

**GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA**

STARRED QUESTION NO:279
ANSWERED ON:12.12.2005
CONTAMINATED GROUND WATER
Pathak Shri Brajesh;Patle Shri Shishupal Natthu

Will the Minister of WATER RESOURCES be pleased to state:

- (a) whether the Government has conducted any study with regard to extent of toxic substances found in ground water and its effects on human health;
- (b) if so, the details thereof, State-wise and the steps taken/proposed to be taken to contain the quality of ground water;
- (c) whether the Government proposes to set up treatment plants to save ground water from getting contaminated;
- (d) if so, the complete details thereof; and
- (e) if not, the reasons therefor?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR HEAVY INDUSTRIES, PUBLIC ENTERPRISES AND WATER RESOURCES (SHRI SONTOSH MOHAN DEV)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY OF PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO.279 FOR REPLY ON 12.12.2005 REGARDING CONTAMINATED GROUND WATER

As per available information, ground water in major parts of the country is by and large potable. There are, however, areas which have poor quality of ground water mainly due to contamination from ground water bearing rocks, excessive use of fertilizers, industrial and domestic effluents, mining wastes, saline water ingress etc. The Central Ground Water Board (CGWB), during its surveys and studies of the contamination of ground water have revealed that arsenic and fluoride are the main geogenic contaminants. The names of States and locations where ground water has been found contaminated and reasons thereof are given in the enclosed Annexure.

Consumption of contaminated water is a health hazard. Prolonged use of Arsenic contaminated water for drinking causes diseases like dermatosis, keratosis, conjunctivitis, bronchitis and gastro-enteritis in the initial stage and peripheral neuropathis, hepatopathy melanosis, de- pigmentation and hyper-keratosis. The effect of excessive amount of Fluoride on human body is dental molting, skeletal and crippling fluorosis. Heavy Metals like Lead may cause irreversible brain damage, seizure coma, fatigue, irritability etc., and repeated and prolonged exposure of Mercury can result in severe disturbances in the central nervous system, kidneys, liver etc.

"Water" being a State subject, it is primarily the responsibility of the State Governments to take steps to check ground water pollution. However, the Union Government has also taken following measures to mitigate the problem of ground water pollution:-

- (i) The Central Government has set-up Central Ground Water Authority to regulate and control ground water management and development.
- (ii) Mass awareness and education programme have been launched on the significance of water economy, efficient utilization, health, hygiene and sanitation.
- (iii) The Rajiv Gandhi National Drinking Water Mission, under the Ministry of Rural Development, has also been assisting and guiding the States in the provision of safe drinking water to the rural population under the Accelerated Rural Water Supply Programme (ARWSP). In quality affected areas, where ground water is unfit for drinking, the safe drinking water is supplied either through alternative sources, tapping surface water or by other means by undertaking remedial measures like de-fluoridation, iron removal and arsenic removal.

Central Pollution Control Board (CPCB), under the Ministry of Environment & Forests has adopted several measures like directing the industries through State Pollution Control Boards to limit the discharge of effluent within the stipulated standards, initiation of scheme to give assistance to clusters of small scale industrial units for setting up common effluent treatment plants and taking up of quality scheme of monitoring in critically polluted areas.

A new concept of the Common Effluent Treatment Plant (CETP) was envisaged to treat the effluent emanating from the clusters of

compatible small scale industries and also to minimize the burden of various Government authorities working for controlling pollution and monitoring of water pollution control. The financing pattern of CETP is 20:30:25:25 (promoter's: loans from financial institutions: State: Central subsidy in form of Grant). The funds from the Government of India are routed through the respective State Pollution Control Boards. State-wise number of CETPs installed so far are as follows:-

Sl. Name of CETPs Numbers of
No CETPs

1	Andhra Pradesh	4
2	Delhi	15
3	Haryana	1
4	Karnataka	4
5	Tamil Nadu	28
6	Maharashtra	13
7	Madhya Pradesh	1
8	Punjab	3
9	Rajasthan	7
10	Uttar Pradesh	3
11	West Bengal	1
12	Gujarat	16
Total:		96

(REFERENCE LOK SABHA STARRED QUESTION NO.279 DATED 12.12.2005 REGARDING CONTAMINATED GROUND WATER)

