two laboratories⁵⁴ established for MVS) were responsible for monitoring 25 sub-divisions, with each lab covering two to three blocks. Two sub-divisional laboratories in each of Vidisha and Jhabua districts were not established. Further, district labs were also functioning as sub-division labs, preventing them from fulfilling their supervisory role over sub-division labs.

This indicates that water testing infrastructure fell short of the DWQM&S requirements. Overlapping lab roles and limited capacity weaken oversight, risking unsafe water and loss of public trust.

During the exit conference, the Principal Secretary stated that District and Sub-divisional laboratories were already distinct. However, he agreed that sub-divisional laboratories located at district headquarters function as both *i.e.*, sub-divisional lab as well as District lab.

⁵² It determines concentrations of chemical substances which may affect the quality of water

⁵³ This examination indicates the presence of bacteria characteristic of pollution and hence the safety of water for consumption.

⁵⁴ Sagad-Hinotiya Mali MVS in Vidisha District and for Bansujara Badamalhera MVS in Chhatarpur District

The reply corroborates shortage of proper labs, which should be set up for real-time testing of water samples.

4.2.2 Non-accreditation of All Required Parameters

The DWQM&S Framework requires all laboratories to be accredited/ recognised by NABL. Audit reviewed NABL Accreditation status of the labs and found that the Madhya Pradesh State Lab was accredited for 11 out of 17 parameters required under the DWQM&S framework, while district level labs were missing accreditation for 8 to 14 water testing parameters (details in [Appendix 29](#)). WTP labs had no accreditation and none of the labs were accredited for testing biological contaminants like total coliform and E. Coli, which are the key indicators of waterborne diseases. Additionally, NABL accreditation had expired in four districts⁵⁵ labs for 13 to 18 months, with no renewal action taken.

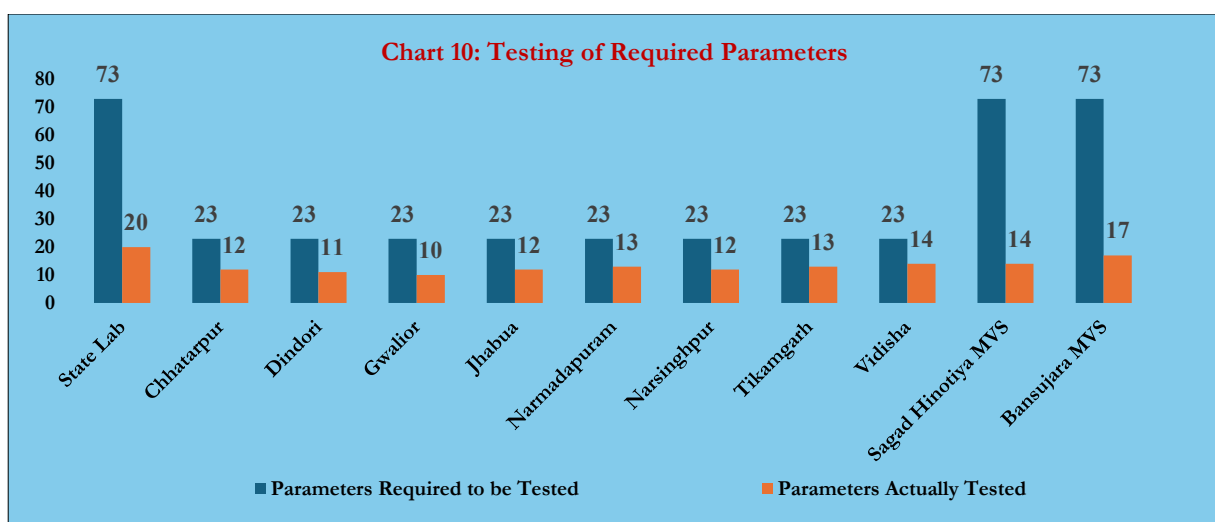
Absence of NABL accreditation of water quality testing parameters can lead to unreliable results, impacting public health and environmental monitoring, potentially leading to the misdiagnosis of contamination and the implementation of ineffective solutions.

During Exit Conference, the Principal Secretary, PHED stated that all parameters have been accredited by NABL.

The reply is not acceptable as the parameters specified in the DWQM&S framework have not been fully accredited while in some districts, the validity of the accreditation had already lapsed.

4.2.3 Testing of Inadequate number of Parameters

As per the DWQM&S Framework (Paras 5.1.2.1, 5.1.3.1, and 5.1.2.2 (iv)), SWSM and DWSM are responsible for water quality monitoring and ensuring labs test key parameters. However, scrutiny indicated that State/District labs and WTP labs for MVs were not testing all the required parameters, as shown in **Chart 10**:



⁵⁵ Jhabua (24.03.2023), Narmadapuram (25.03.2023), Narsinghpur (02.05.2023) and Tikamgarh (10.08.2023).

As per the DWQM&S framework and IS 10500:2012, 73 water quality parameters should be tested. However, the State lab tested only 20, and two⁵⁶ laboratories at WTPs were conducting tests on only 14 to 17 parameters instead of the required 73 water quality parameters.

In case of MVSSs, important chemical parameters⁵⁷, Heavy Metals⁵⁸ as well as individual Pesticides⁵⁹ were not being tested in the WTP labs.

Similarly, district labs were not conducting nine to 13 parameters⁶⁰ of the required 23 water quality parameters, and sub-divisional labs were not conducting five to nine of the required 16 parameters (Appendix 29). The tests for oil & grease, Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) were also not conducted in both divisional and sub-divisional labs. Arsenic was not tested in the labs at Gwalior, Narsinghpur, Dindori, and Jhabua; Nitrate was not tested in both district and sub-divisional labs.

Thus, without ensuring the contamination of pesticides, 'potable' water was being supplied to the rural community.

The status of testing of few key parameters and the impact is shown below.

Table 19: Impact of non-testing

Parameters	Impact of non-testing and status in the selected eight districts
Ammonia	Toxic, long-term health risks; not tested in all eight districts and Jal Nigam labs.
Arsenic	Causes cancer and skin diseases, missing in four district and Jal Nigam labs.
Nitrate	Causes blue-baby syndrome; not tested in Dindori and 04 sub-division labs of 03 districts ⁶¹
Sulphate	Can cause diarrhoea with magnesium, missing in 04 sub-division labs.
E. Coli/TTC	Causes gastrointestinal illness; not tested in 04 sub-division labs of 04 districts ⁶²
Oils Grease	Indicates hydrocarbons/oils; not tested in district and Jal Nigam labs
BOD, COD, DO	Indicators of pollution and contamination; not tested

The limited testing of water quality parameters and inadequate lab capacity severely compromise public health safeguards. *In such a situation, Audit cannot derive adequate assurance that the quality of water supplied under JJM meets the acceptable standards.*

In the exit conference, the Principal Secretary, PHED stated that water is supplied after treatment in the Water Treatment Plant (WTP) in the MVSSs. The MD, Jal Nigam agreed that in future the samples would also be forwarded to State laboratories for testing pesticides.

The reply is not acceptable as the claim of water being safe after treatment at the WTP remains unverified because WTPs were not testing all the required parameters.

4.2.4 Laboratory Gap Assessment and Improvement Plan

As per chapter 7 of DWQM&S framework, the Laboratory Gap Assessment and Improvement Plan helps evaluate water testing labs on human resources, physical infrastructure, processes

56 Sagad Hinoyotiya MVS of Vidisha District and Bansujara (Badamalhera) MVS of Chhatarpur District.

57 Ammonia, Silica, Potassium, Sulphide etc.

58 Copper, Cadmium, Lead, Nickel, Zinc, Silver etc.

59 Alachlor, Atrazine, Alpha HCH, Beta HCH and Uranium etc.

60 Temperature, Colour, Odour, Ammonia, Taste, Free Residual chlorine, Oil and Grease, Dissolved Oxygen, Biological Oxygen Demand, E. coli/ Thermotolerant coliform bacteria, Nitrite & Total Arsenic, etc.

61 Tikamgarh, Narmadapuram and Jhabua.

62 Chhatarpur, Narsinghpur, Narmadapuram and Jhabua.

infrastructure, and documentation. Para 5.1.2.1 of the framework further stipulated that the State lab is responsible for monitoring lower-level labs and suggesting plans for their improvement.

Audit reviewed the PHED labs in selected eight districts and labs at WTPs of Jal Nigam and observed the following deficiencies:

- (i) Gap Assessment of State, district, sub-division labs, and labs at WTPs was not conducted, and no improvement plans were prepared.
- (ii) Ice boxes/cold storage was not available in district laboratories and sub-division laboratories of Chhatarpur and Tikamgarh districts. In the absence of ice boxes/cold storage, the results of Bacteriological tests in these districts may not be reliable.
- (iii) The State lab has only 23 of the 43 instruments required under the DWQM&S framework.
- (iv) None of the labs (PHED & Jal Nigam) were equipped with advance Spectrophotometer⁶³, Arsenic testing instrument⁶⁴ and Centrifuge⁶⁵ required for microbiological and chemical tests of the quality of water.
- (v) The labs faced severe shortage of technical staff⁶⁶. There were no microbiologists/Jr. microbiologists in State, District, or Sub-Division labs and lab at WTP ([Appendix 30](#)).

Inadequate planning, equipment, and staffing in water labs risk unreliable testing, delayed detection, and unsafe water supply under JJM.

The Principal Secretary, PHED stated in the exit meeting that district and sub-divisional laboratories were already distinct but did not comment regarding shortage of manpower and instrument required for labs.

The reply is not acceptable because all laboratories are facing a shortage of staff and equipment. None of the State, District, or Sub-Division labs had microbiologists or junior microbiologists, who are essential for conducting bacteriological tests.

4.2.5 Deficiencies in Water Quality Testing Frequency

Paragraph 10.1 of the JJM Guidelines mandates comprehensive water quality testing for all drinking water sources, requiring chemical parameter tests once annually and bacteriological tests twice annually (pre- and post-monsoon) to ensure safe potable water and compliance with Indian Standards. The E-in-C, PHED, further stipulated targets of 300 samples per month for district and sub-divisional labs, with district labs forwarding samples to the State Lab for five *per cent* cross-verification. For Jal Nigam, as per target, Water Treatment Plant (WTP) labs intend to test one sample per village per month, with forwarding to district and state labs for verification, including a monthly roster, to maintain quality assurance across all parameters and prevent health risks from contaminants like iron, arsenic, pH imbalances, chlorine, turbidity, and bacteria.

63 This instrument measures the intensity of light absorbed or transmitted by a substance in water. It is commonly used to analyse concentrations of various chemicals, such as nutrients, metals, and organic compounds.

64 The apparatus works by trapping in a pre-treated filter paper, which then stains yellow.

65 The centrifuge separates solids, oils, and other undesirables from water.

66 Jr. Chemist Microbiologist, Jr. Microbiologist & Laboratory Assistant.

Audit noticed pervasive non-compliance across PHED, State Lab, and Jal Nigam from 2019-20 to 2023-24, with labs consistently failing to meet testing frequencies and targets, leading to incomplete assessments and neglected testing failures.

In PHED, out of eight selected districts, six district labs achieved 73-99 *per cent* for chemical and 58-99 *per cent* for bacteriological tests against the 300-sample monthly target. Although the tests recorded substantial number of failures—Chemical-103, 53, and 247; and bacteriological- 23, 78, and 221 respectively in Gwalior, Jhabua and Vidisha Districts; 26 samples out of 128 for iron content in Gwalior in 2023-24, 10 out of 75 in Vidisha, 12 out of 33 in Tikamgarh, and 49 out of 233 in Chhatarpur in 2024-25, no remedial actions were taken. Further, in Chhatarpur, despite six arsenic, one E. coli, and total coliform cases, requiring immediate investigation and remedial action, no action was taken. Sub-divisional labs forwarded a meagre 2.3 *per cent* (8,677 out of 3.77 lakh) chemical and 1.9 *per cent* (5,952 out of 3.19 lakh) bacteriological samples to district labs, while districts sent 4,536 chemical (36-91 *per cent*) and 1,874 bacteriological (0-87 *per cent*) samples to the State Lab against 7,200 required. Further, no remedial action was taken by ignoring 108 chemical and 28 bacteriological test's state-level failures.

State Lab cross-checked water quality test just 27 *per cent* (2,299 out of 8,400) in 2019-20, 22 *per cent* (1,851) in 2020-21, and 48 *per cent* (4,033) in 2021-22.

For Jal Nigam, in two operational MVSS (Sagad Hinotiya and Bansujara-Badamalhera) during 2023-24, WTP labs achieved only 19 *per cent* chemical (510 out of 2,736) and 11 *per cent* bacteriological (296 out of 2,736) against one-per-village-monthly targets, forwarding just 32 *per cent* (163 out of 510) to district labs and none to the State Lab, with no submission roster established; additionally, six villages under Vidisha district received contaminated water (pH⁶⁷, chlorine⁶⁸, turbidity⁶⁹ issues) since December 2022 without full parameter testing.

These deficiencies have severely undermined JJM's goal of providing safe, contaminant-free drinking water to rural households, exposing millions to health hazards such as waterborne diseases and exposure to toxicity from chemicals, potentially leading long-term public health crises. Incomplete testing and non-remediation erode community trust, ownership, and engagement in infrastructure maintenance.

During Exit Conference, the Department stated that frequency of tests will be increased.

Further development is awaited (July 2025).

4.2.6 No assurance of supply of safe drinking water

4.2.6.1 The Central Ground Water Board's June 2020 report identified elevated uranium levels above the WHO's 30 ppb limit in drinking water in 10 districts⁷⁰, including Gulganj and Kurri of Chhatarpur, Ghantigaon and Tekanpur of Gwalior and Thandala of Jhabua.

⁶⁷ Nipaniya.

⁶⁸ Nipaniya, Beelkhedi, Jeerapu, Johad, Sadher & Vardha village.

⁶⁹ Nipaniya.

⁷⁰ Balaghat, Betul, Chhatarpur, Datia, Gwalior, Jhabua, Panna, Raisen, Seoni and Sheopur.

Audit found that the state laboratory did not test for uranium or virological parameters. As per DWQM&S guidelines, such tests should be conducted by approved labs like BARC or NABL-accredited institutes, but the state lab did not forward samples for these tests.

4.2.6.2 As per Ground Water Yearbook 2021-22 Madhya Pradesh, Audit observed that 55 villages in the test checked districts were affected by Nitrate, Fluoride and Hardness concentrations. Out of these 55 villages, SVSs were implemented in 13 villages⁷¹, without taking any remedial measures for removal of nitrate and total hardness concentrate in the water.

Government reply is awaited (July 2025)

4.2.7 Water Quality Surveillance by the local community

Para 4.3(v) of the DWQM&S framework mandates water quality surveillance by the local community. GPs/VWSCs must conduct two tests per habitation using Field Test Kits (at the source and two tail-end delivery points) and perform sanitary inspections. For this, five women per village were to be trained in using FTKs and uploading data to the JJM portal.

