

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

**UNSTARRED QUESTION NO. 2617**

ANSWERED ON 22.12.2022

**CHEMICAL CONTAMINATION OF GROUND WATER**

2617 SHRI RAJIV PRATAP RUDY

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

- (a) whether it is a fact that there is large scale chemical contamination of ground water in the country;
- (b) if so, the details thereof, State/UT-wise including Bihar, district-wise;
- (c) whether the Government has mapped the hotspots of ground water contamination and the chemicals found therein and if so, the details thereof; and
- (d) whether the Government has a comprehensive policy to treat contaminated ground water and to check the flow of chemicals in water on a daily basis and if so, the details thereof, State/UT-wise?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI PRAHLAD SINGH PATEL)

(a) 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 Fluoride, Arsenic, Nitrate, Iron and Heavy Metals beyond permissible limits (as per BIS) for human consumption in isolated pockets in certain States / UTs.

(b) & (c) State-wise numbers of partly affected districts with different contaminants (as on 2021) in Ground Water in the country including Bihar is given at **Annexure**. The report on ground water levels and quality in the country is compiled in the form of ground water year book which is hosted on CGWB website and can be accessed through URL - <http://cgwb.gov.in/GW-Year-Book-State.html>

(d) Water being a State subject, initiatives for ground water management, including its quality is primarily the responsibility of the States, however, various steps have been taken by the Central Government for facilitating ground water quality improvement/ remediation of contamination in the country.

Commonly observed contaminants such as Arsenic, Fluoride and Iron are geogenic in nature, whereas contaminants such as nitrates, phosphates, heavy metals etc. owe their origin to various human activities including domestic sewage, agricultural practices and industrial effluents which are mainly anthropogenic.

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.

This Department 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 for which Jal Jeevan Mission (JJM) is being implemented in rural areas since August, 2019 to provide potable tap water supply of prescribed quality to every rural household by 2024. Further, National Water Quality Sub-Mission (NWQSM) was launched on 22<sup>nd</sup> March, 2017 as a part of National Rural Drinking Water Programme (NRDWP) which has been subsumed in JJM to provide safe drinking water to 27,544 arsenic/fluoride affected rural habitations in the country.

Similarly, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme is being implemented since June 25, 2015, in selected 500 cities and towns across the country which 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. Further, AMRUT- 2.0 was launched on 01<sup>st</sup> October 2021 for the period of 05 years (FY 2021-22 to 2025-26), with the objective of providing universal coverage of water supply through functional household tap connection in all statutory towns in the country.

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**ANNEXURE REFERRED TO IN REPLY TO PART (b) & (c) OF UNSTARRED QUESTION NO. 2617 TO BE ANSWERED IN LOK SABHA ON 22.12.2022 REGARDING “CHEMICAL 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)	Fluoride (above 1.5 mg/l)	Nitrate (above 45 mg/l)	Arsenic (above 0.01 mg/l)	Iron (above 1mg/l)	Lead (above 0.01 mg/l)	Cadmium (above 0.003 mg/l)	Chromium (above 0.05 mg/l)	Uranium (above 0.03 mg/l)
1	Andhra Pradesh	12	12	13	7	12	2		1	8
2	Telangana	9	10	10	1	9	4	1	1	6
3	Assam		17		21	25	9		2	
4	Arunachal Pradesh					6				
5	<b>Bihar</b>	<b>4</b>	<b>13</b>	<b>32</b>	<b>27</b>	<b>35</b>	<b>9</b>		<b>3</b>	<b>10</b>
6	Chhattisgarh	1	23	24	4	22	5	1	1	4
7	Delhi	8	7	9	3	5	3	2	5	4
8	Goa					2			1	
9	Gujarat	26	27	32	12	14	1			5
10	Haryana	18	21	21	17	20	17	8	4	19
11	Himachal Pradesh		2	7	1	5				1
12	Jammu & Kashmir		3	9	3	10	3	1	1	
13	Jharkhand		16	23	4	23	25			4
14	Karnataka	29	30	29	3	22	1		7	8
15	Kerala	4	5	14	1	15	6	7	1	
16	Madhya Pradesh	20	44	51	9	47	16		2	12
17	Maharashtra	28	20	30		24	20	1		3
18	Manipur		1		2	4				
19	Meghalaya		5			7				
20	Nagaland		3			5				
21	Odisha	18	26	29	5	30	4		2	5
22	Punjab	12	19	23	17	16	12	8	11	20
23	Rajasthan	31	33	33	10	33	14			28
24	Tamil Nadu	29	29	32	14	16	6	1	7	14
25	Tripura		3		3	8				
26	Uttar Pradesh	14	40	62	39	68	19	2	17	35
27	Uttarakhand	1	1	4	5	8	8		2	
28	West Bengal	9	12	16	11	21	7	2	3	1
29	Andaman & Nicobar	1				3				
30	Daman & Diu	1		2	1					
31	Puducherry			2	1					
	<b>Total</b>	<b>Parts of 275 districts in 20 states &amp; UTs</b>	<b>Parts of 422 districts in 26 states &amp; UTs</b>	<b>Parts of 507 districts in 23 states &amp; UTs</b>	<b>Parts of 221 districts in 25 states &amp; UTs</b>	<b>Parts of 515 districts in 29 states &amp; UTs</b>	<b>Pb in parts of 191 districts in 21 states</b>	<b>Cd in parts of 34 districts in 11 states</b>	<b>Cr in parts of 71 districts in 18 states</b>	<b>U in parts of 187 districts in 18 states</b>

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