GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO.1664

ANSWERED ON 04.08.2025

ARSENIC CONTAMINATION IN GROUNDWATER

1664. SMT. PHULO DEVI NETAM

Will the Minister of JAL SHAKTI be pleased to state:

- (a) with the Central Ground Water Board (CGWB) successfully constructing Arsenic-free wells using cement sealing technology in affected areas, manner in which Government plan to scale up this initiative to ensure broader access to safe groundwater; and
- (b) the Central Ground Water Board's report indicates nearly 20 per cent of groundwater samples exceed permissible pollutant limits, measures Government is implementing to address this widespread contamination?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The innovative method for construction of Arsenic-free wells using cement-sealing technology developed by the Central Ground Water Board (CGWB) has been extensively shared by CGWB with state line departments of various Arsenic affected states for replication and scaling up. Necessary technical support for execution is also being provided wherever requested for. Borrowing from the successful implementation of this Model, UP Jal Nigam, the department responsible for drinking water supply in the state, is extensively using cement Sealing Technique. It is informed that the State Govt. has constructed 204 wells using cement sealing technology in 9 Districts.

CGWB is also taking proactive steps to further promote this technique, especially in Arsenic affected areas, by sharing the design and methodology with various government officials, NGOs and local communities during its various training and capacity building sessions and public interaction programmes.

(b) Central Ground Water Board (CGWB) generates ground water quality data of the entire country on a regional scale as part of its ground water quality monitoring program and various scientific studies. Varying number of samples are tested for different water quality parameters and degree of contamination varies depending upon source region and parameter being tested. Overall, the data on ground water quality indicates that the ground water in the country remains largely potable. However, localized occurrence of certain contaminants, including Arsenic, Fluoride, Heavy metals, Nitrates etc, beyond the prescribed limits for drinking water use has been reported in some isolated pockets of some States/UTs.

Further, it may be noted that Water is a state subject and the responsibility of taking initiatives to mitigate ground water contamination and to provide safe drinking water to citizens lies primarily with the state governments. Nonetheless, to complement the efforts of the state governments, several steps have been taken by the Central Government to address these issues across the country. Some of the important ones are mentioned below:-

- i. The ground water quality data generated by CGWB is regularly disseminated through Annual Reports, Half-yearly Bulletins and Fortnightly Alerts for quick action by the stakeholders.
- ii. In order to enhance monitoring efficiency, a new Standard Operating Procedure (SoP) for Groundwater Quality Monitoring has been adopted by CGWB, which stipulates more frequent and denser sampling, particularly in vulnerable areas, to ensure a more comprehensive assessment of groundwater quality.
- iii. Government of India is implementing Jal Jeevan Mission (JJM) Har Ghar Jal, in partnership with states, for providing contamination free potable tap water to every rural household of the country in adequate quantity, of prescribed quality and on regular & long-term basis. Following measures have been taken under JJM to facilitate action on water quality aspects at state level:-
 - Water safety has been one of the key priorities under the JJM since its inception. Under the JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery.
 - While allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
 - The "Drinking Water Quality Monitoring & Surveillance Framework" was devised and disseminated to states in October 2021.
 - To facilitate implementation of the above said Framework, around 2180 water quality testing laboratories have been set up in the country. Besides this, five persons, preferably women are identified and trained from every village for testing the water samples through Field Test Kits (FTKs). States/UTs have been advised to carry out testing of water quality on a regular basis and take remedial action wherever necessary, to ensure that the water supplied to households is of prescribed quality.
 - States/ UTs have also been advised to install community water purification plants (CWPPs) as an interim measure, especially in quality affected habitations, to provide potable drinking water to every household.
- iv. The ground water pollution also owes its origin to contamination of surface water sources for which various efforts have been made in the country like installing Sewage Treatment Plants, Effluent Treatment Plants and better system of sewage networks etc. Under National Mission for Clean Ganga (NMCG), the government has initiated several steps for improving the water quality along the river Ganga and its tributaries. Similar action with respect to other major rivers is being taken under National River Conservation Plan (NRCP).