Audit reviewed the quality and adequacy of community-based water quality surveillance in eight selected districts and observed the following:

- 💧 PHED trained 26,533 women for using FTKs against a target of 36,775 (28 per cent shortfall). In case of Jal Nigam, the claim of five trainees per village does not match (555 women trained against the target of 1,140) the portal data. Further, since authentication of 10,827⁷² registered FTK users was not available on the JJM portal, adequacy of training, as claimed by the Department, remained unverified.
- 💧 In 2019–20 and 2020–21, FTKs were not distributed in four⁷³ and three⁷⁴ districts, respectively, and no FTK tests were done in five⁷⁵ districts, indicating poor community involvement. Further, FTKs were not provided to three villages (Gwalior - Bhoori, Benipura village and Vidisha-Barkheda Tal village), yet 75, 13 and 6 tests were claimed to have been conducted in these villages, as per JJM portal. In one village (Tikamgarh), 33 tests were reported on the JJM portal, despite water supply being discontinued for six months.
- 💧 Sanitary inspections⁷⁶ were not planned/carried out in the villages under SVSs in Narmadapuram, Narsinghpur, Tikamgarh and Vidisha. In the other four districts, inspections were claimed to have been done, but reports were not available.

71 Gaurihar village of Chhatarpur District, Bareilly, Dehri jagir, Ghatera, Gyaraspur and Pathariya villages of Vidisha District, Aron, Charai Shyampur, Dongarpur and Mohana villages of Gwalior District and Digoda villages of Tikamgarh District in Nitrate concentrate and Dongarpur village of Gwalior District and Gyaspur village of Vidisha District in Total Hardness.

72 $(36,775 - 26,533 = 10,242)$, $(1,140 - 555 = 585)$; $10,242 + 585 = 10,827$.

73 Dindori, Gwalior, Tikamgarh and Vidisha.

74 Dindori, Gwalior, and Vidisha.

75 Dindori, Gwalior, Narsinghpur, Tikamgarh and Vidisha.

76 An on-site inspection of a water supply facility to identify actual and potential sources of biological contamination. The physical structure and operation of the system and external environmental factors (such as a toilet location) are evaluated. This information is used to decide appropriate remedial action to improve/ protect the drinking water source and supply system. Sanitary inspections are to be carried out for all new and existing sources of drinking/domestic water supply.

The above deficiencies cast aspersions on the quality and adequacy of community participation in water quality surveillance.

Government reply is awaited (July 2025).

JPI: Dharampura Village under Tikamgarh district (SVS)

Dharampura village in Jatara Block of Tikamgarh_District was covered by a single-village water supply scheme which was *Har Ghar Jal Certified* but was found non-operational for the last six months during JPI.

Audit observed that there was piling up of garbage and cow dung around the dug well and tube well, which were water sources for the scheme. Thus, the contamination of the water source and non-functional infrastructure indicates neglect in ensuring the scheme's usability and sustainability.



Photo 4.1: Pile up of cow dung contaminating the source

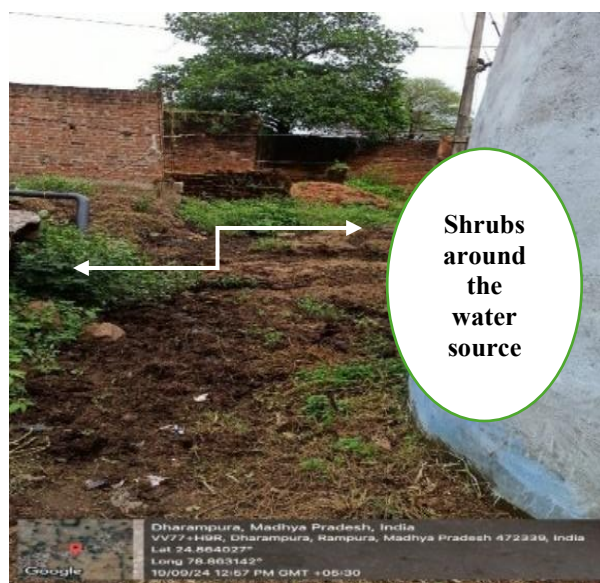


Photo 4.2: Dug well surrounded by shrubs and garbage

In the exit meeting, the Principal Secretary, PHED taken this matter seriously and instructed to the E-in-C to investigate the matter.

Further reply is awaited (July 2025).

4.3 Source & Scheme Sustainability and Long-Term Viability

Part-I: Scheme Sustainability

4.3.1 O&M costs not recovered from the beneficiaries

The National Water Policy, 2012 and JJM guidelines both prescribe full recovery of O&M costs⁷⁷ (of water supply systems) from beneficiaries. Hence, it was imperative that the PHED proposed

⁷⁷ O&M includes recurring cost like electricity charges, chemical cost, expenditure on preventive and breakdown maintenance, remuneration for pump operator etc.

the scheme, taking into account the expected O&M expenditure and mandated recovery of user charges from the rural beneficiaries.

As per Para 7.13 of JJM guidelines, Gram Panchayats/VWSCs managing water supply successfully for a year and collecting O&M tariffs are eligible for an incentive of 10 *per cent* of in-village infrastructure cost. However, due to SWSM's failure to develop the criteria for disbursing this incentive, eligible Gram Panchayats/VWSCs were deprived of this, which could have incentivised villages for a more engaged participation in the whole JJM process.

The responsibility of O&M of the schemes after possession rests with the Gram Panchayats. In 24 villages⁷⁸ out of 32 surveyed villages, Audit noticed that O&M costs were either not collected or collected partially. This indicated that PHED did not prepare the DPR after comparing the viability of the scheme, in view of anticipated realisation of O&M cost from the community. The viability of the schemes was not elaborated in the DPR. Due to non/partial collection of O&M funds, long term operation/sustainability of the scheme is doubtful.

Audit noticed that out of 32 villages, seven SVSs were non-operational within few years of completion due to failure of motor pump, damage in pipelines, drying of source, *etc.* In Kundla village of Jhabua District, the Panchayat refused to take over the scheme until all habitations were covered under JJM as some habitations located across the railway line were not included in the scheme. The villagers were using the water from old infrastructure such as handpumps, dug wells, *etc.*, even after completion of the scheme. As such, deterioration of created infrastructure cannot be ruled out.

On the issue of the sustainability of the schemes, the Principal Secretary stated in the Exit Conference that an O&M policy for continuous water supply has been finalized and will be implemented shortly.

Further development is awaited (July 2025).

4.3.2 Non metering of household connections

Fourteenth Finance Commission (2015-2020) recommended 100 *per cent* metering of individual connections in both rural and urban households, commercial establishments, and institutions by March 2017. It emphasized that new individual connections be provided only when functional water meters are installed. JJM guidelines vested SWSM with the power to decide action on unmetered connections to stop continued loss of revenue.

Audit noticed that provision for metering of individual connections was neither made in the DPRs nor the meters were installed when providing individual connections. This was also confirmed by Audit during JPIs in 32 selected SVS/MVS villages of eight districts.

78 No O&M contribution- Chhatarpur (Dumkheda, Kanbhai, Bandha Chanouli) Dindori (Mohati, Kathotiya), Gwalior (Benipur), Jhabua (Kundla, Mandli Badi), Narmadapuram (Kakadi, Bagalkhedi, Gwadikhurd), Narsinghpur (Khadai, Suatala), Tikamgarh (Dharampura, Marguwan, Kunaita, Tamora) and Vidisha (Barkheda Tal, Sagar, Newli and Bhoiriya).

Partially contribution- Gwalior (Bhori, Dang Guthina, Pura Banwar).

This indicated that the SWSM did not plan for metering tap connections under JJM water supply schemes, which may have an impact on sustainability of water supply systems.

The EE's of four districts⁷⁹ stated (August to October 2024) that metering was not provisioned for in the estimates and hence not taken up. The MD, Jal Nigam stated that individual metering is not done because it is not in the scope of the agreement.

The reply confirms that the PHED and Jal Nigam overlooked the recommendation of the Fourteenth Finance Commission as well as the JJM Guidelines.

4.3.3 Skill Development of barefoot mechanics

To achieve the goal of a functional piped water supply to every rural household, in every village/habitation on a long-term basis, skilled human resources (barefoot mechanics) in the areas like masonry, plumbing, fitting, electricity, *etc.*, will be required. JJM, therefore, envisaged skilled human resources in each district and for each village, for which convergence with Pradhan Mantri Kaushal Vikas Kendra (PMKVK) operational in each district will have to be worked out.

Audit noticed that administrative approval of ₹ 1,712.62 lakh was accorded by the GoMP in February 2021 for *Kaushal Vikas Prashikshan Yojana* (Development of Skilled Human Resources) to train 50,000 people in masonry, plumbing, fitting, electricity, *etc.* The Department could, however, train 11,271 people as Electrician, Mason, Fitter, *etc.*, at the expenditure of ₹ 402.10 lakh. Thus, only 22 *per cent* people could be trained after incurring an expenditure of 23 *per cent* of the approved cost. This hindered the operation of the completed schemes.

Regarding the skill development of barefoot mechanics, the Engineer-in-Chief assured in exit conference that these matters would be thoroughly investigated.

4.3.4 Community Disengagement: Undermining Scheme Sustainability

The Jal Jeevan Mission (JJM) emphasizes community engagement as a cornerstone for ensuring sustainable water supply systems. By involving local communities in planning, implementation, and maintenance, JJM promote a sense of ownership and responsibility, VWSCs are formed to mobilise residents, raise awareness, and manage water resources effectively. This collaborative approach not only ensures the success of water supply schemes but also promotes long-term community development and self-reliance.

Audit noticed that the Department did not involve the local community in the planning and execution of schemes, resulting in a profound lack of ownership and engagement among local communities. It was noticed that VWSCs/Pani Samiti did not collect community contribution regarding O&M charges. This failure severely compromised the schemes' sustainability and impact. Moreover, during JPI and survey it was noticed that seven schemes out of 32 schemes were entirely non-functional due to non-maintenance of scheme components *viz.*, motor pumps, pipelines *etc.*, indicating non-involvement of local community and non-development of sense of ownership.

79 Gwalior, Jhabua, Narsinghpur, Tikamgarh.

Part-II: Source Sustainability

4.3.5 Sustainability of Water Sources

As per Para 3.6 of JJM Guidelines, Village, District, and State Action Plans must ensure convergence for source sustainability and greywater management. Para 5.3 of JJM guidelines states that DWSM must secure funds for these components, and projects will be approved only if included in the DPR.

Audit found that in seven out of eight districts, Jal Nigam executed 25 MVSs covering 5,431 villages, including 1,907 villages already covered under completed or ongoing SVSs (Total SVSs: 4,602). These 1,907 SVSs are now being shifted to MVSs due to inadequate groundwater ([Appendix 31](#)). In Vidisha, all 522 SVSs were shifted to MVSs, and in Jhabua, 664 of 716 SVSs were shifted (93 *per cent*), indicating poor initial assessment of groundwater availability. PHED had already spent ₹ 19.23 crore⁸⁰ on borewells in these villages without recharge structures, making the expenditure wasteful as they will now receive bulk water from MVSs.

Government reply is awaited (July 2025).

4.3.6 Availability of Ground Water

Data contained in the Dynamic Ground Water Resources Assessment of India (Year 2022, 2023, and 2024) shows that, there has been a shift in the dynamics of groundwater resources compared to the previous assessment year in Madhya Pradesh. Notably, there has been an increase in both groundwater recharge and groundwater extraction. Simultaneously, a discernible escalation in groundwater extraction has transpired, propelled by the recalibration of well census data, escalating water demands due to burgeoning population growth.

Audit compared the Annual Extractable Ground Water Resources for the years 2022, 2023 and 2024 with the annual groundwater extraction and found the extraction of the groundwater gradually increased from 19.25 Billion Cubic Meter (bcm) to 19.30 bcm from the year 2022 to 2023, and 19.30 bcm to 19.85 bcm from 2023 to 2024. JJM Guidelines specifically stress adopting sustainability measures to improve the groundwater level and source.

No measures for sustainability of water source were adopted at Panchayat, DWSM and SWSM level to increase the extractable ground water resources. Audit noticed that 1,907 SVSs based on ground water were shifted to MVS due to non-availability of groundwater as has been discussed in the previous [Paragraph 4.3.5](#).

Government reply is awaited (July 2025).

4.3.7 Technological interventions to boost the sustainability of water sources

As per para 8.4.1 of JJM Guidelines, National Remote Sensing Centre (NRSC), Hyderabad, has prepared Hydro-Geo-Morphological (HGM) Maps (4,898 Nos) in a 1:50,000 scale for the country which can be used to determine the probable location of groundwater availability and the locations for recharge of the aquifers. HGM maps, based on Survey of India topo-sheets, can be prepared by

⁸⁰ Cost of one borewell = ₹ 100828 * 1907 = ₹ 19.22 crore

States as needed. However, Audit found that the Department did not adopt GoI-recommended technological interventions in the eight test-checked districts.

In reply, the EEs of Dindori, Gwalior, Jhabua, Narmadapuram, Narsinghpur and Tikamgarh replied that due to non-provision in the estimate and non-availability of budgetary allotment and trained staff, the technological interventions and innovations were not adopted. The EEs of Chhatarpur and Vidisha stated that reply will be submitted in due course.

The reply is not tenable because as per the provisions contained in JJM Guidelines technological interventions should have been adopted.

4.3.8 Executing water supply scheme without ensuring sustainable source and supplying water from dead storage contrary to specifications

Para 3 of the Manual for preparation of DPRs, mandates ensuring a 100 *per cent* dependable source for a design period of 30 years. IS: 5477 (Part 1 1999) guidelines define dead storage as an inactive storage designated during design to accommodate sediment accumulation throughout the reservoir's lifespan, as the lowest reservoir volume that cannot be fully depleted by standard outlets (*i.e.*, gravity channels). Dead storage is designed to trap sediment over the design lifespan of the Dam, preventing encroachment into live storage and ensuring long-term functionality. Dead storage maintains ecological flows and dam stability, while live storage supports operational releases. Regular sediment monitoring ensures dead storage performs as intended, safeguarding the reservoir's capacity to remain a dependable source for the design period.

Audit examination of five MVSs indicated significant irregularities in water allocation, threatening their long-term viability as described below.

MVS	Condition	Impact
Rajghat MVS	Despite a projected requirement of 93 Million Cubic Meter (MCM) for 1,573 villages, MP Water Resources Department (WRD) initially allocated 51.20 MCM from the dam's dead storage. While this was later reallocated from "live storage" by the Chief Engineer, the subsequent re-allocation lacked competent authority approval.	Against the dam's total capacity (2018) of 1,945 MCM, demand was 2,217.74 MCM. In the backdrop of this pre-existing deficit of 272.74 MCM, additional allocation of 93 MCM was unsustainable.
Gandhi Sagar-1 MVS	The water supply scheme for 820 villages, based on population projections, required 95.50 MLD in 2023, 116.70 MLD in 2,038, and 143.05 MLD in 2053, as per the DPR. WRD allocated 34.82 MCM (95.38 MLD) from the dead storage of Gandhi Sagar Dam in December 2019, which is insufficient to meet the ultimate demand of 52.25 MCM (143.05 MLD) by 2053.	Using dead storage water not only violates IS code specifications, risking dam stability and its capacity to meet irrigation needs. This could render the MVS Project's expenditure ineffective due to future scarcity of water in its design period.
Gandhi Sagar-2 MVS	WRD allocated 33.69 MCM from the dam's dead storage. This is inadequate to meet the projected water demand of 35.80 MCM for 915 villages and seven towns in 2023, resulting in a deficit of 2.11 MCM.	This gap between availability and demand indicates poor planning and coordination, as the allocation was not finalized during DPR preparation. Furthermore, reliance on dead storage raises concerns about long-term sustainability and compliance with dam safety standards.

