

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO. 1482

ANSWERED ON 13.02.2025

ARSENIC LEVEL IN GROUNDWATER IN ASSAM

1482. SHRI GAURAV GOGOI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government is aware that arsenic levels over 0.01 mg/l have been found in 19 districts of Assam;
- (b) if so, the details thereof along with the efforts made/being made by the Government to implement effective mitigation and remediation measures;
- (c) whether the Government has undertaken any health impact assessments to evaluate the consequences of arsenic exposure in affected areas and if so, the details thereof;
- (d) the steps taken/being taken by the Government to raise public awareness about the dangers of arsenic exposure and promote safe drinking water practices; and
- (e) the details of long-term strategies that are being considered to prevent future arsenic contamination in groundwater sources in Assam?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Central Ground Water Board (CGWB) generates ground water quality data on a regional scale as part of its ground water quality monitoring program and various scientific studies. As per the latest data of pre-monsoon, 2024 generated by CGWB, occurrence of Arsenic in ground water in excess of the prescribed limits has been reported in isolated pockets of 9 districts in Assam viz. Barpeta, Goalpara, Golaghat, Karbi-anglong, Kokrajhar, Lakhimpur, Sibsagar, Nalbari and Karimganj.

Water being a State subject, sustainable development and management of groundwater resources, including the quality aspect is primarily the responsibility of the State Governments. However, the Central Government facilitates the efforts of the State Governments, including Assam, through technical and financial assistance through its various schemes and projects. In this direction, the important steps taken by the Ministry of Jal Shakti and other central ministries 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 such as Arsenic 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, including PHE Department, Assam, towards the same.
- 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.
- 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.
- 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.

(c) Use of Ground Water for drinking purpose having Arsenic beyond the permissible limits over a prolonged period of time is known to cause several adverse health effects. As per the information provided by M/o Health & Family Welfare, Arsenic exposure can cause skin lesions, cancer, cardiovascular diseases and developmental issues in children.

(d) Several measures have been initiated by the Union Government to raise public awareness regarding dangers of Arsenic exposure. Firstly, technical guidelines for “Detection, Prevention and Management of Arsenicosis in India” have been prepared by Ministry of Health & Family Welfare and shared with the affected States for use by the health authorities and programme managers. These are also to be used for training of field

functionaries such as medical officers, paramedical workers, etc. The guidelines are available on the websites of Directorate General of Health Services and Ministry of Health & Family Welfare.

In order to create awareness of disease symptoms and prevention of Arsenicosis, Ministry of Health & Family Welfare has also shared Information, Education and Communication (IEC) material with the affected States. Further, CGWB conducts Public Interaction Programmes (PIPs) at the grassroots level for dissemination of outputs of scientific studies being carried out by CGWB and to raise public awareness about ground water related issues including the issues of contamination by toxic elements like Arsenic. So far CGWB has organised 1518 such programs across the country.

In order to take the awareness on drinking water quality to the grassroots, under Jal Jeevan Mission, the “Drinking Water Quality Monitoring & Surveillance Framework” was devised and disseminated to states in October 2021. 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).

(e) Arsenic contamination of ground water is known to be mainly geo-genic in nature, that is, the contamination occurs through leaching of Arsenic bearing compounds into ground water through rock and soil matrix under conducive conditions. The best long term remedy for the issue is considered to be regular quality testing to identify contaminated sources, tapping Arsenic safe aquifers and switching over to alternative sources for drinking, especially surface water sources etc. In this direction, JJM- Har Ghar Jal marks an important milestone.

As a result of cumulative efforts under JJM, it is reported that from August 2019 to January 2025 the number of Arsenic affected habitations in the country have declined from 14,020 to 314. These remaining habitations have also been provided clean, & safe drinking water through Community Water Purifier Plants (CWPPs). As per JJM portal, in Assam, 81% of village households have been covered under the Scheme and as reported, there are no Arsenic affected habitations left.
