GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 469

ANSWERED ON 28.11.2024

CONTAMINATION OF GROUNDWATER

469. SMT. KANIMOZHI KARUNANIDHI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the details of arsenic and fluoride contamination found in groundwater across the country, State/UT-wise;
- (b) whether the Government has taken any initiative to address this issue;
- (c) if so, the details thereof; and
- (d) the steps taken/proposed to be taken for ensuring the supply of potable drinking water to the affected populations from such contamination?

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 including Arsenic and Fluoride 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 the occurrence of Arsenic and Fluoride in ground water beyond permissible limits (as per BIS) for human consumption in isolated pockets in various States / UTs. Arsenic has been reported in parts of 230 districts in 25 States and in parts of 469 districts in 27 states fluoride contamination is found. State/UT wise details are provided in the **Annexure**. Further, it is largely observed that the ground water contamination reported by CGWB is mostly geogenic (coming from soil and rock matrix) in nature.
- **(b) & (c)** Water is a state subject and the responsibility of ground water management, including taking initiatives for improving ground water quality and mitigate the contamination issue, lies primarily with the state governments. In addition to this several steps have been taken by the Central Government in this direction. Some of the important ones are mentioned below:
 - i. Data on ground water quality available with CGWB are made available in public domain through reports as well as through the web site (http://www.cgwb.gov.in) for use by various stakeholders. The data is also shared with concerned State Governments for taking necessary remedial measures.
 - ii. Central Ground Water Board (CGWB) has entered into an MoU with Geological Survey of India (GSI) in 2022 for the study of Uranium, Lead, Arsenic, Fluoride and Mercury

- contamination of groundwater in parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam States.
- iii. CGWB has developed a unique design for constructing Arsenic free wells in arsenic affected areas using the cement sealing technology for tapping contamination free aquifers and has shared the technical information along with the handover of the arsenic safe wells with States for gainful utilisation. Similarly in-situ fluoride mitigation technique has also been developed.
- iv. Further, the quality of groundwater can be improved to some extent if concerted efforts are made to improve the groundwater resources through appropriate groundwater recharge/rainwater harvesting. The Ministry of Jal Shakti has taken up several important measures in this direction like launching of Jal Shakti Abhiyan which focuses on saving and conserving rainwater with peoples' participation, preparation for Master plan, a macro level plan indicating various structures for the different terrain conditions of the country for Artificial Recharge, regulation of ground water extraction, implementing Atal Bhujal Yojana with the theme of participatory ground water management etc.
- (d) Government of India is implementing Jal Jeevan Mission for ensuring reliable, affordable, sufficient, potable tap water supply to every household in the rural areas including water quality affected habitations. Following measures have been taken under JJM to facilitate action on water quality aspects:
 - i. Under JJM, while planning for potable water supply to household through tap water connection, priority is given to quality-affected habitations. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source takes time, purely as an interim measure, States/ UTs have been advised to install community water purification plants (CWPPs) especially in Arsenic and Fluoride affected habitations to provide potable water to every household.
 - ii. While allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
 - iii. The "Drinking Water Quality Monitoring & Surveillance Framework" was devised and disseminated to States in October 2021.
 - iv. To facilitate implementation of the above said Framework, more than 2000 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).
 - v. To enable States/ UTs to test water samples for water quality, and for sample collection, reporting, monitoring and surveillance of drinking water sources, an online JJM Water Quality Management Information System (WQMIS) portal has been developed.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 469 TO BE ANSWERED IN LOK SABHA ON 28.11.2024 REGARDING "CONTAMINATION OF GROUNDWATER".

States where Arsenic contamination has been detected in pockets: Andhra Pradesh, Telangana, Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Odisha, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, Daman & Diu, West Bengal, Puducherry (Total 25 States & UTs).

States where Fluoride contamination has been detected in pockets: Andhra Pradesh, Telangana, Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Daman & Diu (Total 27 States & UTs).