Agar Malwa MVS	The projected water demand for 480 villages, estimated at 42.52 MLD (15.52 MCM) in 2021, rising to 49.12 MLD in 2031 and 64.15 MLD by 2047, was planned to be sourced from the Kundaliya Dam without a finalized allocation from WRD at the time of DPR preparation.	Although MP WRD subsequently allocated 17.33 Million Cubic Meter (MCM) (47.48 MLD) water supply for the MVS, this was not sufficient for the target villages after the year 2031. As such, adequate provisioning of supply was not ensured over the next 30 years.
Kundaliya MVS	DPR projected a water demand of 51.33 MLD for 535 villages for the year 2017. Furthermore, a 2019 proposal added 9.82 MLD for other towns and villages, increasing the total demand to 61.15 MLD. The Kundaliya Dam does not have substantial storage, WRD allocated only 51.34 MLD from dead storage in 2016.	Consequently, the scheme's water availability is critically insufficient to cover 100 <i>per cent</i> of the revised requirements for all intended beneficiaries.

Thus, from the above, it can be seen that allocation of water for the MVSs from the dead storage of dams will not only compromise the structural stability of the dams but over-allocation above the carrying capacity is likely to create a severe water deficit, making it highly improbable that these schemes can meet their projected water demands over the intended design period.

Using water from the dead storage of a dam for drinking purposes may raise quality concerns, as this water may contain higher levels of sediments, organic matter, reducing dissolved oxygen levels, contaminants etc.

4.4 Beneficiary Surveys to determine Scheme Outcomes

The results of the audit were correlated with the findings emanating from beneficiary survey of 629 households in 32 villages in order to objectively appraise and benchmark audit findings against ground realities.

Community consultations	As per this report: VWSCs were either not formed or were not consulted before commencing JJM scheme. ISA activities were short of targets. Survey outcome: Five VWSCs (out of 32) stated that the scheme was not taken up based on open meeting of Gram Sabha.
Achievement of Scheme Objectives	As per this report: FHTC targets had not been met or schemes suffered from source sustainability issues. Safety and potability of water supplied is a concern owing to poor testing quality and frequency. 10 <i>per cent</i> community contribution remains to be collected which may impact O&M works thereby impacting scheme sustainability. Survey outcome: 141 beneficiaries (out of 629) stated that they were not receiving water supply. Another 183 beneficiaries stated that the water supplied was not potable while 252 beneficiaries stated that they were not aware of the 10 <i>per cent</i> community contribution which was to be paid by them.

The on-ground findings corroborate the audit observations and have a bearing on attainment of scheme objectives by the Government of Madhya Pradesh.

The Principal Secretary directed (June 2025) the E-in-C to investigate these matters thoroughly.

Further progress is awaited (June 2025).

4.5 Conclusion

Audit identified systemic deficiencies in monitoring, water quality assurance, and scheme sustainability, which collectively jeopardize the JJM's core objective of providing sustainable and potable water to every rural household. Key monitoring lapses include dashboard misreporting of FHTCs, wide variations between planned and executed FHTCs in SVSs, and non-adoption of technological interventions like IoT and HGM Maps, leading to inaccurate progress tracking and poor infrastructure planning. Non-functional FHTCs remained undetected.

Water quality monitoring was severely compromised by inadequate infrastructure. DWQM&S Framework, which provided a comprehensive mechanism for monitoring the quality of drinking water was not adhered to. NABL accreditation for critical parameters like E. coli and total coliform was lacking in the district and sub-divisional labs and only partial testing was carried out. There were shortfalls in testing frequency. As such, the Department could not ensure the beneficiaries of safe water supply.

JJM implementation in Madhya Pradesh has high risk of both scheme and source failure as evidenced by significant sustainability issues detected by Audit – both in scheme as well as in source. O&M costs were not recovered from the beneficiaries, water supply remained un-metered, community participation was not encouraged through skill development and creating adequate pool of FTK users. Source vulnerabilities were evident in shift of SVSs to MVSs due to source depletion without recharge measures, over-allocation from dam dead storage risking future sustainability and increased allocation/extraction beyond the carrying capacities of the reservoirs. Beneficiary surveys of 629 households across 32 villages corroborate these findings, highlighting non-functional schemes and reliance on old sources, eroding community ownership and long-term viability.

These systemic failures not only expose rural populations to health hazards like waterborne diseases and chemical toxicity but may lead source failures and diminished public trust, ultimately hindering the successful implementation of JJM in Madhya Pradesh.

4.6 Chapter Recommendations

It is recommended that the GoMP may:

1. develop and implement strict data validation protocols for the E-Jal Shakti portal and conduct regular audits of reported FHTCs benchmarked against on-ground verifications in all districts, and fix accountability for misreporting.
2. mandatorily include the provisions for recharge structures in all ongoing/operational schemes and converge with other schemes for groundwater management and source augmentation.
3. equip state/district labs with full NABL accreditation for all required parameters, hire adequate personnel, and mandate remedial actions (e.g., de-fluoridation plants) for failed samples, with cross-verification.

The above recommendations have been suitably condensed in the concluding chapter.

Chapter-V

Conclusion & Recommendations





CHAPTER V: CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The Jal Jeevan Mission, launched in 2019, aimed to provide Functional Household Tap Connections to every rural household in India by 2024, ensuring access to safe and adequate drinking water (55 liters per capita per day) with a focus on sustainability, equity, and community ownership. The audit evaluated the performance of JJM in Madhya Pradesh, covering 2019-20 to 2023-24.

In Madhya Pradesh, as against the target of 98.28 lakh FHTCs, 60.90 lakh FHTCs have been rolled out thus far (December 2024), representing a 62 *per cent* success rate. However, mission-critical deficiencies in planning, execution, and sustainability have undermined JJM's core objectives in case of Madhya Pradesh.

Mission-Critical Aspects and their Performance Evaluation:

Planning and Community Engagement: JJM's bottom-up approach via Village Action Plans (VAPs), District Action Plans (DAPs), and State Action Plans (SAPs) was largely bypassed. VAPs were absent or retrospective in many villages, baseline surveys deficient, and community involvement minimal (VWSCs not formed across the districts). Stakeholder/Community contribution was negligible as ISAs did not fulfil their mandate and scheme awareness was not relayed to the last mile. This eroded ownership and decreased agency of the communities even though they were slated to be the main beneficiaries. Deficiencies in planning resulted in non-functional schemes (7/32 surveyed) and ignored priorities for SC/ST/PVTG habitations and drought-prone areas. Convergence for greywater management and source recharge was absent, violating guidelines and jeopardizing water security.

Execution and Financial Management: There were delays in execution along with cost escalations, and inadmissible payments. Jal Nigam violated Scheme guidelines by transferring contractor security deposits to a savings account and did not use scheme funds properly over several years, leading to idle resources and delayed project results.

Sustainability and Monitoring: Schemes lacked hydrogeological assessments, with over-allocation from dam dead storage in five MVSs risking future deficits. Non-adoption of IoT/SCADA for monitoring and no O&M policy enforcement led to non-operation of assets post-completion. Technological interventions were ignored. Beneficiary surveys indicated single point taps outside homes, contradicting multi-point guidelines. Labs were under-equipped and non-accredited with NABL for all parameters. Inadequate testing and minimal cross-verification pose public health challenges.

The findings indicate significant gaps in planning, execution, and outcomes, which have collectively hindered the mission's objectives and raise concerns about long-term sustainability and eventual success of the 'Har Ghar Jal' campaign. The following recommendations proposed by Audit, based on the report findings, offer solutions for mitigating the identified weaknesses and deficiencies.

5.2 Recommendations

The following SMART (Specific, Measurable, Achievable, Relevant, Time-bound) recommendations offer solutions for the PHED and the GoMP to address groundwater depletion risks, ensure scheme viability over the design life, and achieve 100 *per cent* functional FHTCs in a time-bound manner.

1. Enhance Bottom-Up Planning including Strengthening of Community Ownership and engagement for O&M sustainability

Measures: Achieve 100 *per cent* VAP coverage in remaining villages at the earliest using ISAs. Form/activate VWSCs in all villages, mandate 5-10 *per cent* community contributions for capital/O&M via IEC campaigns and sensitize locals on water quality testing and source protection as per JJM handbooks.

2. Prioritize Source Sustainability to Combat Groundwater Depletion

Measures: Conduct mandatory hydrogeological assessments for all new/ongoing schemes, revive traditional water bodies (e.g., lakes, springs), implement recharge measures like rainwater harvesting.

3. Improve Execution and Financial Discipline to Minimize Delays and Overruns

Measures: Enforce timely ISA deployment and PFMS compliance for phased fund releases, with strict monitoring of cost escalations and inadmissible payments (e.g., inflated PACs). Closely monitor project delays and recover inadmissible payments

4. Upgrade Water Quality Monitoring Infrastructure and Remediation

Measures: Equip state/district labs with full NABL accreditation for all parameters, hire adequate personnel, and mandate remedial actions (e.g., de-fluoridation plants) for failed samples, with cross-verification of test result.

5. Adopt Technological Innovations for Real-Time Monitoring and Functionality

Measures: Implement IoT-based systems and SCADA across all schemes for water flow/quality tracking, extending to OHTs and public institutions.

Bhopal
The 21 April 2026



(RAM HIT)
Principal Accountant General (Audit II)
Madhya Pradesh

Countersigned



New Delhi
The 30 April 2026

(K. SANJAY MURTHY)
Comptroller and Auditor General of India

Appendices



Master Balancing Reservoir



Standpost

Appendix 1

Details of non-conduction of Baseline Survey

Sl. No.	Districts	Total Schemes	Total villages/schemes allotted to ISA	Difference
1	Chhatarpur	204	171	33
2	Dindori	454	478	-24
3	Gwalior	455	384	71
4	Jhabua	716	500	216
5	Narmadapuram	858	650	208
6	Narsinghpur	894	700	194
7	Tikamgarh	473	484	-11
8	Vidisha	522	543	-21
	Total	4576	3910	666

Appendix 2

Details of ineffective VAP

Sl. No	District	No. Of villages (J-10)	VAP prepared as per J-10	Percentage of prepared VAP
1	Jhabua	778	734	94.34
2	Narsinghpur	1,007	685	68.02
3	Dindori	892	520	58.30
4	Vidisha	1,518	632	41.63
5	Chhatarpur	1,074	962	89.57
6	Tikamgarh	625	255	40.80
	Total	5,894	3,788	
Details of 100% completed VAP				
1	Narmadapuram	894	889	99.44
2	Gwalior	529	522	98.68
	Grand Total	7,317	5,199	

Appendix 3

Ineffective Village action plan

Sl. No	Districts	Name of Scheme	G.P. Resolution	Are VWSC meetings held at least four times a year?	
1	Vidisha	Barkheda Tal	No	-	No
2		Bhoriya	No	-	No
3		Sagar	Not prepared	Yes	-
4		Newli	Not prepared	Yes	-
5	Chhatarpur	Kanbhaee	No	-	No
6		Dumkheda	Yes	-	No
7		Bamankola	Yes	Yes	
8		Bandha Chanouli	Yes	-	No
9	Tikamgarh	Tamora	Yes	-	No
10		Marguwan	No	-	No
11		Dharampura	Yes	-	No
12		Kunaita	Yes	-	No
13	Gwalior	Dang Guthina	Yes	-	No
14		Pura banawar	No	-	No
15		Benipura	No	-	No
16		Bhori	Yes	-	No
17	Narmadapuram	Kankadi	No	-	No
18		Gwadi Khurd	Yes	-	No
19		Bagal Khedi	Yes	-	No
20		Khoksar	Yes	Yes	-
21	Jhabua	Kundla	No	-	No
22		Mandli Badi	Yes	Yes	-
23		Ghughri	Yes	Yes	-
24		Barigaon	Yes	Yes	-

Sl. No	Districts	Name of Scheme	G.P. Resolution	Are VWSC meetings held at least four times a year?	
25	Narsinghpur	Manegaon	Yes	Yes	-
26		Suatala	Yes	Yes	-
27		Hirdepur	Yes	Yes	-
28		Khadaï Chichli	Yes	Yes	-
29	Dindori	Mohati	Yes	-	No
30		Kathoutiya	Yes	-	No
31		Sukhloundi	Yes	-	No
32		Bhalapuri	Yes	Yes	-
Total			No-8 Yes-22 Not prep-2	12 Yes	20 No

Appendix 4

Statement showing VAPs prepared after preparation of DPR & floating of NIT and wasteful expenditure on preparation of VAP by ISAs

(₹ in lakh)								
Sl. No.	District	Name of ISA	Agt. No.	Contract amount	Paid amount	Allotted SVS	No. VAP prepared after award of tender	Payment for preparation of VAP
1	2	3	4	5	6	7	8	9=8/7*5
1	Chhatarpur	M/s SRM education and social welfare society, Sagar	34/21-22	88.78	88.78	200	1	0.44
2	Dindori	M/s National Institute of woman child & youth development, Jabalpur	60/20-21	41.95	40.37	100	1	0.42
		M/s Aditi Swayam Sevi Sansthan Samiti, Jabalpur	43/22-23	74.35	63.97	200	8	2.97
3	Gwalior	M/s Gramin Vikas Yuwa Sansthan, Rajasthan	42/21-22	74.83	60.14	184	5	2.03
4	Jhabua	M/s Human settlement and rural development Jhabua	102/22-23	56.04	10.85	150	4	1.49
5	Narmadapuram	M/s Native Education & Employment Developing Society	85/21-22	106.90	90.34	250	3	1.28
		M/s Adhar Foundation	50/23-24	102.23	0	250	4	1.64
6	Narsinghpur	M/s Hamlog Shixachha and Samaj Kalyan samitee, Bhopal	53/20-21	62.85	55.44	150	7	2.93
		M/s Help Rice Hands to Help, Jabalpur	72/22-23	111.59	72.53	300	5	1.86
7	Tikamgarh	M/s Alliance Urban & Rural Development Society, Bhopal	91/20-21	68.22	55.44	184	4	1.48
8	Vidisha	M/s Sarthak Society for Human development, Jaipur	04/21-22	38.34	19.17	100	5	1.92
Total							47	18.46

Appendix 5

Details on the formation of the VWSC

Sl. No.	District	No. Of villages (J-10)	VWSC Formed (J-10)	Total Villages (as per Departmental Information)
1	Narmadapuram	894	889	908
2	Jhabua	778	774	770
3	Narsinghpur	1,007	689	949
4	Dindori	892	384	904
5	Vidisha	1,518	752	1,528
6	Chhatarpur	1,074	1,066	1,074
7	Tikamgarh	624	444	596
8	Gwalior	525	519	516
Total		7,312	5,517	7,245

