

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF DRINKING WATER AND SANITATION

LOK SABHA
UNSTARRED QUESTION NO. 6245
ANSWERED ON 02/04/2026

WATER QUALITY TESTING LABORATORIES

6245. SHRI ATUL GARG:

SHRI RAVINDRA DATTARAM WAIKAR:

SHRI NARESH GANPAT MHASKE:

DR. SHRIKANT EKNATH SHINDE:

SHRI SHRIRANG APPA CHANDU BARNE:

SMT. BHARTI PARDHI:

Will the Minister of JAL SHAKTI be pleased to state:

(a) the number of water quality testing laboratories currently operational as on February 2026 to monitor drinking water safety across the country, particularly in Uttar Pradesh;

(b) whether there are any plans to establish additional water quality testing laboratories to expand monitoring capacity, particularly in underserved areas, if so, the details thereof and if not, the reasons therefor;

(c) the criteria used for prioritising locations for new laboratories to ensure comprehensive water quality coverage;

(d) the standards and technologies being adopted in these laboratories to ensure accurate and reliable water testing; and

(e) the manner in which this expanded laboratory network aligns with broader objectives of ensuring safe and potable water for all rural households?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI
(SHRI V. SOMANNA)

(a) to (e) Jal Jeevan Mission (JJM) is under implementation since August, 2019, in partnership with States/ UTs to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to rural households. Under JJM, as per existing guidelines, Bureau of Indian Standards' BIS:10500 standards are adopted as benchmark for quality of water being supplied through the piped water supply schemes. Drinking Water being a State subject, the responsibility of Planning, Designing, Approval, Implementation, Operation & Maintenance of drinking water supply schemes, including those under the Jal Jeevan Mission (JJM), is vested with State/UT Governments.

The Government of India supplements the efforts of the States/ UTs by providing financial, policy guidance and technical assistance.

As reported by States/ UTs on JJM – Water Quality Management Information System (JJM-WQMIS), the State Public Health Engineering/ Rural Water Supply Departments operated a network of 2,870 water quality testing laboratories as on February, 2026 at various levels viz. State, regional, district, sub-division, block, mobile and/ or WTP facility laboratories which increased to 2,874 water quality testing laboratories (including 145 in Uttar Pradesh) as on 30.03.2026.

In consultation with various stakeholders 'Concise Handbook for Monitoring Water Quality of Piped Drinking Water Supply to Rural Households' has been released in December 2024 for guidance to States/ UT's. This handbook recommended for a comprehensive testing of drinking water samples at various testing points such as source, treatment plant, storage and distribution points, and remedial action wherever necessary, to ensure that the water supplied to households is of prescribed quality (BIS:10500). In view of the increased frequency and scope of testing prescribed under the revised protocol as compared to earlier recommendations, States/UTs have been advised to strengthen and augment their water quality testing facilities, including in underserved areas, to meet the enhanced monitoring requirements. States/UTs may strengthen their existing laboratory infrastructure or adopt Public Private Partnership (PPP) modes, as per their requirements, to ensure adequate testing capacity.

Further, States/UTs have been advised to obtain and maintain accreditation/ recognition for their drinking water testing laboratories, in order to ensure the reliability, accuracy, and credibility of the data they produce.

The enhanced laboratory coverage enables regular, timely and decentralised testing of drinking water sources and supply systems, early detection of contamination, and prompt corrective action by implementing agencies. This supports continuous water quality surveillance, strengthens community confidence in drinking water supplies, and contributes to the overall objective of providing safe drinking water on a sustainable basis in rural areas.

The Ministry of Housing Affairs (MoHUA) has informed that they have published Manual on Water Supply and Treatment Systems (Drink from Tap) in March 2024 for reference by the States/ ULBs for designing, implementation, drinking water quality and monitoring of the water supply projects. (<https://mohua.gov.in/publication/manual-on-water-supplyand-treatment-systems---drink-from-tap---march-2024.php>). MoHUA has also issued an advisory "Strengthening Water Quality Monitoring in Cities through Community Participation" under AMRUT 2.0 in November, 2024 to all the States to formulate a Water Quality Monitoring strategy at the State or City level and to strengthen the institutional capacity for citywide monitoring of drinking water quality in urban areas along with Digital Display Boards for water quality parameters for public information & awareness.

Further, AMRUT 2.0 Mission promotes 24x7 water supply with quality assurance, Drink from Tap (DfT) quality water in selected District Metered Areas (DMAs)/wards, online water quality monitoring, sensors and Supervisory Control and Data Acquisition (SCADA), community participation, especially Women Self Help Groups (SHGs), in water quality testing. 258 water supply schemes have smart monitoring systems such as SCADA system under AMRUT, and 1,422 water supply projects under AMRUT 2.0 has provision for SCADA system.

Central Ground Water Board (CGWB) has informed that there are 16 Regional Chemical Laboratories including Uttar Pradesh located at Lucknow, Jammu, Chandigarh, Jaipur, Ahmedabad, Bhopal, Raipur, Nagpur, Patna, Kolkata, Guwahati, Bhubaneswar, Hyderabad, Bengaluru, Chennai and

Thiruvananthapuram. These laboratories have facilities to analyse groundwater samples for basic parameters such as pH, electrical conductivity, nitrate, fluoride, etc., and heavy metals including iron (Fe), arsenic (As) and uranium. CGWB conducts groundwater quality assessment throughout the country in accordance with the Standard Operating Procedure (SOP), which can be accessed through the following link:

<https://cgwb.gov.in/cgwbpnm/public/uploads/documents/17333891661542642909file.pdf>
