GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1729

ANSWERED ON 05.12.2024

STUDY ON CONTAMINATION AND DEPLETION OF GROUNDWATER

†1729. SHRI RAM SHIROMANI VERMA

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Central Ground Water Board (CGWB) has conducted any study regarding contamination and depletion of groundwater;
- (b) if so, the details thereof; and
- (c) the concrete measures taken/being taken by the Government to prevent and mitigate further degradation of water quality?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Central Ground Water Board (CGWB) generates ground water quality data annually for the whole country on a regional scale as part of its ground water quality monitoring program and various scientific studies. Ground water samples collected from various locations are analysed for various quality parameters like Electrical Conductivity, Fluoride, Arsenic, Nitrate & Uranium etc. The studies show that ground water in India is largely potable with occurrence of contamination in certain isolated pockets.

Further, to keep a tab on ground water situation in the country, CGWB also monitors groundwater levels throughout the country four times in every year. The perusal of data for ground water levels measured during November 2023 shows that about 84.8% of the wells across the country record the water level data within the range of 0-10 meters below ground level (mbgl) indicating ease of access to ground water.

- (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 generated by CGWB is 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. 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 such as Arsenic in ground water.
- iii. CGWB is successfully constructing Arsenic free wells in Arsenic affected areas using the cement sealing technology for tapping contamination free aquifers and also providing technical assistance to state departments in Fluoride mitigation.
- iv. Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) Har Ghar Jal, since August 2019, to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household in the country. Under the JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery. Water safety has been one of the key priorities under the JJM since its inception. States are advised to strictly ensure supply of safe drinking water as per these norms. Further, under JJM, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- States/ UTs have been advised to plan and implement piped water supply schemes of bulk water v. transfer based on safe water sources such as surface water sources or alternative safe ground water for the villages quality sources with water issues including Arsenic. Further 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 at the rate of 8-10 litre per capita per day (lpcd) to meet their drinking and cooking requirements.
- vi. Also 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.