Appendix 6

Statement showing completion certificate not issued by the Department

Sl. No.	District	Agreement No.	Stipulated date of completion	Actual date of completion/ Date of last measurement	Period of consideration i.e. last before audit	Delay in issue of CC	Status of work	Physical completion certificate issued or not	Remarks
1	Jhabua	03/2021-22	07-10-2021	25-09-2022	31-08-2024	23	All schemes shown completed	No	-
2		77/2021-22	28-01-2022	30-06-2022	31-08-2024	26	All schemes shown completed	No	-
3		37/2022-23	16-02-2023	18-02-2023	31-08-2024	18	All schemes shown completed	No	-
4	Narmadapuram	52/2020-21	17-07-2021	29-03-2024	31-07-2024	4	In 14 villages, 12 schemes is completed,	No	02 village (Meli and Aamkhedi) is under retendering process
5	Narsinghpur	48/2020-21	12-07-2021	31-05-2024	31-08-2024	3	All schemes shown completed	No	-
6		74/2021-22	06-08-2022	25-05-2023	31-08-2024	15	All schemes shown completed	No	-
7	Tikamgarh	24/2020-21	05-07-2021	15-04-2022	31-08-2024	28	All schemes shown completed	No	-

Appendix 7

Statement showing delay in completion of works and non/short imposition of penalty in SVS

Sl. No.	Districts	Agreement No.	CA	Date of work order	Stipulated date of completion	Status of work	Actual date of completion/Date of last measurement	Delay in days	Time extension sanction	Reasons for delay with days approved by competent authority	Reasons for delay allowable	Allowable delay	Net delay	Delay levied	Penalty levied after sanctioned time extension	Penalty leviable	Shortfall
1	Chhatarpur	55/2021-22	161.05	11-11-21	10-07-22	Ongoing	22-04-23	286	No	NA	NA	NA	NA	NA	0.00	16.11	16.11
2		15/2021-22	159.06	03-07-21	02-01-22	Ongoing	31-08-24	972	No	NA	NA	NA	NA	NA	0.00	15.91	15.91
3		31/2020-21	161.81	18-03-21	17-09-21	Completed	17-10-22	395	Yes	(i) Non-availability of space/successful sources (52 days) (ii) Non-availability of materials (53 days) (iii) Closure of school/Anganwadi due to holiday (139 days) (iv) Covid-19 pandemic (90 days) (Total 334 days)	Given in draft	191	204	60	4.85	16.18	11.33
4		14/2020-21	103.74	24-03-21	23-08-21	Completed	26-02-22	187	Yes	(i) Covid-19 pandemic (126 days) (ii) Panchayat elections (24 days)	Given in draft	34	153	2	0.06	7.65	7.59

Sl. No.	Districts	Agreement No.	CA	Date of work order	Stipulated date of completion	Status of work	Actual date of completion/ Date of last measurement	Delay in days	Time extension sanction	Reasons for delay with days approved by competent authority	Reasons for delay allowable	Allowable delay	Net delay	Delay levied	Penalty levied after sanctioned time extension	Penalty leviable	Shortfall
(iii) Delay in electric connection (34 days) (Total 184 days)																	
5	Dindori	73/2020-21	148.17	19-03-21	18-05-21	Ongoing	31-10-24	1262	No	No	NA	NA	NA	NA	0.00	14.82	14.82
6		110/2021-22	233.06	03-12-21	22-02-22	Ongoing	30-09-24	951	No	No	NA	NA	NA	NA	0.00	23.31	23.31
7		115/2021-22	109.81	23-11-21	22-08-22	Ongoing	30-09-24	770	No	No	NA	NA	NA	NA	0.00	10.98	10.98
8		34/2018-19	152.57	06-10-18	05-04-19	Completed	15-07-21	832	No	No	NA	NA	NA	NA	0.00	15.26	15.26
9	Gwalior	48/2020-21	317.98	30-01-21	29-10-21	Ongoing	30-09-24	1067	No	NA	NA	NA	NA	NA	0.00	31.80	31.80
10		65/2021-22	216.94	19-07-21	18-04-22	Completed	06-02-24	659	No	NA	NA	NA	NA	NA	0.00	21.69	21.69
11		52/2020-21	294.41	30-01-21	31-10-21	Completed	13-11-23	743	No	NA	NA	NA	NA	NA	0.00	29.44	29.44
12	Jhabua	03/2021-22	367.32	08-04-21	07-10-21	Completed	25-09-22	353	No	NA	NA	NA	NA	NA	0.00	36.73	36.73
13		77/2021-22	250.37	29-07-21	28-01-22	Completed	30-06-22	153	No	NA	NA	NA	NA	NA	0.00	25.04	25.04
14	Narmadapuram	47/2022-23	312.46	13-10-22	11-04-23	Ongoing	18-03-24	341	No	NA	NA	NA	NA	NA	0.00	31.25	31.25
15		48/2021-22	119.4	19-10-21	17-04-22	Completed	12-01-23	270	No	NA	NA	NA	NA	NA	0.00	11.94	11.94
16		52/2020-21	149.88	01-02-21	17-07-21	Completed	29-03-24	986	No	NA	NA	NA	NA	NA	0.00	14.99	14.99
17		53/2020-21	259.84	08-11-21	07-01-22	Ongoing	30-08-24	966	No	NA	NA	NA	NA	NA	0.00	25.98	25.98
18	Narsinghpur	40/2020-21	161.64	13-01-21	12-07-21	Completed	31-05-24	1054	No	NA	NA	NA	NA	NA	0.00	16.16	16.16
19		16/2021-22	52.77	20-10-20	19-02-21	Completed	05-02-22	351	No	NA	NA	NA	NA	NA	0.00	5.28	5.28
20		74/2021-22	100.5	07-02-22	06-08-22	Completed	25-05-23	292	No	NA	NA	NA	NA	NA	0.00	10.05	10.05
21		54/2020-21	190.6	06-03-21	05-07-21	Completed	06-06-22	336	No	NA	NA	NA	NA	NA	0.00	19.06	19.06

Sl. No.	Districts	Agreement No.	CA	Date of work order	Stipulated date of completion	Status of work	Actual date of completion/ Date of last measurement	Delay in days	Time extension sanction	Reasons for delay with days approved by competent authority	Reasons for delay allowable	Allowable delay	Net delay	Delay levied	Penalty levied after sanctioned time extension	Penalty leviable	Shortfall
22	Tikamgarh	75/2020-21	118.55	03-02-21	02-11-21	Completed	18-03-22	136	No	NA	NA	NA	NA	NA	0.00	8.06	8.06
23		41/2020-21	323.45	15-12-20	14-06-21	Ongoing	13-08-23	790	No	NA	NA	NA	NA	NA	0.00	32.35	32.35
24		24/2020-21	101.57	06-10-20	05-04-21	Completed	15-04-22	375	No	NA	NA	NA	NA	NA	0.00	10.16	10.16
25		53/2020-21	87.70	13-01-21	12-02-21	Ongoing	15-02-23	733	No	NA	NA	NA	NA	NA	0.00	8.77	8.77
26		77/2020-21	68.44	05-02-21	04-03-21	Ongoing	22-02-22	355	No	NA	NA	NA	NA	NA	0.00	6.84	6.84
27		11/2020-21	149.24	24-03-21	23-08-21	Completed	26-02-22	187	Yes	(i) Covid-19 pandemic (126 draft days) (ii) Panchayat elections (24 days) (iii) Delay in electric connection (34 days) (Total 184 days)	Given in	34	153	2	0.11	10.71	10.60
28	Vidisha	44/2020-21	75.72	28-01-21	27-05-21	Ongoing	17-02-22	266	No	NA	NA	NA	NA	NA	0.00	7.57	7.57
29		58/2020-21	133.98	17-02-21	16-11-21	Ongoing	31-07-24	988	No	NA	NA	NA	NA	NA	0.00	13.40	13.40
30		77/2020-21	163.65	19-03-21	18-05-21	Ongoing	31-07-24	1170	No	NA	NA	NA	NA	NA	0.00	16.37	16.37
Total																	508.84
															5.02	513.86	508.84

Appendix 8

Statement showing Liquidated Damage recoverable from the contractors in MVS

Sl. No.	Name of scheme	Awarded to	Date of issued LAO	Contract Value	Stipulated completion date	Completion period	Actual date of Completion	Total delayed in days (on August 2024)	Amount of Liquidated Damage	Amount withheld	Reasons for delay	Additional payment to SQC for extended period
1	Payli	M/s Larsen & Turbo Limited, Bhopal	13.12.2018	645.46	03.07.21	30 months	ongoing	1155 (Maximum)	64.54	8.46	insufficient deployment of manpower and machinery	2.34
2	Sagad Hinotiya	M/s Offshore Infrastructures Limited	10.04.2017	126.79	09.04.19	24 months	Ongoing	1971 (Maximum)	12.68	0.00	Doing work very slowly	4.32
3	Bansujara (Badamalhera)	M/s Larsen & Turbo Limited, Bhopal	18.04.2017	187.00	17.04.19	24 months	30.06.2024	1901 (Maximum)	18.70	0.00	GM attributed 275 days of delay on the part of the contractor	2.72
Total (₹ 95.92 – ₹ 8.46 = ₹ 87.46)									95.92	8.46		9.38

Appendix 9

Statement showing extra burden on state exchequer for cost increment due to unrealistic cost estimation

(₹ in crore)

Sl. No.	Districts	Number of Scheme	Approved Cost	Revised cost submitted	Extra cost
1	Chhatarpur	54	38.42	68.71	30.29
2	Gwalior	25	26.89	41.30	14.41
3	Tikamgarh	81	108.12	139.70	31.58
4	Vidisha	154	100.64	160.11	59.48
5	Narmadapuram	41	32.76	44.26	11.37
6	Jhabua	124	170.79	225.93	55.14
7	Narsinghpur	233	70.96	151.78	80.82
8	Dindori	141	120.09	165.33	45.24
	Total	853	668.67	997.12	328.33

Appendix 10

Statement showing extra cost due to providing FHTC by crossing

(Amount in ₹)								
Sl. No.	Districts	Agt. No.	Provision of FHTC in the BOQ by crossing the road	Provision of FHTC in the BOQ without crossing the road	Total FHTC	Actually, executed by the Division by crossing the road	Actually, executed by the Division without crossing the road	Extra cost
Excess provision in BOQ/estimate								
1	Chhatarpur	55/2021-22	576	288	864	148	26	92,108
		14/2020-21	145	58	203	130	67	68,446
2	Narmadapuram	61/2020-21	261	68	329	191	96	66,734
3	Narsinghpur	16/2021-22	338	250	588	276	161	71,690
4	Tikamgarh	75/2020-21	564	62	626	564	62	3,27,592
		41/2020-21	1,460	0	1,460	950	0	5,68,574
		11/2020-21	291	239	530	410	0	2,00,620
Total for excess provision			3,635	965	4,600	2,669	412	13,95,764
Short provision in BOQ/estimate								
1	Gwalior	57/2022-23	295	329	624	829	90	5,89,948
		48/2020-21	691	846	1,537	960	48	7,89,862
		65/2021-22	491	599	1,090	463	74	3,66,825
		52/2020-21	689	842	1,531	1,381	45	8,49,868
2	Narsinghpur	60/2021-22	150	457	607	385	182	1,79,735
3	Vidisha	58/2020-21	195	417	612	347	123	58,936
		44/2020-21	159	232	391	308	96	1,27,107
Total short provision			2,670	3,722	6,392	4,673	658	29,62,281
Grand Total								43,58,045

Appendix 11

Statement showing invitation of tender on PAC including GST

(₹ in lakh)							
Sl. No.	Particulars	Gopi krishna, MVS			Rajghat, MVS		
		Cost as per SOR	Deduct GST	Cost as per DPR*	Cost as per SOR	Deduct GST	Cost as per DPR
1	Intake well	288.45	259.61	290.76	376.97	339.28	379.99
2	Provision for construction Treatment Plant etc.	551.64	496.47	556.05	1,274.02	1,146.62	1,284.21
3	Raw water Reservoir cum pumphouse at IPS	0.00	0.00	0.00	430.69	387.63	434.14
4	Clear Water Reservoir including MBR etc.	570.21	513.19	574.77	2,147.72	1,932.95	2,164.9
5	Pumping sets	675.00	607.50	680.4	51,65.63	4,649.06	5,206.95
6	Pumping Main	8,217.65	7,395.88	8,283.39	45,776.01	41,198.41	46,142.22
7	Gravity Main	21,498.49	19,348.64	21,670.48	77,564.17	69,807.75	78,184.68
8	Overhead Tank	3,412.24	3,071.02	3,439.54	14,948.42	13,453.58	15,068.01
9	Staff Quarters	194.41	174.97	195.97	257.85	232.06	259.91
10	Distribution System	7,214.16	6,492.74	7,271.87	32,446.87	29,202.18	32,706.44
11	Provision for Electrical work including Sub Station	614.55	553.10	619.47	1,449.25	1,304.32	1,460.84
Total		₹43,236.81	₹38,913.13	₹43,582.70	₹1,81,837.59	₹1,63,653.83	₹1,83,292.29
PAC to be decided		₹43,236.13 - 10 % =		₹38,913.13	₹1,81,837.59 - 10 % =		₹1,63,653.83
PAC decided		₹43,582.70 - 10% =		₹39,224.43	₹1,83,292.29 - 10% =		₹1,64,963.06
Total Difference		₹39,224.43 - ₹38,913.13		₹311.30	₹1,64,963.06 - ₹1,63,653.83		₹1,309.23

*In the DPR cost was derived by deduction 10% from the cost of SOR and adding 12% GST. Further, PAC was decided by again deducting 10% from DPR rate

Appendix 12

Statement showing systemic deficiency resulting in lack of uniformity in average FHTC cost in SVS

Sl. No.	District	No. of scheme	Sanction cost (in lakh)	Proposed FHTC	Average per FHTC cost	Extra cost	(Amount in ₹)
							Median for percentage variation
1	Chhatarpur	100	7,267.67	17,733	40,984	20,86,133	62
2	Dindori	363	26,110.36	70,198	37,195	57,53,617	52
3	Gwalior	387	28,496.78	66,209	43,041	1,15,69,346	85
4	Jhabua	643	76,614.80	1,46,758	52,205	2,29,16,796	121
5	Naramadarpuram	441	25,561.47	72,796	35,114	55,44,996	26
6	Narsinghpur	359	12,465.10	35,954	34,670	59,35,186	39
7	Tikamgarh	386	38,317.07	1,11,877	34,249	51,15,967	37
8	Vidisha	381	16,848.78	48,682	34,610	57,58,835	39
Total		3,060	2,31,682.03	5,70,207	40,631	6,46,80,876	

Statement showing systemic deficiency resulting in lack of uniformity in average FHTC cost in MVS

Sl. No.	Name of scheme	Estimated Cost	No. of FHTC	Average per FHTC cost	(₹ in crore)
					Excess cost of Scheme
1	Sagad Hinotiya	169.36	26,573	63,734	44.47
2	Bansujara (Badamalhera)	210.85	27,158	77,638	83.21
3	Bansujara (Tikamgarh)	376.14	41,778	90,033	179.78
4	Payli	749.17	99,990	74,924	279.22
Total		1,505.52	1,95,499		586.67

