

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA
UNSTARRED QUESTION NO. 96
ANSWERED ON 29.11.2021

CONTAMINATION OF GROUND WATER

96 SHRI DEEPENDER SINGH HOODA

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the names of the States where rivers and groundwater have been found to be contaminated with salinity, Iron and Nitrates;
- (b) whether the contamination is in excess of the limit prescribed by the Bureau of Indian Standards (BIS);
- (c) if so, the details thereof;
- (d) the corrective steps being taken by Government in this regard;
- (e) whether Government proposes to bring out a white paper in this regard; and
- (f) if so, the details thereof?

ANSWER

MINISTER OF STATE FOR JAL SHAKTI
(SHRI BISHWESWAR TUDU)

(a) to (c) Central Ground Water Board (CGWB) generates ground water quality data of the country on a regional scale as part of its ground water quality monitoring program and various scientific studies. These studies indicate the occurrence of contaminants such as Iron, Salinity and Nitrate beyond permissible limits (as per BIS) for human consumption in isolated pockets in various States / UTs viz. Andhra Pradesh, Telangana, Chhattisgarh, Delhi, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal. The details of State-wise Number of Partly Affected Districts with Salinity, Iron and Nitrate Contaminants in Ground Water of India are given in **Annexure I**.

Further, Central Water Commission (CWC) generates surface water quality information with respect to rivers in the country through various sites located in various parts of the country. As per the information for the period August, 2018 to December, 2020, iron parameter were found to have values more than the prescribed standard for drinking water (as per BIS) at 414 sites located in certain river basins falling in the States of Rajasthan, Jharkhand, Assam, Uttar Pradesh, Odisha, Tripura, Tamil Nadu, West Bengal, Maharashtra, Andhra Pradesh, Kerala, Karnataka, Bihar, Madhya Pradesh, Uttarakhand, Chhattisgarh, Arunachal Pradesh, Meghalaya, Gujarat, Manipur, Delhi, Telangana, Himachal Pradesh and Sikkim. In addition, the value of Nitrates were found beyond prescribed limits for drinking water (as per BIS) at 8 sites out of 588 sites for water year 1st June, 2019 to 31st May, 2020. Details in this regard are given at **Annexure II**.

(d) Water being a State subject, initiatives on water management, including its quality is primarily States's responsibility; however, various steps have been taken by the Central Government for controlling water contamination in the country.

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. CPCB has made a comprehensive programme on water pollution for controlling point sources by developing industry specific standards and general standards for discharge of effluents notified under the Environment (Protection) Act, 1986 for enforcement by SPCBs/PCCs. As per the directives of CPCB, Online Continuous Effluent Monitoring Systems (OCEMS) are installed by the industrial units in the country for getting real time information on the effluent quality and non-complying units are identified for follow-up inspections and actions.

The Department of Water Resources, River Development and Ganga Rejuvenation has issued guidelines for control and regulation of groundwater extraction with pan-India applicability notified on 24 September 2020. The guidelines include suitable provisions on measures to be adopted to ensure groundwater free from pollution.

The water pollution also owe its origin to contamination of surface water sources for which various efforts have been made in the country by installing Sewage Treatment Plants, Effluent Treatment Plants and better system of sewage networks etc. However, the adverse effects of the water pollution can be addressed to a large extent if safe water is made available to public. With this aim, central Government in partnership with States, is implementing Jal Jeevan Mission (JJM) since August, 2019 to provide potable tap water supply of prescribed quality to every rural household in the country by 2024.

In addition, Ministry of Housing & Urban Affairs supplements the efforts of the States/ UTs through its programmes and policies. Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is one of such programmes, which was launched on June 25, 2015, in selected 500 cities and towns across the country. The Mission focuses on development of basic urban infrastructure in the AMRUT cities, such as water supply, sewerage & septage management, storm water drainage, green spaces & parks, and non-motorized urban transport.

(e) No sir.

(f) Question does not arise in view of the reply in para (e) above.

Annexure referred to in reply to parts (a) to (c) of Unstarred Question No. 96 to be answered in Rajya Sabha on 29.11.2021 regarding “Contamination of Ground Water”.

States wise number of partly affected Districts with different Contaminants in Ground Water of India.

S. No.	State/ UT	Salinity (EC above 3000 micro mhos/cm) (EC: Electrical Conductivity)	Nitrate (Above 45 mg/l)	Iron (Above 1mg/l)
1	Andhra Pradesh	12	13	7
2	Telangana	8	10	8
3	Assam			18
4	Arunachal Pradesh			4
5	Bihar		10	19
6	Chhattisgarh	1	12	17
7	Delhi	7	8	
8	Goa			2
9	Gujarat	21	24	10
10	Haryana	18	21	17
11	Himachal Pradesh		6	
12	Jammu & Kashmir		6	9
13	Jharkhand		11	6
14	Karnataka	29	29	22
15	Kerala	4	11	14
16	Madhya Pradesh	18	51	41
17	Maharashtra	25	30	20
18	Manipur			4
19	Meghalaya			6
20	Nagaland			1
21	Odisha	17	28	30
22	Punjab	10	21	9
23	Rajasthan	30	33	33
24	Tamil Nadu	27	29	2
25	Tripura			4
26	Uttar Pradesh	13	59	15
27	Uttarakhand		4	5
28	West Bengal	6	5	16
29	Andaman& Nicobar	1		2
30	Daman & Diu	1	1	
31	Puducherry		1	
	Total	Parts of 248 districts in 18 states & UTs	Parts of 423 districts in 23 states & UTs	Parts of 341 districts in 27 states & UTs

ANNEXURE – II

Annexure referred to in reply to parts (a) to (c) of Unstarred Question No. 96 to be answered in Rajya Sabha on 29.11.2021 regarding “Contamination of Ground Water”.

Sr. No	Water Quality Sites	River	Year	Month	Nitrate (above 45 mg/l)
1	Amgaon	Chulband	2019	November	62.925
2	Bhakari	Wainganga	2019	November	45.1
	Bhakari	Wainganga	2019	September	45.45
3	Kollegal	Cauvery	2019	June	81.26
4	Lodhikheda	Jam	2019	November	47.60
5	Mungoli	Penganga	2019	September	47.55
6	T.Bekuppe	Arkavathy	2019	November	51.70
	T.Bekuppe	Arkavathy	2019	November	45.17
7	Tandi	Bhaga	2019	August	75.64
	Tandi	Bhaga	2019	June	48.8
	Tandi	Bhaga	2019	October	97.6
	Tandi	Bhaga	2019	September	107.54
8	Thimmanahalli	Yagachi	2019	June	78.06

Study Period (2019-20)
