

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

RAJYA SABHA

UNSTARRED QUESTION NO. 1851

ANSWERED ON 17.03.2025

CONTAMINANTS IN GROUNDWATER

1851. SHRI MUKUL BALKRISHNA WASNIK

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

- (a) the details regarding presence of contaminants in groundwater, State-wise;
- (b) whether Government has conducted any study to assess the impact of these contaminants on people's health;
- (c) if so, the details thereof, if not, the reasons therefor; and
- (d) the number of cases registered, conviction rate, acquittal and pendency under Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986 since 2019, year-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(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 Flouride, Arsenic, Nitrate and heavy metals, beyond permissible limits (as per BIS) for human consumption in certain isolated pockets in some States / UTs. Details of such reported contamination for the year 2023 are provided in **Annexure**.

(b) & (c) As per M/o Health & Family Welfare, presence of some of these contaminants has been shown to cause adverse health effects in humans as a consequence of prolonged exposure through drinking-water. Key chemicals responsible for large-scale health effects through drinking-water exposure include arsenic, fluoride, lead, etc.

Further, to mitigate the impacts of ground water contamination, the Ministry is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, in partnership with states, which marks an important milestone for providing contamination free potable tap water to every rural household of the country in adequate quantity, of prescribed quality and on regular & long-term basis. Due to these efforts number of habitations affected in the country by two major contaminants viz. Arsenic & Fluoride, have declined from 14,020 to 314 and from 7,996 to 251 respectively. And remaining habitations have also been provided clean & safe drinking water through Community Water Purifier Plants (CWPPs).

(d) The M/o Jal Shakti does not have any information on the number of cases registered, conviction rate, acquittal and pendency under Water (Prevention and Control Pollution) Act, 1974 and the Environment (Protection) Act, 1986. However, as per the information received from Central Pollution Control Board (CPCB) under the M/o Environment, Forests & Climate Change, CPCB and State Pollution Control Boards / Pollution Control Committees are implementing the provisions of the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 to prevent and control of pollution to the environment and health. Accordingly, regulation of industrial pollution is implemented through consent mechanism by the respective SPCBs / PCCs. In case of non-compliance by the industries, the CPCB/SPCB/PCC take appropriate actions under the provisions of the above said Acts, like holding inquiry and imposition of penalty in case of contravention of regulations.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1851 TO BE ANSWERED IN RAJYA SABHA ON 17.03.2025 REGARDING “CONTAMINANTS IN GROUNDWATER”.

State-wise details of Nitrate, Fluoride, Arsenic and Uranium Contamination in Ground Water for Year 2023

S · N o ·	State	Nitrate			Fluoride			Arsenic			Uranium		
		No. of samples analysed	% of samples with NO ₃ > 45 mg/L	No. of districts having Nitrate > 45 mg/L	No. of samples analysed	% of samples with F > 1.5 mg/L	No. of districts having F > 1.5 mg/L	No. of samples analysed	% of samples with As > 10 ppb	No. of districts having Arsenic > 10 ppb	No. of samples U analysed	% of samples U > 30 ppb	No. of districts having U > 30 ppb
1	Andaman & Nicobar Islands	113	0	0	113	0	0	0	0	0			
2	Andhra Pradesh	1149	23.5	26	1149	11.31	17	0	0	0			
3	Arunachal Pradesh	12	0	0	12	0	0	12	0.0	0	12	0	0
4	Assam	155	0	0	155	0	0	155	0.65	1	155	0	0
5	Bihar	808	2.35	15	808	4.58	6	0	0.0	0	752	0.1	1
6	Chandigarh UT	8	0	0	8	0	0	8	0.0	0	8	0	0
7	Chhattisgarh	783	11.49	20	783	1.79	8	0	0	0	783	0.6	3
8	Dadra & Nagar Haveli and Daman & Diu	17	0	0	10	0	0	0	0	0			
9	Delhi	103	20.39	7	103	16.5	6	103	2.91	2	103	10.7	6
10	Goa	10	0	0	10	0	0	6	0.0	0	6	0	0
11	Gujarat	632	18.04	23	632	13.92	25	0	0.0	0			
12	Haryana	879	14.56	21	879	23.66	17	857	0.70	5	857	18.7	16
13	Himachal Pradesh	171	9.36	6	171	1.17	2	0	0.0	0			
14	Jammu & Kashmir	250	9.2	6	250	0	0	250	0.8	2	250	0	0
15	Jharkhand	397	5.79	9	397	2.77	8	0	0.0	0	342	0	0
16	Karnataka	345	48.99	27	345	17.68	19	125	3.20	2	125	4.8	3
17	Kerala	342	6.73	10	342	0.29	1	0	0.00	0	342	0	0
18	Madhya Pradesh	589	22.58	39	589	1.02	6	1064	0.0	0	1064	0.5	3

19	Maharashtra	1567	35.74	32	1567	1.91	10	0	0.00	0	1567	0.2	3
20	Meghalaya	39	0	0	39	0	0	39	0.0	0	39	0	0
21	Mizoram	3	0	0	3	0	0	3	0.0	0	3	0	0
22	Nagaland	6	0	0	6	0	0	6	0.0	0	6	0	0
23	Odisha	625	14.4	15	625	4.48	10	904	0.66	3	904	0.3	3
24	Pondicherry	4	25	1	4	0	0	0	0	0	4	0	0
25	Punjab	922	12.58	20	922	13.77	17	908	4.85	12	908	32.6	20
26	Rajasthan	630	49.52	30	630	43.17	31	0	0.0	0	627	21.2	21
27	Tamil Nadu	916	37.77	31	916	9.72	21	0	0.0	0	915	2.3	9
28	Telangana	1150	27.48	32	1150	14.87	28	0	0.0	0			
29	Tripura	81	2.47	2	81	0	0	81	0.0	0	81	0	0
30	Uttar Pradesh	1387	9.37	48	1387	5.7	27	1386	6.70	29	1386	8.3	43
31	Uttarakhand	207	17.39	5	207	0.48	1	207	3.86	3	206	0.5	1
32	West Bengal	959	8.65	18	959	0.73	3	959	8.76	6			
	Grand Total	15259	19.8	443	15259	9.04	263	7074	3.55	65	11445	6.6	132
		Parts of 443 districts in 23 States/UTs		Parts of 263 districts in 20 States/UTs			Parts of 65 districts in 10 States/UTs			Parts of 132 districts in 13 States/UTs			

***Data from the States/UTs of Manipur, Lakshadweep, Ladakh and Sikkim is not available.**
