

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

RAJYA SABHA

UNSTARRED QUESTION NO. 604

ANSWERED ON 12.12.2022

CONTAMINATION OF ARSENIC IN GROUNDWATER

604 SHRI NEERAJ SHEKHAR

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether contamination of arsenic in groundwater is more than 0.01 mg per litre in 209 districts of the country;
- (b) if so, the details thereof, State-wise and district-wise;
- (c) the details of number of population affected in these 209 districts due to arsenic contamination in groundwater, as on date, State-wise and district-wise; and
- (d) the number of households which have been provided with potable arsenic free drinking water in these 209 districts during 2022-23 till date, district-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) & (b) Central Ground Water Board (CGWB) generates ground water quality data on a regional scale from various scientific studies and from ground water quality monitoring throughout the country. These studies indicate the occurrence of arsenic beyond the Bureau of Indian Standards (BIS) permissible limits in isolated pockets in certain parts of the country. Arsenic has been reported from certain points of 221 districts in 25 States/UTs. Further, State-wise details of partly affected districts with arsenic contaminant in ground water are given at **Annexure I**. State-wise and district-wise number of affected habitations is given at **Annexure-II**.

(c) & (d) Information regarding number of people affected due to groundwater contamination is not maintained by the Ministry of Jal Shakti, Government of India. However, contamination in drinking water sources in rural areas is monitored by the Department of Drinking Water & Sanitation, habitation-wise. As reported by States, as on 01.04.2022 and as on 07.12.2022, district-wise details of habitations having arsenic contamination in drinking water sources are given at **Annexure-II**.

Water being a State subject, initiatives for water management, including providing potable drinking water is primarily States' responsibility. However, various steps have been taken by the Central Government in this regard.

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. Water safety has been one of the key priorities under the JJM since its inception.

Under JJM, while planning for potable water supply to household through tap water connection, priority is given to quality-affected habitations. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source takes 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. State-wise, district-wise details of habitations covered with CWPP are given at **Annexure-II**.

Data on ground water quality available with CGWB are periodically being shared with concerned State Governments for taking necessary remedial measures. Successful contamination-free wells created for exploration of groundwater are handed over to the States for gainful utilization.

Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, special attention is being given to ground water quality including contamination by toxic substances such as arsenic. Further, under NAQUIM, arsenic safe deeper aquifer zones have been identified and wells have been constructed tapping the arsenic safe deeper aquifers using innovative cement sealing technique. So far, 513 exploratory wells tapping arsenic safe aquifers have been constructed, including 40 in Bihar, 188 in West Bengal and 285 in Uttar Pradesh. In addition, the innovative cement sealing technique of CGWB has been shared with the State agencies for suitable use.

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 604 TO BE ANSWERED IN RAJYA SABHA ON 12.12.2022 REGARDING “CONTAMINATION OF ARSENIC IN GROUNDWATER”.

States Wise Details of Partly Affected Districts with Arsenic Contaminant in Ground Water of India

