

CHAPTER-I
INTRODUCTION AND
AUDIT FRAMEWORK

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1.1 Introduction

As per the 2011 census, only 2.60 *per cent* of rural households and 20 *per cent* of urban households in Bihar had access to tap water supply. For their drinking water needs, while the State as a whole was primarily dependent upon ground water supply, rural households mostly relied on hand pumps. Further, out of 38 districts in Bihar, water quality in 13 districts¹ was affected by arsenic beyond permissible limits, by high degree of fluoride in 11 districts² and with high iron content in 11 districts³. Overall⁴, 28 districts⁵ of the State suffered from poor water quality due to the presence of various contaminants affecting the health and general development of these areas.

Based on the level of contamination of ground water, districts in the State have been designated by Public Health Engineering Department (PHED) as either Quality Affected (QA) districts (where water was affected with high level of iron, fluoride and arsenic contamination) or Non-quality Affected (NQA) districts where water was not affected by such quality issues. The status of QA and NQA districts in Bihar is reflected in the **Map** below:

¹ (i) Begusarai (ii) Bhagalpur (iii) Bhojpur (iv) Buxar (v) Darbhanga (vi) Katihar (vii) Khagaria (viii) Lakhisarai (ix) Munger (x) Patna (xi) Samastipur (xii) Saran and (xiii) Vaishali.

² (i) Aurangabad (ii) Banka (iii) Bhagalpur (iv) Gaya (v) Jamui (vi) Kaimur (vii) Munger (viii) Nalanda (ix) Nawada (x) Rohtas and (xi) Sheikhpura.

³ (i) Araria (ii) Begusarai (iii) Bhagalpur (iv) Katihar (v) Khagaria (vi) Kishanganj (vii) Madhepura (viii) Munger (ix) Purnia (x) Saharsa and (xi) Supaul.

⁴ Two districts (Bhagalpur and Munger) were affected by all three types of contaminants and three districts (Begusarai, Katihar and Khagaria) were affected by two types (iron and arsenic) of contaminants.

⁵ (i) Aurangabad (ii) Araria (iii) Banka (iv) Begusarai (v) Bhagalpur (vi) Bhojpur (vii) Buxar (viii) Darbhanga (ix) Gaya (x) Jamui (xi) Katihar (xii) Kaimur (xiii) Khagaria (xiv) Kishanganj (xv) Lakhisarai (xvi) Madhepura (xvii) Munger (xviii) Nalanda (xix) Nawada (xx) Patna (xxi) Purnia (xxii) Rohtas (xxiii) Saharsa (xxiv) Samastipur (xxv) Saran (xxvi) Sheikhpura (xxvii) Supaul and (xxviii) Vaishali.

Quality affected and non-quality affected districts of Bihar



(Source: Target and achievement Report of PHED)

As may be seen from the map above, there were 28 QA and 10 NQA districts in the State, based on presence of various contaminants like arsenic, fluoride and iron (as of July 2018).

The *Har Ghar Nal Ka Jal (HGNI) yojana*, a scheme for adequate supply of tap water, was launched by the Government of Bihar (GoB) in December 2015, as part of the seven resolves⁶ (*Saat Nischay*) of the State Government, under its good governance programme. The aim of this particular *Nischay* (or resolve), was to provide safe drinking piped water to every household in the State, reduce water borne diseases and end dependency on hand pumps for drinking water by the year 2020.

Under this Scheme, 70 litres safe drinking water per capita per day (lpcd) in rural areas and 135 lpcd clean drinking water in urban areas, was to be provided to meet drinking and other households needs viz. cooking, bathing, water for animals in rural areas etc.

To achieve the objectives of the *HGNI yojana* or *Nischay*, GoB initiated (December 2015) the following four water supply schemes:

- ***Mukhyamantri Gramin Peyjal Nischay Yojana for Quality Affected wards (MGPN - QA)***: This *Yojana* was implemented by the Public Health Engineering Department (PHED) in QA wards of Gram Panchayats (GPs) where water quality was affected by more than permissible limits of iron, fluoride and arsenic. Under this scheme, all households would be supplied with safe drinking tap water through piped supply.

