GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 5292

ANSWERED ON 03.04.2025

CONTAMINATION OF GROUNDWATER IN BIHAR

5292. DR. MOHAMMAD JAWED

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government is aware of the recent studies indicating the presence of high levels of manganese in drinking water in Bihar's Gangetic plains which have been linked to cancer and if so, the details thereof;
- (b) the steps being taken by the Government to address this issue and reduce the presence of manganese in drinking water in the affected regions;
- (c) whether there are any ongoing monitoring and regulation measures to ensure the safety of drinking water in these areas; and
- (d) if so, the details thereof along with the specific action taken/being taken by the Government in this regard?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

- (a) Central Ground Water Board (CGWB) generates ground water quality data of the entire country including Bihar on a regional scale as part of its ground water quality monitoring program and various scientific studies. Most of the regular parameters like Electrical Conductivity (EC), Carbonates, Sodium, Nitrate, Fluoride etc. are monitored annually and heavy metal analysis is being done periodically. The data on ground water quality for Bihar indicates that the ground water in the state remains largely potable. However, localized occurrence of certain contaminants, including heavy metals like Manganese, beyond the limits prescribed for drinking water use has been reported in some isolated pockets in the analysis conducted during 2019. In this analysis, out of 607 samples tested, Manganese in excess of permissible limits of 0.3 mg/L has been detected in 221 samples (36.41%) in certain isolated areas across 34 districts. However, the co-relation between occurrence of Manganese in drinking water and incidence of cancer requires further investigation.
- **(b) to (d)** Water is a state subject and the responsibility of taking initiatives to mitigate ground water contamination, including that caused by Manganese and to provide safe drinking water to citizens lies primarily with the state governments. However, to complement the efforts of the state governments, several steps have been taken by the Central Government to address these issues. Some of the important ones are mentioned below:
 - i. The ground water quality data generated by CGWB including that for heavy metal contamination like that of Manganese, 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. Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, while taking up aquifer studies, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as heavy metals like Manganese in ground water.
- iv. Jal Jeevan Mission (JJM) Har Ghar Jal, being implemented by this Ministry in partnership with states, marks an important milestone 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, including in Bihar:-
 - 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, with 123 in Bihar. 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.

As a result of all these cumulative efforts, the state of Bihar has reported under JJM that, as on date, there are no Manganese affected habitations left in the state.

- v. 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, which also covers the area of Bihar.
- vi. Central Pollution Control Board (CPCB) in association with State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs) is implementing the provisions of the Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 to prevent and control pollution in water. CPCB has made a comprehensive programme on water pollution for controlling point sources by developing industry specific standards and general standards for discharge of effluents notified under the Environment (Protection) Act, 1986 for enforcement by SPCBs/PCCs.
