GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 99

ANSWERED ON 04.12.2023

STUDY TO ASCERTAIN ARSENIC AND FLUORIDE CONTAMINATION OF GROUNDWATER

99. SHRI NEERAJ SHEKHAR

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

(a) whether Government has conducted any study by some reputed institution with expertise to ascertain the reasons for increase in levels of arsenic and fluoride in ground water affecting large number of population of the country and to find remedial measures;

(b) if so, the details thereof;

(c) if not, the reasons therefor; and

(d) the reasons for increase in concentration of arsenic and fluoride in groundwater during last three decades?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU**)**

(a) & b) Central Ground Water Board (CGWB) under the Ministry of Jal Shakti conducts regular monitoring and assessment of groundwater quality including ground water contamination of Arsenic and Fluoride. CGWB has carried out various studies in collaboration with other institutions.

- These studies, *inter alia*, 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 Fluoride has been reported in 469 districts in 27 states. The ground water contamination reported by CGWB is mostly geogenic in nature and does not show significant change over the years.
- CGWB along with National Institute of Hydrology (NIH) has prepared a report on “Mitigation and Remedy of Groundwater menace in India: A Vision Document” in the year 2010 and the report has been circulated to various concerned agencies and departments for guidance and execution.
- Recently Central Ground Water Board has entered into an MoU with Geological Survey of India (GSI) for study of groundwater contamination including Arsenic and Fluoride with focus on 8 states (Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Chhattisgarh, Jharkhand, Bihar and Assam).

(c) Not Applicable, in view of a) & b) above.

(d) The studies conducted indicate the occurrence of Arsenic and Fluoride contaminations in various parts of the country which are mostly geogenic in nature, which means these constituents are already in the rock or soil matrix and gets mobilised to ground water through various chemical processes. There is no conclusive evidence regarding the increase in concentration of the contaminants over time. However, increase reported in the instances of Arsenic contamination can be attributed to two reasons

1. Revision of permissible limit of Arsenic in drinking water from 50 ppb to 10 ppb by BIS in 2015 and
2. Increase in number of sampling points.

Similarly, increase in Fluoride can also be attributed to increase in number of sampling points over years taken up for monitoring.

Here it may not be out of place to mention that though water is a state subject, various steps have been taken by the Central Government for improving the ground water quality and to mitigate the dangers posed by ground water contamination.

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