⁶ Seven resolves of GoB (i) Aarthik Hal, Yuvaon Ko Bal (ii) Aarakshit Rozgar Mahilaon Ka Adhikar (iii) Har Ghar Bijli (iv) Har Ghar Nal ka Jal (v) GharTak, Pakki Gali Naliyaan (vi) Shauchalay Nirmaan, Ghar Ka Samman (vii) Awsar Badhe, Aage Padhein.

- **Mukhyamantri Gramin Peyjal Nischay Yojana for Non-Quality Affected wards (MGPN - NQA):** This *Yojana* was also to be implemented by PHED in such wards of QA GPs where the water quality was not affected or where the PHED was already implementing schemes for supply of drinking water through tender process.
- **Mukhyamantri Gramin Peyjal Nischay Yojana (MGPN):** This *Yojana* was to be implemented by the Panchayati Raj Department (PRD), in non-quality affected GPs of the State. The implementation of the Scheme in each ward was through ‘Ward Implementation and Management Committees’ (WIMCs), headed by the respective ward members of the GPs.
- **Mukhyamantri Shahri Peyjal Nischay Yojana (MSPN):** This *Yojana* was to be implemented by the Urban Development and Housing Department (UD&HD), GoB, in all wards of urban areas either through ULBs or *via* Bihar Urban Infrastructure Development Corporation (BUIDCO), functioning under the control of UD&HD.

1.2 Consideration of coverage of households under HGNJ resolve

The *HGNJ yojana* was primarily funded from the State Budget and Finance Commission grants (Central as well as State). Besides, funds from Centrally Sponsored Schemes (CSS) *viz.* National Rural Drinking Water Project (NRDWP)//*Jal Jeevan Mission (JJM)*, *Neer Nirmal Pariyojna (NNP)*, *Atal Mission for Rejuvenation and Urban Transformation (AMRUT)* *etc.*, were also used for creation of water supply infrastructures under *HGNJ*. Details of wards covered under *HGNJ* from different sources of funds are given in **Table 1.1**.

Table 1.1: Details of wards covered under HGNJ resolves

Sl. No.	Name of Implementing unit	Total coverage of wards	Source of funds	No. of wards covered from source of funds mentioned
1	PRD	57,767	14 th & 5 th Finance Commission & State Budget	57,767
2	PHED	55,922	State Plan	51,213
			NRDWP	3,061
			NNP	1,648
3	UD&HD	3,156	State Plan	2,438
			AMRUT	718

(Source: Information provided by the Departments)

1.3 Organisational set-up

Water supply schemes under *HGNJ yojana* were to be executed by the PHED and PRD in rural wards whereas in urban wards, the same was to be implemented by UD&HD. The State Government directed the PHED to act as the lead technical partner for all the user department. The detailed organisational set-up for *HGNJ yojana* is depicted in **Table 1.2**.