S. No.	State/UT	Arsenic (above 0.01 mg/l)
1	Andhra Pradesh	Ananthpur, East Godawari, Krishna, Prakasham, Guntur, Kurnool, Nellore
2	Telangana	Nalgonda
3	Assam	Baksha, Barpeta, Bongaigaon, Cachar, Darrang, Dhemaji, Dibrugarh, Dhubri, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, Karimganj, Lakhimpur, Morigaon, Nagaon, Nalbari, Sivsagar, Sonitpur, Biswanth
4	Bihar	Araria, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Kishanganj, Lakhisarai, Munger, Patna, Purnea, Samastipur, Saran, Vaishali, E.Champaran, Gopalganj, Sheohar, Supaul, Madhepura, Muzaffarpur, Saharsa, Siwan, W Champaran, Sitamarhi, Madhubani
5	Chhattisgarh	Rajnandgon, Raipur, Raigarh, Koriya,
6	Delhi	East Delhi, North East Delhi, South east Delhi,
7	Gujarat	Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Kachchh, Mehesana, Patan, Rajkot, Surendranagar, Vadodara
8	Haryana	Ambala, Bhiwani, Faridabad, Fatehabad, Hissar, Jhajjar, Jind, Karnal, Panipat, Rohtak, Sirsa, Sonapat, Yamunanagar, Mahendergarh, Palwal, Panchkula, Rewari
9	Himachal Pradesh	Kangra
10	Jammu & Kashmir	Jammu, Kathua, Rajouri
11	Jharkhand	Sahebganj, Lohardaga, Godda, Dhanbad
12	Karnataka	Raichur, Gadag and Yadgir district
13	Kerala	Kollam
14	Madhya Pradesh	Betul, Burhanpur, Chhindwara, Dhar, Khandwa, Mandsaur, Morena, Neemuch, Umaria
15	Manipur	Bishnupur, Thoubal
16	Odisha	Gajapati, Ganjam, Bhadrak, Kendrapara, Jagatsingh Pur,
17	Punjab	Mansa, Amritsar, Bhatinda, Fazilka, Ferozpur, Gurdaspur, Hoshiarpur, Kapurthala, Ropar, Faridkot, Nawashahar, Sangrur, Taran Taran, SAS Nagar, Pathan kot, Patiala, Chandigarh
18	Rajasthan	Ganganagar, Pali, Bikaner, Banswara, Bhilwara, Churu, Hanumangarh, Jodhpur, Sirohi, Tonk
19	Tamil Nadu	Ariyalur, Perambalur, Dindigul, Cuddalore, Nagapattinam, Ramnathapuram, Tiruvallur, Tirunelveli, Thiruvarur, Trichchirappalli, Tuticorin, Sivaganga, Chennai, Dharmapuri
20	Tripura	North Tripura, Gomati and South Tripura
21	Uttar Pradesh	Bahraich, Balia, Balrampur, Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Gorakhpur, Lakhimpur Kheri, Meerut, Mirzapur, Moradabad, Rai Bareilly, Sant Kabir Nagar, Shajahanpur, Siddarthnagar, Sant Ravidas Nagar, Unnao, Azamgarh, Rampur, Badaun, Deoria, Jhansi, Kausambi, Kushinagar, Pilibhit, Banda, Sitapur, Hardoi, Muzaffarnagar, Sultanpur, Faizabad, Pratapgarh, Maunath Bhanjan, Barabanki, Maharajgang, JP Nagar
22	Uttarakhand	Dehradun, Udham Singh Nagar, Haridwar, Almora, Uttarkashi
23	West Bengal	Purba Bardhaman, Dakshin Dinajpur, Hooghly, Howrah, Malda, Murshidabad, Nadia, N-24 Parganas, S-24 Parganas, Coochbehar, Uttar Dinajpur
24	Daman & Diu	Diu
25	Puducherry	Pondicherry
	Total	Parts of 221 districts in 25 States & UTs

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 604 TO BE ANSWERED IN RAJYA SABHA ON 12.12.2022 REGARDING “CONTAMINATION OF ARSENIC IN GROUNDWATER”.

District-wise details of habitations having Arsenic contamination in drinking water sources

Sr. No	State	District	No. of Arsenic-affected habitations as on 01.04.2022	No. of Arsenic-affected habitations as on 07.12.2022	
				Total no.	Covered with CWPP
1.	Punjab	Amritsar	215	203	158
2.		Fatehgarh Sahib	2	1	1
3.		Fazilka	5	5	2
4.		Ferozepur	25	24	13
5.		Gurdaspur	184	169	80
6.		Hoshiarpur	11	10	7
7.		Jalandhar	1	1	0
8.		Kapurthala	5	5	2
9.		Ludhiana	1	1	1
10.		Moga	1	1	1
11.		Patiala	10	9	9
12.		Rupnagar	25	23	18
13.		Sas Nagar	1	1	1
14.		Tarn Taran	74	69	47
15.	Uttar Pradesh	Bahraich	2	2	2
16.		Ballia	74	74	74
17.		Bareilly	10	10	10
18.		Basti	5	5	5
19.		Budaun	4	4	4
20.		Deoria	1	1	1
21.		Kushi Nagar	4	4	4
22.		Lakhimpur Kheri	2	2	2
23.		Maharajganj	3	3	3
24.		Siddharth Nagar	2	2	2
25.	West Bengal	Maldah	65	65	64
26.		Murshidabad	27	27	12
27.		Nadia	35	35	31
28.		North 24 Paraganas	6	5	5
Total			800	761	559

Source: JJM-IMIS
