GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 2353

ANSWERED ON 13.03.2025

EMERGING CONTAMINANTS IN GROUNDWATER

2353. SHRI DUSHYANT SINGH

SHRI ASHOK KUMAR RAWAT

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

(a) whether there are any emerging contaminants identified in the 2024 Annual Groundwater Quality Report that require immediate attention, particularly in regions like Jhalawar-Baran and other parts of Rajasthan and if so, the details thereof;

(b) the manner in which the Government initiatives have been effective in mitigating groundwater contamination and specific actions taken to address contamination in rural and underdeveloped areas;

(c) whether the Government foresees community engagement and private sector partnerships in improving groundwater quality management and if so, the details of these collaborations along with the way in which they would be implemented in regions such as Rajasthan;

(d) the manner in which these efforts would be tailored to ensure sustainable groundwater management in regions with limited infrastructure and resources, ensuring equitable access to clean water for all communities; and

(e) the extent to which initiatives taken by the Government are effective in managing contamination attributed to the submergence?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(**a)** The Annual Groundwater Quality Report 2024 prepared by the Central Ground Water Board (CGWB) is based on the ground water sampling and analysis from 15,259 monitoring locations spread across the country. The major objective of the report is to study various water quality parameters like Electrical Conductivity(EC), Fluoride, Arsenic, heavy metals, Nitrate etc.in groundwater used for drinking and agriculture purposes. The report has found the presence of above contaminants beyond the prescribed limits for human consumption in isolated pockets of some States/UTs, including Rajasthan. Apart from that, no new emerging pollutants have been identified in the report.

Parameter-wise details of ground water quality in Jhalawar, Baran and other Districts of Rajasthan is provided in **Annexure.**

(b) Water is a state subject and the responsibility of ground water management, including taking initiatives for improving ground water quality and mitigate the contamination issue, lies primarily with the state governments. The Central Government complements the efforts of the States by providing technical support and financial assistance through its various centrally sponsored schemes.

However, the Central Government in this direction has taken several steps in this direction and some of the important ones are regular sharing of ground water quality data available with CGWB through Yearbooks, Half-yearly Bulletins and fortnightly Alerts etc.; Taking up special studies in ground water quality affected areas; Taking up construction of Arsenic safe wells by CGWB in the affected areas using the innovative cement sealing technology; Implementing comprehensive pollution control program by Central Pollution Control Board (CPCB) by setting industry specific discharge standards, making Effluent Treatment Plants (ETPs) mandatory for Industries, Online continuous monitoring of Discharge etc.

Moreover, Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August 2019, to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household in the country, wherein Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery.

As a result of all these cumulative efforts, it is reported that from August 2019 to March 2025 the 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. These remaining habitations have also been provided clean, & safe drinking water through Community Water Purifier Plants (CWPPs).

(c) The central government has taken several important steps to ensure large scale community and private sector participation for turning ground water management into a truly peoples' movement. The notable among them are:

i. The Central Government is implementing Atal Bhujal Yojana in 80 water stressed districts across 7 states, including Rajasthan. The primary aim of the scheme is demand side management through scientific means based on water budgeting of the area involving the local communities at village levels leading to sustainable groundwater management in the targeted areas.

ii. Central Ground Water Board organizes various Public Interaction Programs (PIP), Mass Awareness Programs (MAP), Tier II and Tier –III programmes on local ground water issues, including educating the public about the impacts of water contamination and promoting sustainable practices to maintain water quality. The PIPs have rural and underdeveloped areas as their focus so as to spread the message to even remote corners of the country.

iii. Under JJM, with a view to involve community at large and to spread awareness regarding water quality , five persons, preferably women, are identified and trained from every village for testing the water samples through Field Test Kits (FTKs). Thus far, more than 24 lakh women have been trained across the country.

iv. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 with active community involvement. Jal Shakti Kendras (JSKs) have been set up under Abhiyan in various districts of the country for interacting with local community and dissemination of water related knowledge. 33 JSKs have been set up in Rajasthan so far.

v. To further strengthen the momentum of Jal Shakti Abhiyan, Jal Sanchay Jan Bhagidari: A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat whose main objective is to ensure that every drop of water is conserved through collective efforts, following a whole-of-society and whole-of-government approach.

vi. Further, the Ministry of Jal Shakti and its organizations, work with a very large number of Non-Governmental Organizations and academic institutions to promote public awareness and for enhancing water resource management in the country. Notably, the Ministry has entered into several MoUs with NGOs working at the grassroots level.

(d) M/o Jal Shakti has formulated National Water Policy, 2012 which highlights the inequitable distribution of ground water resources in the country and the need to develop area specific approach considering the local climatic factors and hydrogeological conditions for sustainable management of ground water resources. The policy urges the States to formulate their schemes and projects accordingly. Additionally, as mentioned earlier, the government is implementing Jal Jeevan Mission for ensuring equitable access to clean water for all communities, especially in rural areas. Under JJM, out of the allocated amount, states can utilize up to 2% for Water Quality Monitoring & Surveillance. Further, as per Operational Guidelines of JJM, while allocating funds, 30% weightage is to be given to rural population, 10% to rural SC/ST population and 10% population residing in habitations affected by chemical contamination.