Table 1.2: Organisational set-up for HGNJ yojana

Level	PHED	PRD	UD&HD
Department Level	PHED is headed by Principal Secretary and works as the nodal agency for providing water and sanitation services. The Department is responsible for policy development, planning, coordination and monitoring of the <i>Har Ghar Nal Ka Jal</i> Scheme at the department level.	PRD: A State level Implementation and Monitoring Cell was established under the Secretary/Principal Secretary for monitoring the Scheme at the Department level.	UD&HD: Secretary/Principal Secretary with the help of Deputy Secretary monitor the Scheme at the Department level.
District/Municipality Level	District Water and Sanitation Committee (DWSC) – These Committees were constituted under the chairmanship of the District Magistrate with the Executive Engineer, PHED as a Member Secretary. The Committee was responsible for coordination, overseeing and review of the projects related to the Scheme at the district level.	District Water and Sanitation Committee (DWSC) - These Committees were constituted under the chairmanship of the District Magistrate and Zila Panchayati Raj Officer as a member. The Committee was responsible for ensuring that schemes are completed within prescribed timelines while also ensuring quality of the scheme. This Committee was also responsible for distribution of targets amongst Blocks and monitoring of the schemes.	Municipal Board- While the Municipal Board was responsible for approval of schemes in ULBs, the Municipal Commissioner/ Executive Officer was responsible for monitoring and quality control of different components of the scheme. The Municipal Engineer was responsible for preparation of estimates for the schemes and quality control of the Scheme.
Division/Block Level	Public Health Division (PHD) , headed by an Executive Engineer, was responsible for execution of the schemes at the division/ block levels	A Block level Monitoring Unit was set up under the Chairmanship of the BDO for the implementation of the Scheme and its monitoring at the Block level. The Block Panchayati Raj Officer (BPRO) was to provide assistance as a facilitator while the Junior Engineer of MGNREGA was to provide technical assistance.	--
GP Level	Gram Panchayat (GP)- The GP was responsible for selection of water supply schemes after approval by the Wards. The GPs were also responsible for monitoring these schemes through the Vigilance Committee constituted for this purpose.	The GP under the leadership of the <i>Mukhiya</i> was responsible for implementation of the <i>Har Ghar Nal Ka Jal</i> schemes. The <i>Mukhiya</i> was also responsible for monitoring and supervision of schemes executed by WIMC.	--

(Source: Schemes guidelines of concerned Department)

1.4 Audit objectives

The Performance Audit (PA) was carried out with the objectives of assessing whether:

- the planning process for coverage of 100 *per cent* households and construction and maintenance of water supply system was adequate and effective;
- sound financial management principles were adhered to in respect of scheme execution and operation & maintenance;
- optimum quantity and quality of water was supplied as envisaged and benchmarks set for service delivery, were achieved; and
- monitoring and evaluation mechanism and quality control for the implementation of the scheme was effective.

1.5 Audit criteria

Audit findings were benchmarked against criteria sourced from the following:

- Resolutions, Scheme implementation guidelines, Model Estimates, Schedule of Rate (SOR) issued by the GoB for *HGNJ yojana*.
- Bihar Panchayat Raj Act, 2006 (amended time to time).
- Bihar Municipal Act, 2007 (amended time to time).
- Ward Implementation and Management Committee (Conduct of Business) Rules, 2017.
- Bihar Financial Rules.
- Central Public Health and Environmental Engineering Organization (CPHEEO) Manuals.
- Central Ground Water Board (CGWB) Report.
- Bihar Public Works Accounts Code.
- Vision and Strategy document issued by PHED in January 2016 for providing piped water supply to rural households under *HGNJ yojana*.
- Service Level Benchmarks (SLB) prescribed in the Thirteenth Finance Commission Report and notified by Ministry of Urban Development (MoUD), Govt. of India (GoI).
- Citizen Charter notified by Government of Bihar in 2011.
- *Atal* Mission for Rejuvenation and Urban Transformation (AMRUT) Mission Statement and Guidelines.

1.6 Audit scope and methodology

The PA covering a period of six financial years, from 2017-18 to 2022-23, was conducted between June to November 2023. Audit methodology involved scrutiny of relevant records/documents at the departmental level in PRD, PHED *etc.*, district, block, GPs, ULB level records and documents available with Bihar Urban Infrastructure Development Corporation (BUIDCO)⁷. In addition,

⁷ BUIDCO is an implementing agency of UD&HD, GoB.

electronic data available on the *Panchayat Nischaysoft Portal*⁸ (Website of the Panchayati Raj Department, GoB) and *Jal Jeevan Mission* under the Ministry of *Jal Shakti*, GoI were also analysed during audit.

Apart from scrutiny of records, joint physical verification of sampled 534 scheme sites was also conducted along with officials of the auditee units. Beneficiary survey of 2,283 beneficiaries was carried out to obtain responses and feedback regarding water supply services provided to them under *HGNJ yojana*.