Appendix 13

Statement showing unauthorised execution and payment of extra items and quantities

Sl. No	Districts	Agreement No.	Name of item	Unit	Quantity as per BOQ	Executed Quantity	Excess quantity	Rate	Tender %	Amount
(Amount in ₹)										
1	Dindori	110/2021-22	Excavation in earth work	Cu M	2004	2384	380.000	140.00	-8.51	48673
			HDPE pipes	M	1500	2100	600.000	388.00	-8.51	212989
			Brick masonry valve chamber	Nos	48	67	19.000	6219.00	-8.51	108105
2	Gwalior	52/2020-21	90 mm dia 6kg/sq cm HDPE pipe	M	9350.000	14400.000	5050.000	232.00	-10.99	1042841
			110 mm dia 6kg/sq cm HDPE pipe	M	1775.000	2275.000	500.000	388.00	-10.99	172679
			140 mm dia 6kg/sq cm HDPE pipe	M	1035.000	2285.000	1250.000	563.00	-10.99	626408
3		57/2022-23	Deep well submersible pump set	Nos	0.000	7.000	7.000	41975.00	-3.77	282748
			Open well submersible pump set	Nos	2.000	4.000	2.000	23370.00	-3.77	44978
			Excavation in soft rock	Cu M	1978.000	4347.470	2369.470	255.00	-3.77	581436
			Demolishing of CC road	Cu M	269.400	736.960	467.560	745.00	-3.77	335200
			Restoration of CC road (M-20)	Cu M	27.000	644.720	617.720	4645.00	-3.77	2761136
			110 mm dia 10 kg/sq cm HDPE pipe	M	1400.000	2381.000	981.000	515.00	-3.77	486168
			90 mm dia 6 kg/sq cm HDPE pipe	M	2000.000	4559.300	2559.300	228.00	-3.77	561522
			110 mm dia 6 kg/sq cm HDPE pipe	M	600.000	794.000	194.000	366.00	-3.77	68327
			Filling of available excavated earth	Cu M	5122.390	6645.070	1522.680	24.00	-3.77	35167
			FHTC	Nos	484.000	709.000	225.000	2830.00	-3.77	612745
			Electro fusion coupler	Nos	0.000	122.000	122.000	476.00	-3.77	55883
					0.000	92.000	92.000	678.00	-3.77	60024
4		48/2020-21	Excavation in soil	Cu M	3304.560	4699.310	1394.750	140.00	-3.70	188040
			Demolishing CC road	Cu M	231.760	352.250	120.490	745.00	-3.70	86444
			Filling available earth	Cu M	1662.600	1902.020	239.420	37.00	-3.70	8531
			90 mm dia 6 kg/ sq cm	M	1325.000	2295.000	970.000	232.00	-3.70	216714

Sl. No	Districts	Agreement No.	Name of item	Unit	Quantity as per BOQ	Executed Quantity	Excess quantity	Rate	Tender %	Amount
			110 mm dia 10 kg/ sq cm	M	0.000	510.000	510.000	518.00	-3.70	254405
5	Jhabua	77/2020-21	FHTC	Nos	500.000	726.000	226.000	2030.00	-1.22	453183
6	Tikamgarh	75/2020-21	Dismantling of CC road	Cu M	187.500	492.500	305.000	968.00	-9.55	267045
			Restoration of CC road	Cu M	191.250	499.500	308.250	4661.00	-9.55	1299543
			90 mm dia 6kg/sq cm HDPE pipe	M	3592.000	4960.000	1368.000	232.00	-9.55	287067
			Brick masonry valve chamber	Nos	8.000	15.000	7.000	6500.00	-9.55	41155
			Filling of available excavated earth	Cu M	3388.500	4185.000	796.500	24.00	-9.55	17290
Total										1,12,16,446

Appendix 14

Statement showing excess payment to the contractor

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks	(Amount in ₹)
Incorrect rate for refilling of excavated available soil											
1	Chhatarpur	14/2020-21	16.10 (a)	Refilling of excavated soil	1481.350	Cu M	13.00	-8.86	17,551.00	Filling of excavated soil in trenches was not done by ramming, watering, and in layers not exceeding 20 cm, but payment was made with higher rate as item no. 16.10(a) at ₹ 37 per Cu. M. instead of as item no. 16.10(b) at ₹ 24 per Cu. M.	
2	Dindori	34/2018-19	16.10 (b)		5489.420	Cu M	13.00	13.97	81,332.00		
3	Gwalior	65/2021-22			6467.640	Cu M	13.00	-14.78	71,652.00		
4		52/2020-21			9033.400	Cu M	13.00	-10.99	1,04,528.00		
5		48/2020-21			7543.260	Cu M	13.00	-3.70	94,434.00		
6	Jhabua	03/2021-22			21936.430	Cu M	13.00	-8.01	2,62,331.00		
7		46/2020-21			6616.000	Cu M	13.00	-3.15	83,299.00		
8	Narsinghpur	48/2020-21		21936.430	Cu M	13.00	-6.31	2,67,179.00			
9	Tikamgarh	11/2020-21		3445.200	Cu M	13.00	-8.83	40,833.00			
10	Vidisha	58/2020-21		2989.700	Cu M	13.00	-2.60	37,856.00			
11		44/2020-21		2325.710	Cu M	13.00	-17.00	25,094.00			
7	11	Total				10,86,089.00					
Non-recovery of rate of Flat Cable											
1	Chhatarpur	14/2020-21	24.20.10	Flat Cable	1628.000	M	167.00	-8.86	2,47,788.00	The Government ordered (April 2023) to recover the amount paid for the item of flat cable, but the recovery was not done yet by the Department.	
2	Dindori	73/2020-21	7		6500.000	M	71.40	-16.55	3,87,291.00		
3	Gwalior	52/2020-21			4637.000	M	47.60	-16.55	1,84,192.00		
4		48/2020-21			449.500	M	167.00	-10.99	66,817.00		
5	Narsinghpur	48/2020-21			-	-	-	-3.70	87,000.00		
6		60/2021-22			510.000	M	167.00	-6.31	79,796.00		
7	Tikamgarh	53/2020-21			240.000	M	167.00	-11.11	35,627.00		
					7268.360	M	119.00	-0.39	8,61,562.00		

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks
8		77/2020-21			4589.000	M	119.00	-15.60	4,60,901.00	
9		11/2020-21			2125.000	M	167.00	-8.83	3,23,540.00	
5		9			Total				27,34,514.00	
Excess quantity of supply & laying of HDPE pipe										
1	Gwalior	57/2022-23	9.1	HDPE pipe	3468.200	M	-	-3.77	7,50,669.00	The payment for supply of the pipes i.e. 60 per cent was made in excess than actually laid quantity.
					2388.900	M	-	-3.77	3,28,332.00	The payment of laying of HDPE pipes i.e. 40 per cent was made in excess than actually supplied quantity of HDPE pipes.
2		48/2020-21			944.000	M	-	-3.70	3,89,184.00	The Bhoori, Rarua and Surajpur schemes of this agreement were handed over to the respective Gram Panchayat. But the payment for supply of the pipes i.e. 60 per cent was made in excess than actually laid quantity.
					3436.000	M	-	-3.70	14,79,658.00	The payment of laying of HDPE pipes i.e. 40 per cent was made in excess than actually supplied quantity of HDPE pipes, which was not possible to laid the pipeline in excess than the supplied quantity of pipeline.
3	Tikamgarh	75/2020-21			1639.000	M	-	-9.55	4,15,086.00	The scheme was completed and handed over to the Gram Panchayat. But the payment for supply of the pipes i.e. 60 per cent was made in excess than actually laid quantity.
2		3			Total				33,62,929.00	
Incorrect Measurements										
1	Gwalior	57/2022-23	16.6 (a)	Excavation of soft rock	529.200	Cu M	255.00	-3.77	1,29,859.00	Measurement excavation, laying of pipeline and refilling was recorded for location of OHT to Devendra, Devendra to main road (Abhishek Kirana) and Abhishek Kirana to Panchayat Bhawan was recorded (Page No. 12, 13 & 14) and paid. However, double measurements of the same location i.e. Devendra to main road and Devendra to Panchayat Bhawan was also recorded (Page No. 14, 15 & 16) and paid to the contractor.
			9.1	90 mm dia HDPE pipe	894.700	M	228.00	-3.77	1,96,301.00	
			16.10 (b)	Refilling of excavated soil	529.200	Cu M	24.00	-3.77	12,222.00	
		20.24.10 6		Deep well submersible pump	3.000	Nos	41975.00	-3.77	1,21,178.00	Five sump wells were constructed, and a total of ten successful bore well were drilled but payment of 13 deep

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks
2		52/2020-21	24.20.11 3	Open well submersible pump	5.000	Nos	23370.00	-3.77	1,12,445.00	well submersible pump and 10 open well submersible pump was made to the contractor
			16.10 (a)	Refilling of excavated soil	1589.900	Cu M	37.00	-10.99	52,361.00	Quantity of dismantling of Kharanja in Dhiroli (430.25 Sqm in MB 20/21-22, p/3-8), Purabanbar (627.22 Sqm in MB 24/20-21, p/4-10), CC demolish in Himmatgarh (98.50 cum+55.90Cum+89.14 Cum in MB 50/21-22, p/1-8,21), Banawar (53.55 cum+235.34 Cum, MB 23/20-21, p/15-25) was incorrectly added in the quantity of refilling.
			48/2020-21	16.10 (b)	Refilling of excavated soil	595.990	Cu M	37.00	-3.70	21,236.00
3			20.24.10 6	Deep well submersible pump	1.000	Nos	49845.00	-3.70	48,001.00	Five sump wells were constructed, and a total of ten successful bore well were drilled but payment of excess quantity deep well submersible pump in Bhoari PWSS and excess quantity of open well submersible pump was made in Amroul, Bhoari and Rarua PWSS to the contractor against the required quantity.
			24.20.11 3	Open well submersible pump	4.000	Nos	23917.00	-3.70	92,128.00	
4	Tikamgarh	75/2020-21	16.10 (b)	Refilling of excavated soil	686.920	Cu M	24.00	-9.55	14,912.00	The item no. 16.4 'earthwork in excavation of all kind of soil' was executed and paid in 3156.38 cum and item no. 16.6(a) 'earthwork in excavation in soft rock' was executed and paid in 1136.70 cum but item no. 16.10(b) 'filling of available of excavated soil' was executed and paid in 4980.00 cum against the total payable of quantity of 4293.08 cum (3156.38 cum + 1136.70 cum).
5		24/2020-21	24.20.11 3	Open well submersible pump	3.000	Nos	23917.00	-14.95	61,024.00	The three sump wells were executed under this agreement hence three open well submersible pump are required. But payment of 6 open well submersible pump was made to the contractor against the requirement.
2		5	Total		8,61,667.00					
Payment without measurements										
1	Tikamgarh	75/2020-21	9.1	90 mm dia HDPE pipe	1345.000	M	232.00	-9.55	2,82,240.00	The measurement of laying of 90 mm dia HDPE was recorded in 3635 m (MB page no. 23,30-31,39,53) but payment was made for 4980 m and the measurement of laying of 160 mm dia HDPE pipe was recorded in only 340 m (MB page no. 23,31) but payment was made for 790 m. Further, the measurement of restoration of CC road was recorded in 417.20 cum (MB page no. 32,38,53) but
			9.1	160 mm dia HDPE pipe	450.000	M	753.00	-9.55	3,06,490.00	
			16.22	CC road restoration	82.300	Cu M	4661.00	-9.55	3,46,966.00	

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks
2		24/2020-21	17.41	FHTC	102.000	Nos	990.00	-9.55	91,336.00	payment was made for 499.50 cum. Thus, fraudulent payment of 90 mm dia and 160 mm dia HDPE pipe and CC road restoration was made to the contractor without measurements which is also certified by then AE.
										The measurements of providing 164 household connection without road crossing was recorded and 118 household connection with CC road crossing up to 10 m was recorded (page no. 31,54) by sub-engineer which was also checked by then Assistant Engineer, but payment was made for 62 household connection without road crossing and 220 with CC road crossing up to 10 m to the contractor. This shows that the quantity of costlier item of household connections with CC road crossing was fraudulently increased while preparing the bill and paid to the contractor.
			9.1	90/6 mm dia HDPE pipe	325.000	M	232.00	-14.95	64,128.00	Excess quantity of laying of 90 mm dia 6 kg/sq cm HDPE pipe, 90 mm dia 10 kg/sq cm HDPE pipe, 110 mm dia 6 kg/sq cm HDPE pipe, excavation of soil and refilling of excavated available soil was paid against the measured quantity.
			9.1	90/10 mm dia HDPE pipe	1500.000	M	353.00	-14.95	4,50,340.00	
			9.1	110/6 mm dia HDPE pipe	41.000	M	388.00	-14.95	13,530.00	90/6 mm dia HDPE pipe (4-10, 10-15, 20-22, 29-30, 37-38)
			16.4	Excavation in all kinds of soil	580.800	Cu M	140.00	-14.95	69,156.00	90/10 mm dia HDPE pipe (20-22, 37-38, 55-56)
			16.10 (b)	Refilling of excavated soil	649.920	Cu M	24.00	-14.95	13,266.00	Excavation in all kinds of soil & Refilling of excavated soil (4-10, 10-15, 20-22, 26-27, 28-29, 29-30, 37-38, 40-41, 55-56)
1		2			Total				16,37,452.00	
Excess quantity of road restoration										
1	Chhatarpur	55/2021-22	16.23	Road restoration	29.673	Cu M	4695.00	-17.51	1,14,921.00	The quantity of restoration work of CC road was in excess of the quantity of demolition work.
2	Gwalior	48/2020-21			233.550	Cu M	4695.00	-3.70	10,55,946.00	Quantity of road restoration was paid higher than the quantity of demolishing of CC road in Amroul schemes.
3	Vidisha	44/2020-21			9.599	Cu M	5161.00	-17.00	41,119.00	The quantity of restoration work of CC road was in excess of the quantity of demolition work.

