

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

UNSTARRED QUESTION NO.715

ANSWERED ON 02.12.2024

GROUNDWATER CONTAMINATION IN CHHATTISGARH

715. SHRI RAJEEV SHUKLA

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

- (a) whether Government is taking cognisance of the fact that the groundwater is depleting fast in Chhattisgarh and there has been a significant increase in chemical contamination of Fluoride, Arsenic and Iron;
- (b) if so, the details thereof;
- (c) the measures being taken to address the same; and
- (d) the proposed measures thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Central Ground Water Board (CGWB) regularly monitors groundwater levels throughout the country including the state of Chhattisgarh. During the November 2023, about 76.4% of the wells monitored in Chhattisgarh have registered the water level between 0-5 mbgl(meters below ground level), indicating ease of access to ground water. Further, as per the Dynamic Ground Water Resource assessment, 2023 carried out by CGWB, 119 out of 146 Assessment Units in Chhattisgarh were reported to be under safe category and the Stage of Extraction for the state as a whole was 47.17%.

CGWB also generates ground water quality data for various parameters, including Arsenic, Fluoride and Iron for the whole country, including Chhattisgarh as part of its ground water quality monitoring program and for various scientific studies. The details of Fluoride contamination (based on Pre-Monsoon data from 2019 to 2023) and; Arsenic and Iron (based on Pre-Monsoon 2019, 2020 & 2023 data) in ground water across Chhattisgarh are given in **Annexure**.

(c) & d) Water being a State subject, sustainable development and management of groundwater resources is primarily the responsibility of the State Governments. However, the Central Government facilitates the efforts of the State Governments by way of 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 for sustainable development of ground water resources in the country are given below:-

- i. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 which is a mission mode and time bound programme for harvesting the rainfall and taking up water conservation activities. Currently, JSA 2024 is being implemented in the country with special focus on 151 water stressed districts of the country including 3 such districts in Chhattisgarh.

- ii. CGWB has taken up National Aquifer Mapping and Management Programme (NAQUIM) with an aim to delineate aquifer disposition and their characterization. Entire mappable area of the country of around 25 lakh sq. km, including 96,000 sq km of Chhattisgarh has been mapped under the scheme and management plans have been shared with the respective State governments for implementation.
- iii. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB for the entire country, including Chhattisgarh and shared with States/UTs providing a broad outline for construction of around 1.42 crore rain water harvesting and artificial recharge structures in the country to harness 185 BCM (Billion cubic meter).
- iv. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop Scheme in the country, including Chhattisgarh, since 2015-16, which focuses on enhancing water use efficiency at farm level through Micro Irrigation and better on-farm water management practices to optimize the use of available water resources.
- v. Mission Amrit Sarovar was launched by the Government of India which aimed at developing and rejuvenating at least 75 water bodies in each district of the country, including Chhattisgarh. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country. For improving ground water quality in the country, including Chhattisgarh and to provide safe drinking water to the citizens the following measures have been taken:
 - vi. Government of India is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August, 2019, in partnership with States, to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household by 2024. Under JJM, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
 - vii. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source may take 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.
 - viii. 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.
 - ix. 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.
 - x. Central Pollution Control Board (CPCB), in association with State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs), is implementing the provisions of the Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 to prevent and control pollution in water.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 715 TO BE ANSWERED IN RAJYA SABHA ON 02.12.2024 REGARDING “GROUNDWATER CONTAMINATION IN CHHATTISGARH”.

Percentage of samples showing concentration of Fluoride, Arsenic and Iron above Permissible Limit since 2019

Year	Fluoride % of sample showing F>1.5 mg/L	Arsenic % of sample showing As>10 ppb	Iron % of sample showing Fe>1.0 mg/L
2019	5.23	0.3	10.03
2020	2.03	0	11.63
2021	1.28	Not analyzed	Not analyzed
2022	1.52	Not analyzed	Not analyzed
2023	2.35	0.52	16.04