Audit sampling: Considering the key objectives of *HGNJ yojana* to provide clean and safe piped water to all households of the State, 62⁹ implementing units of 12¹⁰ sampled districts covering 19,464 (17 per cent) out of 1,17,820 wards in the State were selected for the Performance Audit. Probability Proportion to Size (Without Replacement) sampling method was used for selection of Districts, Blocks, GPs, and ULBs for detailed audit.

An Entry Conference was held on 26 May 2023 with the Engineer in Chief-cum-Special Secretary of PHED, Additional Secretary of the UD&HD and Additional Secretary, PRD wherein, audit objectives, scope of audit, criteria and methodology were explained. An Exit Conference was held on 18 October 2024 with the officers of these departments and PHED and UD&HD provided (June 2025) the detailed reply on audit observations which have been suitably incorporated in the Report.

1.7 Acknowledgement and limitations

Audit wishes to acknowledge the cooperation and assistance extended by the implementing Departments and their units during the conduct of this audit. However, it is noted that all requisitioned records were not produced by the test checked units, as noted in para below.

1.8 Non-production of records

During the course of audit, not all required documents/information was made available to Audit as part of test-check of units. The non-production of records included the following:

- In six test-checked GPs¹¹ measurement books (MBs) for 23 schemes were not produced by Ward Implementation and Management Committees (WIMCs).

⁸ *Panchayat Nischay Soft Portal* was developed by PRD for the purpose of monitoring of schemes and providing information regarding physical status of the schemes.

⁹ No. of PH divisions: 15; No. of GPs: 35 and No. of ULBs 12.

¹⁰ Aurangabad, Bhagalpur, Darbhanga, Gaya, Gopalganj, Jamui, Katihar, Khagaria, Madhubani, Saran, Supaul and West Champaran.

¹¹ Amilona (Ward No. 1, 2, 5, 6, 8, 9, 12), Mahuwan (Ward No. 1, 2, 4A, 4B, 5, 7, 10, 11, 12, 13), Bariol (Ward No. 10), Nanaura (Ward No. 14), Sugapatti (Ward No. 4, 8, 10, 14), Kalapatti (Ward No. 17).

- Vouchers in support of expenditure to the tune of ₹5.35 crore were not provided to Audit by 35 WIMCs (**Appendix-1.1**) of four GPs.
- 11 WIMCs of five test-checked GPs¹² (GPs had transferred ₹1.47 crore to these 11 wards), did not produce any records to audit.
- Six¹³ Public Health divisions did not produce Detailed Project Reports (DPRs) of relevant schemes. PH division, Supaul did not produce MBs in respect of 43 schemes (**Appendix-1.2**) while PH division, Madhubani failed to produce 12 MBs.¹⁴
- Five¹⁵ test-checked ULBs did not provide records related to baseline survey conducted by them. Besides, records for execution of 12 schemes¹⁶ were not produced to Audit by Nagar Parishad, Jhajha.
- Files related to installation of Internet of Things (IoT) devices were not produced to Audit by UD&HD.

¹² Amilona (Ward No. 1, 2, 5, 8), Mahuwan (Ward No. 5, 10, 12), Nanaura (Ward No. 14), Sugapatti (Ward No. 8, 14), Kalapatti (Ward No. 17).

¹³ Bhagalpur East, Bhagalpur West, Gopalganj, Jamui, Katihar and Supaul (DPRs of only agreement of SBD-88, 89 and 90 of 2019-20 out of 772 agreements).

¹⁴ Agreements (F2 24, 26 of 2018-19 and F2 10 and 11 of 2019-20 and SBD (31, 46, 60, 5, 8, 21, 22 and 28) of 2019-20.

¹⁵ Benipur, Jhajharpur, Rivilganj, Tekari and Jhajha.

¹⁶ Scheme No. 02/18-19, 08/20-21, 09/20-21, 10/20-21, 53/19-20, 57/19-20, 35/17-18, 37/20-21, 38/20-21, 54/19-20, 06/20-21 and 49/19-20.