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks
3		3			Total				12,11,986.00	
Non-construction of FHTC standpost and platform										
1	Gwalior	52/2020-21	17.41	FHTC	1426.000	Nos	500.00	-10.99	6,34,641.00	TPI has specifically mentioned in RA bill No. 5 th , 6 th & 7 th that standposts were not constructed in FHTC connections, which was also observed during joint physical inspection of Pura Banawar village but recovery for that account at the rate of ₹ 500 per cum was not done.
2		57/2022-23			829.000	Nos	500.00	-3.77	3,98,873.00	TPI has specifically mentioned that FHTC connections were made without platform, parapet and grouting in standpost but recovery for that account at the rate of ₹ 500 per cum was not done.
3		48/2020-21			960.000	Nos	500.00	-3.70	4,62,240.00	TPI has specifically mentioned that FHTC connections were made without platform, parapet and grouting in standpost but recovery for that account at the rate of ₹ 500 per cum was not done.
1		3			Total				14,95,754.00	
Double payment of supply of HDPE due to laying HDPE pipe through HDD method										
1	Narsinghpur	74/2021-22	9.1 & 16.3	HDPE pipe	-	-	-	-	6,05,245.00	laying of HDPE pipe by HDD method. 90mm and 110mm pipes laid by HDD machine under item no. 16.3. Thus, payment for laying water supply piped under item no. 9.1 was not required ((6400*69.60) = 4,45,440 (1950*116.40)=226980 Total=672420 ic -9.99% TP= 6,05,245
1		1			Total				6,05,245.00	
Advance payment without execution of work										
1	Tikamgarh	75/2020-21	-	-	-	-	-	-9.55	2,70,000.00	The payment of ₹ 129.20 lakh (excluding GST) up to 7 th running account bill was made to the contractor against the value of work done. But after completion of the scheme final bill of (-) ₹ 2.70 lakh was prepared by the Department, which was pending since 15-02-2024.
1		1			Total				2,70,000.00	
Incorrect deduction of previous payment from next RA bill										

Sl. No.	District	Agt. No.	Item No.	Name of item	Qty.	Unit	Rate	Tender %	Amount	Remarks
1	Namdadapuram	47/2022-23	-	-	-	-	-	-	1,71,514.00	Excess payment of ₹ 1,71,514 has been made to the contractor. VI th RA bill that ₹ 1,80,74,861 has been deducted instead of ₹ 1,82,25,066.71 from the amount of up-to date executed work.
1		1			Total				1,71,514.00	
					Separate payment of MDPE pipe					
1	Gwalior	65/2021-22	9.9	MDPE pipe	1225.000	M	36.00	-14.78	37582	Separate payment of 20mm MDPE pipe was made, which was already included in FHTC items
1		1			Total				37,582.00	
				Grand Total					1,34,74,732.00	

Appendix 15

Statement showing execution and payment of pipes without CIPET report

Sl. No.	District	Agreement No.	HDPE pipe	Quantity executed and paid	Quantity tested as per CIPET report	Difference	Rate	Tender %	Amount
1	Gwalior	57/2022-23	90 mm dia 6 kg/ sq cm	11145.40	9300.00	1845.40	228	-3.77	4,04,889
2		48/2020-21	90 mm dia 6 kg/ sq cm	11054.00	0.00	11054.00	232	-3.70	24,69,640
			110 mm dia 6 kg/ sq cm	1631.00	0.00	1631.00	388	-3.70	6,09,413
			110 mm dia 10 kg/ sq cm	4605.00	0.00	4605.00	518	-3.70	22,97,131
			140 mm dia 6 kg/ sq cm	848.00	0.00	848.00	563	-3.70	4,59,759
3	Tikamgarh	24/2020-21	90 mm dia 10 kg/ sq cm	4000.00	0.00	4000.00	353	-14.95	12,00,906
			90 mm dia 6kg/ sq cm	3900.00	0.00	3900.00	232	-14.95	7,69,532
			110 mm dia 6kg/ sq cm	1200.00	0.00	1200.00	388	-14.95	3,95,993
								Total	86,07,263

Appendix 16

Statement showing short deduction of royalty

Sl. No.	District	Agreement No.	Item	Quantity	Factor	Item	Quantity	Rate	Amount	Total royalty	Royalty deducted	Short deduction	Job work items for which royalty could not be calculated
1	Chhatarpur	55/2021-22	M-15	222.482	0.88	Metal	195.784	120	23,494	36,009	0	36,009	-
					0.45	Sand	100.117	125	12,515				
2		14/2020-21	M-15	115.16	0.88	Metal	101.341	120	12,161	18,639	16,550	2,089	-
					0.45	Sand	51.822	125	6,478				
3	Gwalior	65/2021-22	M-15	300.55	0.88	Metal	264.484	120	31,738	48,644	10,000	38,644	2 OHT & 5 sump well
					0.45	Sand	135.248	125	16,906				
4		52/2020-21	M-20	850.05	0.856	Metal	727.643	120	87,317	1,32,795	0	1,32,795	4 OHT, 4 sump well & 4 pump house
					0.428	Sand	363.821	125	45,478				
5		57/2022-23	M-20	644.72	0.856	Metal	551.88	120	66,226	1,00,719	0	1,00,719	

Sl. No.	District	Agreement No.	Item	Quantity	Factor	Item	Quantity	Rate	Amount	Total royalty	Royalty deducted	Short deduction	Job work items for which royalty could not be calculated
6		48/2020-21	M-10	8.59	0.428	Sand	275.94	125	34,493	1,13,320	0	1,13,320	3 OHT, 5 sump well & 5 pump house
						Metal	7.783	120	934				
			M-20	640.343	0.453	Sand	3.891	125	486				
						Metal	548.133	120	65,776				
			M-15	73.31	0.428	Sand	274.067	125	34,258				
7	Tikamgarh	75/2020-21	-	-	-	-	516.096	120	61,932	1,26,443	61,800	64,643	-
							258.045	250	64,511				
							217.064	120	26,048				
8		24/2020-21	M-20	253.58	0.856	Metal	217.064	120	26,048	53,181	28,400	24,781	3 sump well & 3 pump house
			M-20	488.788	0.428	Sand	108.532	250	27,133				
9	Vidisha	44/2020-21	M-20	488.788	0.856	Metal	418.403	120	50,208	76,358	7,000	69,358	4 sump well
			M-20	209.201	0.428	Sand	209.201	125	26,150				
10	Narmadapuram	52/2020-21	M-20	129.27	0.856	Metal	110.652	120	13,278	20,194	0	20,194	
			M-20	14.74	0.428	Sand	55.326	125	6,916				
11		53/2021-22	M-20	14.74	0.856	Metal	12.617	120	1,514	2,303	0	2,303	
			M-20	1632.92	0.428	Sand	6.309	125	789				
12		47/2022-23	M-20	1632.92	0.856	Metal	1397.78	120	1,67,734	2,55,095	0	2,55,095	
			M-20	42.18	0.428	Sand	698.89	125	87,361				
13	Jhabua	37/2022-23	M-20	42.18	0.856	Metal	36.106	120	4,333	6590	0	6,590	
			M-20	435.46	0.428	Sand	18.053	125	2,257				
14		77/2021-22	M-20	435.46	0.856	Metal	372.754	120	44,730	68,027	0	68,027	
			M-20	26.18	0.428	Sand	186.377	125	23,297				
15		03/2021-22	M-20	26.18	0.856	Metal	22.41	120	2,689	4,090	0	4,090	
			M-20	100.79	0.428	Sand	11.205	125	1,401				
16		46/2020-21	M-20	100.79	0.856	Metal	86.276	120	10,353	15,745	0	15,745	

Sl. No.	District	Agreement No.	Item	Quantity	Factor	Item	Quantity	Rate	Amount	Total royalty	Royalty deducted	Short deduction	Job work items for which royalty could not be calculated
17	Narsinghpur	74/2021-22	M-20		0.428	Sand	43.138	125	5,392				
			M-20	9.82	0.856	Metal	8.406	120	1,009	1,534	0	1,534	
			M-15	273.66	0.428	Sand	4.203	125	525	44,292	0	44,292	
18		60/2021-22	M-15	411.35	0.88	Metal	361.988	120	43,439	66,578	0	66,578	
			M-20	9.75	0.45	Sand	185.108	125	23,139	1,524	0	1,524	
19		48/2021-22	M-15	644.69	0.856	Metal	8.346	120	1,002	1,04,343	0	1,04,343	
			M-20	20.86	0.428	Sand	4.173	125	522	3,376	0	3,376	
			M-15	28.94	0.88	Metal	25.467	120	3,056	4,684	0	4,684	
20	Dindori	120/2021-22	M-15	577.5	0.45	Sand	13.023	125	1,628	93,468	0	93,468	
21		73/2020-21	M-15	101.9	0.88	Metal	89.672	120	10,761	16,493	0	16,493	
22		110/2021-22	M-15		0.45	Sand	259.875	125	32,484				
23		115/2021-22	M-15		0.88	Metal	45.855	125	5,732				
Total										14,14,444	1,23,750	12,90,694	

Appendix 17

Statement showing non deduction of amount pertains to royalty

(Amount in ₹ & Quantity in Cu.M.)

Grade of Concrete	Total Qty.	Sand Qty.	Rate	Amount	Metal Qty.	Rate	Amount	Total
Sagad Hinotiya, MVS in Vidisha district								
M30-in cum	3515.27	1898.24			2847.37			
M25-in cum	1593.75	860.63			1290.94			
M20-in cum	1597.85	683.88			1367.76			
M15-in cum	127.10	57.20			111.85			
M10-in cum	770.52	349.05			698.09			
Sub Total		3848.99	125.00	4,81,124	6316.01	120.00	7,57,921	12,39,045
Payli, MVS in Narsinghpur district								
M30-in cum	35050.156	29406.461			44109.691			
M25-in cum	9418.017	2377.034			3565.550			
M20-in cum	4943.419	685.940			1371.879			
M15-in cum	5887.168	0			0.000			
M10-in cum	467.937	274.365			548.731			
Sub Total		32743.799	125.00	40,92,975	49595.851	120.00	59,51,502	1,00,44,477
Bansujara (Badamalhera), MVS in Chhatarpur district								
M30-in cum	54456.41	29404.361			44106.541			
M25-in cum	4401.914	2317.034			3475.648			
M20-in cum	1602.663	691.223			1382.446			
M15-in cum	0	0			0.000			
M10-in cum	605.662	273.021			546.042			
Sub Total		32685.704	125.00	40,85,713	49510.677	120.00	59,41,281	1,00,26,994
Bansujara (Tikamgarh), MVS in Tikamgarh district								
M30-in cum	49798.231	26891.045			40336.567			
M25-in cum	2484.587	1341.677			2012.516			
M20-in cum	826.200	353.613			707.227			
M15-in cum	5.902	2.656			5.194			
M10-in cum	126.398	57.258			114.516			
Sub Total		28646.249	125.00	35,80,781	43176.020	120.00	51,81,122	87,61,903
Grand Total				1,22,40,593			17,83,1,826	3,00,72,419

(Note: This data has been compiled from the estimates (DPR), and the amount of recoverable royalty may be increase due to positive variation of RCC Items)

Appendix 18

Statement showing non deduction of amount pertain to Hard rock

		(Quantity in Cu.M.)
Sl. No.	Name of Components	Qty. of Hard Rock
(1) Sagad Hinotiya MVS under Vidisha district		
1	Constr. Of intake well	31.995
2	Constr. Of foot bridge 70m long	13.500
3	Raw water pumping main	300.000
4	Constr. Of 28 mld treatment plant	610.830
5	Constr. Of 560 KL Clear water sumpwell	306.000
6	Back Washroom	24.042
7	Constr. Of staff qtrs.	11.620
8	Constr. Of compound wall of filtration plant	22.890
9	Const. of building at WTP	209.420
10	Clear water Pumping Main Zone-1	1783.130
11	Clear water Pumping Main Zone-2	884.030
12	Distribution Network	47697.000
Total		51894.457
51894.457 cum X ₹ 65 = ₹ 33,73,140		
(2) Payli MVS under Narsinghpur district		
1	Intake Well	1476.54
2	RWP	453.05
3	CWR Cum Pump House	2156.12
4	CW PUMPING MAIN	8159.36
5	MBR 05 No.	1018.42
6	CW Feeder Gravity Main	38804.42
7	OHT STANDARD 265 No. OHT 43.74 cum X 265	11591.10
8	Distribution Network	57338.92
Total		120997.93
120997.93 cum X ₹ 65 = ₹ 78,64,865		
(3) Bansujara (Badamalhera), MVS under Chhatarpur district		
1	Intake Well	913.151
2	Approach Channel	1014.300
3	Approach Bridge	83.250
4	Raw Water Rising Main	3618.000
5	CWR Cum Pump House	170.150
6	MBR	127.520
7	GRAVITY MAIN	17425.550
10	OHT STANDARD 450 OHT 24X 450 (no. of OHTs 24 and quantity of OHTs are 100 KL to 980KL)	3309.120
11	Distribution Network	87343.800
Total		114004.841

Sl. No.	Name of Components	Qty. of Hard Rock
114004.841 cum X ₹ 65 = ₹ 74,10,315		
(4) Bansujara (Tikamgarh), MVS under Tikamgarh district		
1	Intake well cum Pump house	575.82
2	Constr. Of Approach Bridge 150m long	607.50
3	Raw Water Pumping Main	438.78
4	Clear Water Gravity Main	143843.00
5	Clear Water pumping Main	9696.00
6	Distribution Network in bituminous line	14653.00
7	Distribution Network in ordinary line	48576.00
Total		218390.10
218390.10 cum X ₹ 65 = ₹ 1,41,95,357		
Grand Total (1) +(2) +(3) +(4) = 5,05,287.328 cum X ₹ 65 = ₹ 3,28,43,676		

(Note: This data has been compiled from the estimates (DPR), and the amount of recoverable hard rock may be increase due to positive variation of RCC Items)

Appendix 19

Community contribution (PHED)

(₹ in lakh)

Sl. No	Name of Division	Total Schemes	Sanction cost	Amount of Community Contribution	Community Contribution collected	Community Contribution to be collected
1	Chhatarpur	204	14,374.57	1,316.00	21.00	1,295.00
2	Dindori	448	32,375.65	1,618.30	0	1,618.30
3	Gwalior	455	34,587.72	3,143.00	0	3,143.00
4	Jhabua	716	87,068.02	4,353.40	0	4,353.40
5	Narmadapuram	858	39,258.16	3,925.81	0	3,925.81
6	Narsinghpur	894	29,176.20	2,917.62	0.66	2,916.96
7	Tikamgarh	473	48,753.51	4,561.00	0	4,561.00
8	Vidisha	522	24,562.79	2,339.00	5.02	2,333.98
Total		4,570	3,10,156.62	24,174.13	26.68	24,147.45

Appendix 20

Statement showing extra burden on Central and State Government

(₹ in lakh)

Sl. No.	District	Total expenditure	Central Share			State Share		
			To be booked	Booked	Extra burden	To be booked	Booked	Extra burden
1	Chhatarpur	5,731.13	2,579.01	2,930.68	351.67	2,579.01	2,800.45	221.44
2	Dindori	27,403.04	12,331.37	13,701.52	1,370.15	12,331.37	13,701.52	1,370.15
3	Gwalior	21,397.89	9,629.05	10,700.41	1,071.36	9,629.05	10,697.47	1,068.42
4	Jhabua	45,759.22	20,591.65	22,879.59	2,287.94	20,591.65	22,879.59	2,287.94
5	Narmadapuram	19,103.68	8,596.66	9,551.83	955.17	8,596.66	9,551.83	955.17
6	Narsinghpur	19,105.07	8,597.28	9,602.85	1,005.57	8,597.28	9,502.22	904.94
7	Tikamgarh	18,841.43	8,478.64	9,420.72	942.08	8,478.64	9,420.72	942.08
8	Vidisha	19,358.51	8,711.33	9,679.25	967.92	8,711.33	9,679.25	967.92
Total		1,76,699.97	79,514.99	88,466.85	8,951.86	79,514.99	88,233.05	8,718.06

Appendix 21

Community contribution (Jal Nigam)

(₹ in crore)