(e) Salinity ingress has been reported in some coastal parts of the country due to seawater encroachment. National Institute of Hydrology (NIH), Roorkee has conducted research studies to investigate aspects related to salinity ingress in coastal aquifers in different areas. Further, CGWB has carried out Aquifer mapping under National Aquifer Mapping and Management Programme (NAQUIM) and reports of all the coastal districts have been prepared and shared with state for implementation of management plans. As per the recommendations, various measures like construction of Tidal Regulators, embankments, sea walls, Check Dams, Recharge reservoirs, Recharge Tanks etc. have been taken up by state governments, which are reported to be working effectively.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2353 TO BE ANSWERED IN LOK SABHA ON 13.03.2025 REGARDING "EMERGING CONTAMINANTS IN GROUNDWATER".

Details of District-wise ground water quality for various parameters, Rajasthan for the year 2023

S. N	Districts (prior to re-organization list)		TDS		Cl		SO4		F		NO3		Th		Ca		Mg	
		Samples analysed	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%	No of Sample More than permissible limit	%
1	AJMER	14	6	42.86	2	14.29	4	28.57	6	42.86	6	42.86	4	28.57	0	0	3	21.43
2	ALWAR	15	2	13.33	1	6.67	3	20	2	13.33	6	40	4	26.67	2	13.33	2	13.33
3	BANSWARA	14	0	0	0	0	0	0	6	42.86	8	57.14	0	0	0	0	0	0
4	**BARAN**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**60**	**1**	**20**	**0**	**0**	**0**	**0**
5	BARMER	54	44	81.48	28	51.85	32	59.26	23	42.59	36	66.67	16	29.63	4	7.41	17	31.48
6	BHARAT PUR	18	10	55.56	5	27.78	6	33.33	6	33.33	5	27.78	7	38.89	1	5.56	6	33.33
7	BHILWARA	27	12	44.44	5	18.52	8	29.63	6	22.22	13	48.15	10	37.04	3	11.11	9	33.33
8	BIKANER	37	14	37.84	10	27.03	7	18.92	13	35.14	12	32.43	9	24.32	2	5.41	7	18.92
9	BUNDI	9	1	11.11	0	0	2	22.22	3	33.33	1	11.11	1	11.11	0	0	2	22.22
10	CHITTA URGARH	5	1	20	0	0	1	20	2	40	3	60	0	0	0	0	0	0
11	CHURU	44	26	59.09	14	31.82	14	31.82	21	47.73	28	63.64	17	38.64	6	13.64	17	38.64
12	DAUSA	10	5	50	2	20	4	40	2	20	4	40	4	40	1	10	3	30
13	DHAULPUR	6	0	0	0	0	0	0	1	16.67	0	0	0	0	0	0	0	0
14	DUNGARPUR	4	0	0	0	0	0	0	1	25	0	0	0	0	0	0	0	0
15	GANGA NAGAR	11	3	27.27	2	18.18	2	18.18	4	36.36	5	45.45	4	36.36	1	9.09	3	27.27

16	HANUM ANGARH	16	8	50	1	6.25	6	37.5	5	31.25	9	56.25	7	43.75	4	25	7	43.75
17	JAIPUR	32	17	53.13	5	15.63	6	18.75	17	53.13	18	56.25	9	28.13	1	3.13	8	25
18	JAISALMER	33	21	63.64	13	39.39	9	27.27	15	45.45	13	39.39	7	21.21	0	0	7	21.21
19	JALORE	23	13	56.52	9	39.13	5	21.74	16	69.57	11	47.83	7	30.43	4	17.39	4	17.39
20	**JHALAWAR**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8.33**	**4**	**33.33**	**0**	**0**	**0**	**0**	**1**	**8.33**
21	JHUN JHUNU	19	10	52.63	1	5.26	5	26.32	12	63.16	12	63.16	0	0	0	0	3	15.79
22	JODHPUR	72	49	68.06	34	47.22	25	34.72	44	61.11	41	56.94	22	30.56	6	8.33	18	25
23	KARAULI	11	6	54.55	2	18.18	3	27.27	2	18.18	7	63.64	3	27.27	2	18.18	3	27.27
24	KOTA	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	NAGAUR	39	29	74.36	21	53.85	22	56.41	26	66.67	19	48.72	17	43.59	3	7.69	18	46.15
26	PALI	19	9	47.37	5	26.32	7	36.84	14	73.68	9	47.37	5	26.32	1	5.26	5	26.32
27	PRATAP GARH	7	0	0	0	0	0	0	1	14.29	6	85.71	2	28.57	0	0	1	14.29
28	RAJSAMAND	15	2	13.33	0	0	3	20	5	33.33	6	40	3	20	0	0	3	20
29	SAWAI MADHOPUR	11	3	27.27	2	18.18	2	18.18	5	45.45	5	45.45	1	9.09	0	0	2	18.18
30	SIKAR	8	1	12.5	0	0	0	0	1	12.5	4	50	0	0	0	0	0	0
31	SIROHI	13	2	15.38	2	15.38	1	7.69	8	61.54	5	38.46	3	23.08	0	0	2	15.38
32	TONK	14	7	50	3	21.43	4	28.57	5	35.71	8	57.14	3	21.43	1	7.14	5	35.71
33	UDAIPUR	12	1	8.33	0	0	0	0	2	16.67	6	50	3	25	0	0	3	25

*prior to re-organization

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