GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1551

ANSWERED ON 13.02.2025

ACUTE CONTAMINATION IN GROUNDWATER OF WEST BENGAL, BIHAR AND UTTAR PRADESH

1551. SHRI KALYAN BANERJEE

Will the Minister of **JAL SHAKTI** be pleased to state:

(a) whether it is a fact that an acute contamination has been reported in the groundwater in West Bengal, Bihar and Uttar Pradesh and if so, the details thereof;

(b) whether it has been reported that the groundwater in 56 percent of country's districts is seriously affected and has acute significant pollutant and if so, the details thereof;

(c) the increase in contaminated districts reported since 2015, year-wise; and

(d) the action taken/being taken by the Government so far on the report of the Ministry of Health and Family Welfare in this regard?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Central Ground Water Board (CGWB) conducts ground water quality monitoring for several contaminants Nitrate, Arsenic, Fluoride, Heavy metals etc. on a regular basis throughout the country and also generates ground water quality data on a regional scale during various scientific studies. These studies indicate that ground water in the country is largely potable. However, occurrence of the said contaminants in ground water beyond permissible limits (as per BIS) for human consumption has been reported in isolated pockets in various States / UTs, including West Bengal, Bihar and Uttar Pradesh.

As per the Annual Ground Water Quality Report, 2024 prepared by CGWB, localized occurrences of EC, nitrate and Fluoride exceeding the prescribed limits for drinking water were reported in the groundwater samples collected and analysed from isolated parts of West Bengal, Bihar, and Uttar Pradesh. The State-wise occurrences of the said parameters beyond the prescribed limits for the year 2023 is presented in **Annexure-I**.

(b) Nitrates have been reported in the ground water samples from isolated pockets of 443 districts (approximately 56%) out of total 788 districts of the country.

Additionally, isolated occurrences of elevated Electrical Conductivity (EC) have been reported in 218 districts, while Fluoride beyond prescribed limit has been identified in isolated parts of 263 districts.

(c) Based on the Ground Water Quality Report, 2024, details of the number of districts partially affected by various groundwater contaminants from 2017 to 2023 are provided in **Annexure -II.**

(d) The Ministry of Health & Family Welfare has flagged the adverse effects caused by consumption of contaminated ground water through various reports, policy documents and guidelines. For mitigation of ground

water contamination and with a view to provide safe drinking water to the country's population, the Union government has taken several notable initiatives, despite the fact that Water is a state subject and the onus of handling ground water quality issues lies mainly on the respective state governments. Some of the important measures of the Ministry of Jal Shakti and other Central Ministries in this direction are given below :

- Data on ground water quality available with CGWB are made available in public domain through reports and also shared with concerned State Governments for taking necessary remedial measures. To further accelerate the dissemination of knowledge on ground water quality, CGWB has initiated the practice of issuing half-yearly ground water quality Bulletins and fortnightly Alerts so that immediate action can be initiated in the reported areas.
- Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, special attention is being given to the aspect of ground water quality including contamination by toxic substances in ground water. CGWB is successfully constructing Arsenic free wells in arsenic affected areas using the innovative cement sealing technology for tapping contamination free aquifers and also providing technical assistance to state departments in construction of Fluoride safe wells.
- Government of India, in partnership with States, is implementing Jal Jeevan Mission (JJM) since August, 2019 to provide potable tap water supply of prescribed quality and on regular &long term basis to every rural household in the country. Under JJM, while planning water supply schemes to provide tap water supply to house-holds, priority is given to quality-affected habitations. While allocating the funds to States/ UTs in a particular financial year, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- CPCB has made a comprehensive programme on water pollution for controlling point sources the main components of which are developing industry specific standards and general standards for discharge of effluents notified under the Environment (Protection) Act, 1986 by Ministry of Environment, Forest and Climate Change, Govt. of India to be enforced by the SPCBs / PCCs through consent mechanism; Establishment of Common Effluent Treatment Plants (CETPs) for cluster of Small Scale Industries; Installation of Online Continuous Effluent Monitoring Systems (OCEMS) by Grossly Polluting Industries for getting real time information on the effluent quality etc.
- Awareness generation programs/ workshop on various aspects of ground water including preventing ground water pollution and safe use of contaminated water are being conducted by CGWB periodically.
- Since ground water is the predominant source used for drinking and since its quality is found to deteriorate when drawn from greater depths, Ministry of Jal Shakti and other central ministries are implementing several programmes for recharging ground water and water conservation which are expected to improve the underground water table, thus improving the quality of ground water. Some of such programmes are Jal Shakti Abhiyan, Amrut Sarovar Mission, MNREGS, PMKSY-WDC etc.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1551 TO BE ANSWERED IN LOK SABHA ON 13.02.2025 REGARDING "ACUTE CONTAMINATION IN GROUNDWATER OF WEST BENGAL, BIHAR AND UTTAR PRADESH".

State-wise occurrences of EC, nitrate and Fluoride beyond the prescribed limits for year 2023

State	**No. of Samples Analysed**	**% samples having EC > 3000 µS/cm**	**% samples having Fluoride > 1.5 mg/L**	**% samples having Nitrate > 45 mg/L**
Bihar	808	0.9	4.58	2.35
Uttar Pradesh	1387	2.7	5.70	9.37
West Bengal	959	0.8	0.73	8.65

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1551 TO BE ANSWERED IN LOK SABHA ON 13.02.2025 REGARDING "ACUTE CONTAMINATION IN GROUNDWATER OF WEST BENGAL, BIHAR AND UTTAR PRADESH".

Year-wise details of numbers of partially districts affected by various ground water quality parameters

*Year	Partially Affected Districts by EC	Partially Affected Districts by Fluoride	Partially Affected Districts by Nitrate
2017	198	207	359
2018	198	212	323
2019	172	226	352
2020	90	131	223
2021	119	142	257
2022	184	213	419
2023	218	263	443

*Complete compilation of nation-wide data is available from 2017 only

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