Sl. No.	Schemes	Total Cost	Cost of in-village infrastructure		Community Contribution
			In per cent	Amount	
1	Sagad Hinotiya	126.79	50.87	64.50	6.45
2	Bansujara (Badamalhera)	187.00	58.84	110.03	11.00
3	Bansujara (Tikamgarh)	255.55	33.18	84.79	8.48
4	Payli	645.46	31.02	200.22	20.02
Total		1,214.80		459.54	45.95

Appendix 22

Statement showing variation in component-wise expenditure by PHED for Gwalior, Jhabua, Narmadapuram, Narsinghpur, Tikamgarh and Vidisha district

Sl. No.	Year	Total expenditure	Coverage fund		Support activities		WQM&S fund	
			₹ in lakh	in %	₹ in lakh	in %	₹ in lakh	in %
1	2019-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2020-21	7,269.82	7,082.85	97.43	56.36	0.78	130.63	1.80
3	2021-22	34,474.79	34,326.86	99.57	100.90	0.29	47.03	0.14
4	2022-23	43,456.31	42,465.74	97.72	557.18	1.28	433.38	1.00
5	2023-24	58,364.85	57,062.74	97.77	697.69	1.20	604.40	1.04
Total		1,43,565.77	1,40,938.2	98.17	1,412.13	0.98	1,215.44	0.85
As per JJM norms					7,178.29	5%	2,871.32	2%

Statement showing variation in component-wise expenditure by PHED for Chhatarpur district

1	2019-20	0	0	0.00	0.00	0.00	0.00	0.00
2	2020-21	784.82	738.9	94.15	0.12	0.02	45.80	5.84
3	2021-22	1,340.65	1279.2	95.42	37.31	2.78	24.14	1.80
4	2022-23	1,624.50	1,341.34	82.57	148.11	9.12	135.05	8.31
5	2023-24	1,981.16	1,720.52	86.84	181.00	9.14	79.64	4.02
Total		5,731.13	5,079.96	88.64	366.54	6.40	284.63	4.97
As per JJM norms					286.56	5%	114.62	2%
Difference in Actual expenditure and norms					79.98		170.01	

Statement showing variation in component-wise expenditure by PHED for Dindori district

1	2019-20	0	0	0.00	0.00	0.00	0.00	0.00
2	2020-21	1,413.48	1,369.43	96.88	6.91	0.49	37.14	2.63
3	2021-22	8,160.38	7,889.21	96.68	19.97	0.24	251.20	3.08
4	2022-23	8,587.72	8,332.36	97.03	45.98	0.54	209.38	2.44
5	2023-24	9,241.46	8,809.07	95.32	115.91	1.25	316.48	3.42
Total		27,403.04	26,400.07	96.34	188.77	0.69	814.2	2.97
As per JJM norms					1,370.15	5%	548.06	2%
Difference in Actual expenditure and norms					-1,181.38		266.14	

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Sl. No.	Year	Total expenditure	Coverage fund		Support activities		WQM&S fund	
			₹ in lakh	in %	₹ in lakh	in %	₹ in lakh	in %
Statement showing variation in component-wise expenditure by Nigam								
Sl. No.	Year	Total expenditure	Coverage fund		Support activities		WQM&S fund	
			₹ in Cr.	in %	₹ in Cr.	in %	₹ in Cr.	in %
1	2019-20	0	0	0	0	0	0	0
2	2020-21	306.69	306.61	99.97	0.08	0.03	0	0
3	2021-22	1,420.46	1,414.65	99.59	5.81	0.41	0	0
4	2022-23	3,146.93	3,127.35	99.38	19.58	0.62	0	0
5	2023-24	8,634.00	8,597.93	99.58	36.07	0.42	0	0
Total		13,508.08	13,446.54	99.54	61.54	0.46	0	0
As per JJM norms					675.40	5%	270.16	2%
Difference in Actual expenditure and norms					613.86		270.16	

Appendix 23

Status of Providing PWS to village institutions

Sl. No.	District	Schools			Anganwadi			Gram Panchayat Bhawan			Health Centre		
		Total	PWS Provided	PWS pending	Total	PWS Provided	PWS pending	Total	PWS Provided	PWS pending	Total	PWS Provided	PWS pending
1	Chhatarpur	2384	1236	1148	1241	648	593	293	68	225	137	61	76
2	Dindori	1922	1449	473	1827	1235	592	282	78	204	106	38	68
3	Gwalior	1127	962	165	597	465	132	33	33	0	25	25	0
4	Jhabua	2323	1812	511	1426	1060	366	66	65	1	34	34	0
5	N.Puram	1390	840	550	934	461	473	81	76	5	75	39	36
6	Narsinghpur	1594	1060	534	841	512	329	66	62	4	13	13	0
7	Tikamgarh	1642	1441	201	1071	628	443	12	10	2	172	101	71
8	Vidisha	2098	1250	848	1048	593	455	333	107	226	78	78	0
	Total	14480	10050	4430	8985	5602	3383	1166	499	667	640	389	251

Appendix 24

Statement showing delay in award of tender for PWSS in School and Anganwadi

Sl. No.	Districts	Selected Block	Agreement No.	Agreement Date	Number		Total	Delay in commencement of work from date of commencement of 100 days campaign i.e. on 02 Oct 2020)
					School	Anganwadi		
1	Narmadapuram	Narmadapuram	53/2021-22	08-Nov-21			270	402
		Makhan Nagar	86/2020-21	27-Mar-21	100	50	150	176
2	Narsinghpur	Kareli	29/2021-22	28-May-21			150	238
			44/2021-22	27-Sep-21			150	360
		Chichli	51/2021-22	11-Oct-21			150	374
			08/2021-22	28-May-21			150	238
3	Dindori	Samnapur	66/2020-21	10-Mar-21	43	25	68	159
			73/2020-21	19-Mar-21	56	39	95	168
			01/2021-22	05-Apr-21	47	27	74	185
			10/2021-22	19-Apr-21	61	44	105	199
			35/2020-21	17-Jun-21	23	24	47	258
		Mehandawani	62/2020-21	10-Mar-21	42	41	83	159
			65/2021-22	27-Jul-21	36	38	74	298
			15/2021-22	31-May-21	49	42	91	241
			62/2021-22	27-Jul-21	43	32	75	298
			66/2021-22	27-Jul-21	34	24	58	298
4	Jhabua	Petlawad	96/2020-21	23-Mar-21	141	0	141	172
			12/2021-22	05-May-21	0	229	229	215
		Jhabua	79/2020-21	26-Feb-21	190	0	190	147
			93/2020-21	17-Mar-21	0	130	130	166
			83/2021-22	23-Sep-21	25	78	103	356
			98/2020-21	19-Mar-21	158	0	158	168
5	Chhatarpur	Bada Malhera	15/2021-22	03-Jul-21			85	274
		Luvkushnagar	31/2020-21	18-Mar-21			60	167
6	Gwalior	Bhitarwar	61/2020-21	24-Jun-21	52	0	52	265
			68/2021-22	13-Oct-21	262	155	417	376
		Bhitarwar & Morar	59/2021-22	21-Jun-21	73	100	173	262
		Morar	62/2021-22	25-Jun-21	32	32	64	266
			69/2021-22	13-Oct-21	133	43	176	376
7	Tikamgarh	Baldeogarh	53/2020-21	13-Jan-21			91	103
		Jatara	77/2020-21	05-Feb-21			89	126
8	Vidisha	Sironj	77/2020-21	19-Mar-21	150	75	225	168
Total							4,173	103 to 402 days

Appendix 25

Statement showing excess payment to the ISAs for activities not performed

(₹ in lakh)								
Sl. No.	District	Name of ISA	Agt. No.	Contract amount	Paid amount	Per cent of paid amount against contract amount	Payable per cent for performed activities	Excess payment
1	2	3	4	5	6	7=6/5*100	8	9=5* (7-8)
1	Chhatarpur	M/s Shiv Shakti Samiti Chhatarpur	27/20-21	52.76	56.43	107	40	35.35
		M/s SRM education and social welfare society, Sagar	34/21-22	88.78	88.78	100	40	53.27
2	Dindori	M/s National Institute of woman child & youth development, Jabalpur	60/20-21	41.95	40.37	96	40	23.49
		M/s Aditi Swayam Sevi Sansthan Samiti, Jabalpur	43/22-23	74.35	63.97	86	40	34.20
3	Gwalior	M/s Gramin Vikas Yuwa Sansthan, Rajasthan	42/21-22	74.83	60.14	80	40	29.93
		M/s M R Morarka, GDC Rural research foundation, Jaipur	92/21-22	81.80	44.03	54	40	11.45
4	Jhabua	M/s Rajasthan Bal Lalyan Sammiti	83/20-21	76.68	46.70	61	40	16.10
5	Narmadapuram	M/s Narmadanchal Naya Jeevan Jan Kalyan Seva Samiti	80/20-21	54.12	48.33	89	40	26.52
		M/s Native Education & Employment Developing Society	85/21-22	106.90	90.34	85	40	48.11
6	Narsinghpur	M/s Hamlog Shixachha and Samaj Kalyan samitee, Bhopal	53/20-21	62.85	55.44	88	40	30.17
		M/s Help Rice Hands to Help, Jabalpur	72/22-23	111.59	72.53	65	40	27.90
7	Tikamgarh	M/s Alliance Urban & Rural Development Society, Bhopal	91/20-21	68.22	55.44	81	40	27.97
8	Vidisha	M/s Sarthak Society for Human development, Jaipur	04/21-22	38.34	19.17	50	20	11.50
Total				933.17	741.67			375.96

Appendix 26

Details on TPIA agreements, Excess payment, and irregular payment to civil contractors without TPI

(₹ in lakh)							
Sl. No	District	Name of TPI Agency	Agreement No. Of TPI/ Date	Rate of agreement	Agreement no. of work/ Date	Payment of work without or inappropriate TPI Inspection	Payment to TPI for amount of work calculated at col. No.
1	2	3	4	5	6	7	8= (7*0.5%)-5
1	Narmadapuram	M/s IR Class Systems & Solutions Pvt Ltd	82/2020-21 (15.03.2021)	12.00% below	47/2022-23 (13-10-2022)	292.04	1.28
					48/2021-22 (19-10-2021)	100.15	0.44
					52/2020-21 (17-02-2021)	115.88	0.51
					53/2020-21 (08-11-2021)	38.38	0.17
2	Narsinghpur	M/s MSV International INC, Haryana	22/2022-23 (20.07.2022)	28.00% below	48/2020-21	163.65	0.59
					16/2021-22	47.60	0.17
					74/2021-22	114.75	0.41
					60/2021-22	123.96	0.45
3	Dindori	M/s MSV International INC, Haryana	22/2022-23 (25.07.2022)	28.00% below	115/2021-22	123.25	0.44
					120/2021-22	142.82	0.51
					110/2021-22	265.00	0.95
					34/2018-19	142.35	0.51
4	Jhabua	M/s Dr. Amin Controllers Pvt Ltd Ahmedabad	88//2020-21 (12.03.2021)	13.4 % Below	77/2020-21	289.34	1.25
					46/2020-21	132.77	0.57
					03/2021-22	387.11	1.68
					37/2022-23	453.78	1.96
5	Vidisha	M/s TUV SUD South Asia Pvt. Ltd., Haryana	73/20-21 (08.03.21)	19.91 % below	44/20-21 (28-01-2021)	97.11	0.39
					58/20-21 (17-02-2021)	96.19	0.39
6	Chhatarpur	Intratech civil solutions & consultant, Pune	29/20-21 (10.03.21)	18.30 % below	55/2021-22 (11-11-2021)	53.46	0.22
					31/20-21 (18-03-2021)	73.47	0.30
					15/21-22 (03-07-2021)	58.28	0.24
					14/2020-21 (24-03-2021)	55.83	0.23
7	Tikamgarh	Pentacle Consultants (I) Pvt Ltd, Mumbai	26/22-23 (26.05.22)	7.00 % below	24/2020-21 (06-10-2020)	104.82	0.49
					75/2020-21 (03-02-2021)	142.84	0.66
					53/20-21 (13-01-2021)	70.04	0.33
					77/2020-21 (05-02-2021)	53.81	0.25
					11/2020-21 (24-03-2021)	119.05	0.55
Total						3857.73	15.94

Appendix 27

Incorrect reporting of FHTC on Portal without water supply

Sl. No.	District	Name of villages	FHTC provided as per portal
1	Jhabua	Negdia	209
2		Lambela	589
3	Narsinghpur	Bahoripar	1
4		Gundrai	16
5		Murachh	15
6	Dindori	Kandawani	17
7		Rujnisarai	49
8		Samnapur	1
9		Jatadongri Ryt	289
10		Khamhera	24
11		Jhankimal	185
12	Vidisha	Amari	104
13		Hamadpur	97
14		Mutarra	28
15		Pairakhedi	115
16		Palita	84
17		Ikodiya	69
18		Kakarua Choubisa	61
19		Bhatkhedi	11
20		Kakaraj	37
21		Amadhana	40
22	Chhatarpur	Bahadurpur	295
23		Bairagiya Pukhari	82
24		Bajrangpur	23
25		Barua	20
26		Bedi	85
27		Behar Purwa	60
28		Beri	95
29		Berkhedi	46
30		Bhairahi	33
31		Bhojpura	69
32		Biduanpurwa	36
33		Bishankhera	94
34		Bokana	106
35		Dharampur	8
36		Ghosipur	30
37		Gonchipura	9

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Sl. No.	District	Name of villages	FHTC provided as per portal
38		Govindpur	86
39		Jamupura	62
40		Jarawara	72
41		Judipur	20
42		Kalaynpur	132
43		Kamalpurwa	73
44		Karki	137
45		Kasar	163
46		Khamin Kheda	69
47		Kharaba	60
48		Khirkua	46
49		Kiratpur (Nand)	74
50		Kiratpur (Padarkha)	130
51		Kiwati	68
52		Kiwlaha	78
53		Kunwarpur	55
54		Lausi	57
55		Madhaupur	20
56		Majhapatiya	180
57		Majhguwan Khurd	14
58		Manpur (Bhanpur)	6
59		Manuriya	313
60		Mishran Purawa	143
61		Motipurwa	70
62		Muderi Uttari	263
63		Nagrauli	48
64		Nidhwa Pukhri	3
65		Padariya	55
66		Panchampur	80
67		Partappura	54
68		Patli	36
69		Patna	171
70		Phutwari	41
71		Rajaura	100
72		Rajpurwa	37
73		Ramjhala	156
74		Rampurghat	72
75		Raopur	118
76		Ratanpur	64
77		Sadfal	42
78		Sadkar	240

Sl. No.	District	Name of villages	FHTC provided as per portal
79	Tikamgarh	Sahapur	186
80		Shivrajpur	47
81		Silgon	25
82		Telangpur	35
83		Tikari	302
84		Acharra Khas	456
85		Aston	351
86		Bachhoda Khas	77
87		Badmadai Khas	156
88		Bakpura	151
89		Balwantpura Khas	104
90		Bamhaurikalan	641
91		Bamhori Khas	1365
92		Banpura Buzurg	195
93		Banpura Khurd	57
94		Banpura Sapaun	107
95		Bela	286
96		Berau	312
97		Bhanpura	125
98		Bhelsi	292
99		Budera	698
100		Chandera Khas	1592
101		Chanderi Khas	550
102		Chinguwan	60
103		Dardora	91
104		Deopur	162
105		Deri	840
106		Deverda Khas	97
107		Dhanwaha	55
108		Digoda	1191
109		Dinau	109
110		Doh Chak-1	33
111		Dubdei	24
112		Dunda	391
113		Farka Patari	189
114		Futterchuk 2	74
115		Gainti	55
116		Ganesh Nagar	32
117		Ganeshpura	143
118		Gopalpura Khas	28

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Sl. No.	District	Name of villages	FHTC provided as per portal
119		Hajuri Nagar	218
120		Hirapur Khas	247
121		Imlana	16
122		Janakpur	21
123		Kachhiya Khera	10
124		Kadwaha	88
125		Khajrar	27
126		Kharon	154
127		Khodera	41
128		Kudila	471
129		Kudyala	93
130		Lakheri	57
131		Lar Khas	442
132		Lar Khurd	384
133		Laroun	270
134		Laxmanpura	163
135		Mabai	718
136		Madori	159
137		Majguwan	112
138		Malguwan	782
139		Manpasar	67
140		Mastapur Khas	359
141		Matol Khas	649
142		Mohangarh Khas	1003
143		Mohanpura	31
144		Muhara Khas	666
145		Murraha Baba	70
146		Narguda Khas	43
147		Naurpara	45
148		Nuna	659
149		Pander	134
150		Patha Khas	411
151		Patori Jagir	120
152		Pipra	157
153		Ram Sagara	138
154		Ramnagar Bujurg	675
155		Ranipura	105
156		Saipura	431
157		Sarkanpur Khas	97
158		Shahpur	80
159		Shiv Nagar	20

Sl. No.	District	Name of villages	FHTC provided as per portal
160	Gwalior	Shyampura	11
161		Sujara	203
162		Tapariya Najdik Kunjpur	93
163		Thar	246
164		Tindori	24
165		Adampur	61
166		Aron	155
167		Baretha	133
168		Belgadha	60
169		Berkheda	67
170		Bhavanpura	77
171		Bhensnari	394
172		Doni	69
173		Gajapur	95
174		Gowai	50
175		Jhankari	51
176		Kaithoda	171
177		Kheda	64
178		Kishanpur	67
179		Kuleth	47
180		Maina	178
181		Makoda	192
182		Najarpur	45
183		Pachora	116
184		Santau	24
185		Udaipur	89
186		Urwa	138
187		Virmadhana	86
Total			31,963

Appendix 28

Details of Wide variation number of FHTC

Sl. No	District	Name of villages	FHTC as per VAP	FHTC as per DPR	FHTC as per execution	FHTC as per JJM Dashboard	FHTC as per Scheme Profile	FHTC as per Scheme certification
1	Narmadapuram	Khoksar	157	162	157	157	157	157
		Gwadikhurd	37	97	96	63	26	0
		Bagalkhedi	97	166	98	98	67	67
		Kankadi	32	32	35	146	32	32
2	Jhabua	Ghughari	521	500	500	521	495	495
		Barigaon	31	60	31	31	31	31
		Kundala	421	630	421	421	411	411
		Mandali Badi	393	320	393	377	377	284
3	Narsinghpur	Suatala	456	90	119	456	4	4
		Manegaon	398	284	200	398	371	92
		Khadai	301	50	12	301	0	0
		Hridaypur	33	169	130	106	106	91
4	Dindori	Mohati	205	251	271	251	159	126
		Bhalapuri	220	235	220	220	216	216
		Kathotiya	705	712	705	705	259	259
		Sukhlaudi	287	297	297	297	297	287
5	Vidisha	Barkheda Tal	124	125	122	124	104	124
		Bhoriya	323	291	239	312	163	163
		Sagar	0	0	0	0	0	0
		Newli	0	0	0	0	0	0
6	Chhatarpur	Dumkheda	206	206	51	175	175	175
		Kanbhaee	21	40	21	21	21	21
		Bamankola	0	0	0	0	0	0
		Bandha Chanouli	0	0	0	0	0	0
7	Tikamgarh	Tamora	205	186	98	258	166	231
		Marguwan	813	626	626	634	614	614
		Dharampura	234	170	185	161	75	75
		Kunaita	34	29	34	34	34	34
8	Gwalior	Dang Guthina	320	190	187	178	88	88
		Pura Banawar	211	181	182	211	41	208
		Benipura	120	91	130	90	90	90
		Bhori	474	322	218	396	84	77
Total			7,379	6,512	5,778	7,142	4,663	4,452

Appendix 29

Statement showing parameters testes and accredited

Sl. No.	District	Name of Lab	DWQM&S framework			NABL accreditation		
			Required Parameters	Tested Parameters	Shortfall	Required Parameters	Accredited Parameters*	Shortfall
1	Chhatarpur	District Lab	23	12	11	17	3	14
2		Sub-Divisional Lab, Bada Malhera	16	9	7	11	9	2
3		Sub-Divisional Lab, Luvkush Nagar	16	9	7	11	9	2
4		Sub-Divisional Lab, Nowgaon	16	6	10	11	9	2
5	Dindori	District Lab	23	12	11	17	3	14
6		Sub-Divisional Lab, Shahpura	16	15	1	11	9	2
7		Sub-Divisional Lab, Samnapur	16	13	3	11	9	2
8	Gwalior	District Lab	23	10	13	17	3	14
9		Sub-Divisional Lab, Dabra	16	9	7	11	9	2
10	Jhabua	District Lab	23	13	10	17	3	14
11		Sub-Divisional Lab, Thandla	16	8	8	11	9	2
12	Narmadapuram	District Lab	23	13	10	17	9	8
13		Sub-Divisional Lab, Pipariya	16	7	9	11	9	2
14		Sub-Divisional Lab, Seoni Malwa	16	7	9	11	9	2
15		Sub-Divisional Lab, Sohagpur	16	10	6	11	9	2
16	Narsighpur	District Lab	23	14	9	17	8	9
17		Sub-Divisional Lab, Gadawara	16	14	2	11	9	2
18		Sub-Divisional Lab, Kareli	16	16	0	11	9	2
19	Tikamgarh	District Lab	23	13	10	17	3	14
20		Sub-Divisional Lab, Jatara	16	10	6	11	9	2
21	Vidisha	District Lab	23	14	9	17	3	14
22		Sub-Divisional Lab, Ganj Basoda	16	11	5	11	9	2
23		Sub-Divisional Lab, Sironj	16	11	5	11	9	2

Appendix 30

Statement showing the position of availability of human resources in District/ Sub-divisional laboratories vis a vis Sanctioned Strength

Sl. No.	District	Chemist/ Water Analyst		Jr. Chemist		Micro- biologist/ Bacterio- logist		Jr. Micro- biologist		Laboratory Assistant				Data Entry Operator				Lab Attendant				Field Assistant			
		District		Sub- Division		District		Sub- Division		District		Sub- Division		District		Sub- Division		District		Sub- Division		District		Sub- Division	
		Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual	Sant.	Actual
1	Chhatarpur	1	1	3	3	1	0	3	0	2	0	3	0	1	0	3	0	1	0	3	0	2	0	3	0
2	Dindori	1	0	2	2	1	0	2	0	2	2	2	1	1	0	2	0	1	0	2	0	2	0	2	0
3	Gwalior	1	3	1	1	1	0	1	0	2	1	1	1	1	0	1	0	1	2	1	0	2	0	1	0
4	Jhabua	1	1	1	1	1	0	1	0	2	1	1	0	1	0	1	0	1	1	1	0	2	0	1	0
5	Narmadapuram	1	2	3	0	1	0	3	0	2	2	3	0	1	0	3	0	1	0	3	0	2	0	3	0
6	Narsinghpur	1	2	2	1	1	0	2	0	2	0	2	1	1	0	2	0	1	0	2	1	2	0	2	0
7	Tikamgarh	1	1	1	1	1	0	1	0	2	0	1	0	1	0	1	0	1	0	1	0	2	0	1	0
8	Vidisha	1	2	2	2	1	0	2	0	2	1	2	1	1	0	2	0	1	0	2	0	2	0	2	0
Total		8	12	15	11	8	0	15	0	16	7	15	4	8	0	15	0	8	3	15	1	16	0	15	0

Statement showing the position of availability of human resources in laboratories established at WTP vis a vis Sanctioned Strength

Particulars	Manpower for the lab at WTP Sagad-Hinotiya Mali,			Manpower for lab at WTP Bansujara (Badamalhera)		
	Required as per DWQM&S	Required as per CPHEO	Employed manpower	Required as per DWQM&S	Required as per CPHEO	Employed manpower
Chemist/Water Analyst	01	01	01	01	01	01
Jr. Chemist	--	-	--	--	-	01
Microbiologist/Bacteriologist	01	01	--	01	01	--
Jr. Microbiologist	--		--	--		--
Laboratory Tec/Assistant	02	03	--	02	03	01
Data Entry Operator/clerk	01	01	--	01	01	--
Lab Attendant/cleaner	01	03	01	01	03	--
Field Assistant	02	03	02	02	03	--
Total	08	12	04	08	12	03

Appendix 31

Statement Showing number of villages under Multi Villages Scheme and Single Villages Scheme

Sl. No.	Name of District	Name of Scheme	Villages under MVS/SVS		Total Villages
			MVS	SVS	
1	Gwalior	Sada	23	5	28
2		Ghategaon- Bhitwarwar	24	160	184
3	Dindori	Shahpura Mehandwani	108	213	321
4		Karanjiya	151	11	162
5		Dindori	365	49	414
6	Narsinghpur	Payli	59	4	63
7	Jhabua	Petlawad	216	29	245
8		Gadvada	4	7	11
9		Jhaknavada	13	9	22
10		Dhamohi	14	5	19
11		Gulabpura	3	6	9
12		Alirajpur	381	158	539
13		Mahi	386	418	804
14		Majhodiya	180	32	212
15	Vidisha	Naharyai Sanjay Sagar	74	55	129
16		Tem	110	97	207
17		Hanota	318	244	562
18		Kotha	239	82	321
19		Madia bina	144	75	219
20	Tikamgarh	Bansujara Tikamgarh	123	78	201
21	Chhatarpur	Garolli	104	8	112
22		Kutne	126	5	131
23		Bijawar	72	27	99
24		Lavkushnagar	155	123	278
25		Chhatarpur Tarped	132	7	139
Total			3,524	1,907	5,431

Glossary of Abbreviations





Flouoride removal Unit



Borewell

Glossary of Abbreviations

AA	Administrative Approval
Alpha HCH	Alpha Hexachlorocyclohexane
AAP	Annual Action Plan
ARWSP	Accelerated Rural Water Supply Programme
AWC	Anganwadi Centre
BC	Block Coordinator
BCC	Behaviour Change Communication
BCM	Billion Cubic Meter
Beta HCH	Beta Hexachlorocyclohexane
BOD	Biochemical Oxygen Demand
BOQ	Bill of Quantities
BT Road	Bituminous Tarmac Road
CC	Community Contribution
CC Road	Cement Concrete Road
CE	Chief Engineer
CMHO	Chief Medical & Health Officer
CU.M.	Cubic Meter
COD	Chemical Oxygen Demand
CIPET	Central Institute of Plastic Engineering and Technology
CGWB	Central Ground Water Board
CWPM	Clear Water Pumping Main
CWGM	Clear Water Gravity Main
CWFM	Clear Water feeder Main
DC	District Coordinator
DAP	District Action Plan
DBT	Direct Benefit Transfer
DDP	Delivered Duty Paid
DI Pipe	Ductile Iron Pipe
DN	Distribution Network
DO	Dissolved Oxygen
DPAP	Drought Prone Areas Programme
DPDA	Drought-Prone and Desert Areas
DPR	Detail Project Report
DWSM	District Water & Sanitation Mission
DWQM&S	Drinking Water Quality Monitoring & Surveillance
DWQC	Drinking Water Quality Commissionerate
EDF	Electrolytic Defluorination Unit
EE	Executive Engineer
E-in-C	Engineer in Chief
EPC	Engineering, Procurement and Construction
FHTC	Functional household tap connection
FC	Finance Commission
FTK	Field Test Kit
GFR	General Finance Rule
GoI	Government of India
GoMP	Government of Madhya Pradesh
GP	Gram Panchayat
GST	Goods and Services Tax
HDD Method	Horizontal Directional Drilling Method
HDPE Pipe	High-Density Polyethylene pipe
HGM Maps	Hydro-Geo-Morphological

Glossay of Abbreviations

HH	House Hold
HGJ	Har Ghar Jal
HT	High Tension
IA	Implementing Agencies
IEC	Information, Education and Communication
IoT	Internet of Things
ISA	Implementation Support Agency
ISSR	Integrated Standard Schedule of Rate
Jal Nigam	Madhya Pradesh Jal Nigam Maryadit
JJM	Jal Jeevan Mission
JPI	Joint Physical Inspection
KRC	Key Resource Center
LD	Liquidated Damages
lpcd	Liters per capita per day
LT	Low Tension
MB	Measurement Book
MCM	Million Cubic Meters
MD	Managing Director
MLD	Million Liters Per Day
MOD	Multi Option Deposit
MoF	Ministry of Finance
MPWRD	Madhya Pradesh water Resource Department
MVS	Multi Village Scheme
NABL	National Accreditation Board for Testing and Calibration Laboratories
NE	Northeast
NIC	National Information centre
NRSC	National Remote Sensing Centre
NRDWP	National Rural Drinking Water Programme
ODF	Open Defection Free
OHT	Over Head Tank
O&M	Operation and Maintenance
PA	Performance Audit
PAC	Probable Amount of Contract
PFMS	Public Financial Management System
PH	Potential Of Hydrogen
PHED	Public Health Engineering Department
PMKVK	Pradhan Mantri Kaushal Vikas Kendra
PLC	Programmable Logic Controller
PRA	Participatory Rural Appraisal
PS	Principal Secretary
PVTG	Particularly Vulnerable Tribal Group
PWS	Pipe Water Supply
PWSS	Pipe Water Supply Scheme
Q & Q	Quantity & Quality
RSW Department	Rural Water Supply Department
RWPM	Raw Water Pumping Main
RA Bill	Running Account Bill
SAGY	Saansad Adarsh Gram Yojana
SAP	State Action Plan
SC/ST	Schedule Cast / Schedule Tribe
SCADA	District Metering Area (DMA) with Supervisory Control and Data Access
SCC	Special Conditions of Contract
SD	Security Deposit
SDG	Sustainable Development Goals

SE	Superintending Engineer
SLSSC	State Level Scheme Sanctioning Committee
SNA	Single Nodal Account
SOR	Schedule of Rate
SQC	Supervision & Quality Control
SVS	Single Village Scheme
SWSM	State Water & Sanitation Mission
TC Bacteria	Total Coliform Bacteria
TPI	Third Party Inspection
TPIA	Third Party Inspection Agency
TTC	Triphenyl Tetrazolium Chloride
UT	Union Territory
UADD	Urban Administration and Development Department
VAP	Village Action Plan
VWSC	Village Water and Sanitation Committee
WASH	Water, Sanitation, and Hygiene
WQM&S	Water Quality monitoring and Surveillance
WRD	Water Resource Department
WTP	Water Treatment Plant
WUC	Water User Committee

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