STATE-WISE DETAILS OF CONTAMINATION OF GROUND WATER IN SOME AREAS OF THE DISTRICTS DUE TO VARIOUS CONTAMINANTS

SL. STATE SALINITY IRON FLUORIDE NITRATE ARSENIC HEAVY
NO. METALS

1	2	3	4	5	6	7	8
1.	Andhra Pradesh	East Godavari, West Godavari, Krishna, Guntur, Prakasam Krishna, Kurnool, Cuddapah, Guntur, Karimnagar	Prakasam, Nellore, Nalgonda, Ranga Reddy, Adilabad, Karimnagar Mahaboobnagar, Vijayawada	Prakasam, Anantapur, Nellore, Nalgonda, Nizamabad, Guntur, Kurnool, atnam, Cuddapah Nalgonda			Anantapur Mehboob- Prakasam, Visakhap
2.	Assam	Bank of Nowgong, Brahmaputra Karbi- Anglong	Northern Kamrup,	Lakhimpur			Digboi
3.	Bihar	Begusarai Nawada Muzaffarpur, Gaya, Munger, Madhubani, Patna, Nalanda, Nawada, Banka	Champa- Patna, Nalanda, Nawada, Bhagalpur, Banka	Munger, Gaya, Patana Begusarai.			Bhojpur Muzaff-
4.	Chhattisgarh	Dhamtari, Kanker, Korba, Koriya, Raipur,	Bastar, Raipur Bilaspur,	Rajnand- gaon Korba			Bastar, Korba

5. Gujarat Banask- Ahmedabad, Amreli,
 antha, Amreli, Banaska-
 Junagarh, Banaskantha ntha,
 Bharaucho, Bhavnagar, Bhavnagar, Gandhin-
 Surat, Junagarh, agar,
 Mehsana, Junagarh, Jamnagar,
 Ahmedabad, Rajkot, Jamnagar,
 Surendr- Junagarh, Kachchh,
 Surendr- anagar, Mahesana
 anagar, Vadodra,
 Kheda, Kachchh,
 Jamnagar Panchmahal,
 Mehsana,
 Sabarkantha
6. Haryana Sonapat, Rohtak, Ambala, Faridabad
 Rohtak, Jhajjar, Sonapat,
 Hissar, Jind, Jind,
 Sirsa, Hissar, Gurgaon,
 Faridabad Bhiwani, Faridabad,
 Jind, Mahendra- Hissar,
 Gurgaon, garh, Sirsa,
 Bhiwani, Faridabad, Karnal,
 Mahendrag- Gurgaon, Kuruksh-
 arh Kaithal, etra,
 Karnal, Rohtak,
 Kurukshetra Bhiwani,
 Sirsa, Mahendragarh
 Sonapat,
 Rewari,
 Fatehabad,
 Panipat
7. Himachal Kulu, Purwanoo
 Pradesh Solan, Una
 Kalaamb
8. Jharkhand Deoghar, Giridih, Palamu, Dhanbad
 Palamau, Bokaro Sahebganj
9. Karnataka Bijapur, Bijapur, Bijapur, Bhadrawati
 Belgaum, Gulbarga, Bangalore,
 Raichur, Bellary, Belgaum,
 Bellary, Raichur, Bellary,
 Dharwar Chitradurga Chiradurga
 Kolar, Dharwar,
 Gadag Gulbarga,
 Hassan,
 Kolar,
 Mandya,
 Raichur,
 Shimoga
10. Kerala Ernakulam Palghat, Idukki,
 Alleppey Kottayam,
 Trichur, Palghat,
 Alleppey Pathanamth-
 itta,
 Mallapuram
11. Madhya Gwalior, Bhind, Bhind, Ratlam,
 Pradesh Bhind, Moerana, Bhopal, Nagda
 Morena, Guna, Chhindwara
 Jhabua, Jhabua, Dhar,
 Khargaon, Chhindwara, Dewas,
 Dhar, Seoni, Gwalior,
 Shivpuri, Mandla, Indore,
 Shajapur, Raipur, Khandwa,
 Guna, Vidisha Mandsaur,

Mandsor,
Ujjain

Morena,
Shivpuri,

Sheore,
Ujjain

12. Maharashtra Amaravati Bhandara, Ahmednagar
Akola. Chandrapur,
Nanded, Amravati,
Gadchiroli, Akola,
Yavatmal, Aurangabad
Sholapur
Bhandara,
Beed,
Buldana,
Chandarpur
Gadchiroli
Dhule,
Jalgaon,

Jalna,
Kolhapur,
Latur,
Nagpur,
Nanded,
Osmanabad,
Pune,
Sangli,
Satara,
Sholapur,
Thane,
Wardha

13. Orissa Cuttack, Parts Bolangir, Anugul, Angul,
Baleswar of Khurda, Baragarh, Talcher
Puri Coastal Kalahandi, Bolangir,
Orissa

Boudh,
Cuttack,
Ganjam,
Jagatsingh
pur,
Kalahandi,
Keonjhar,
Malkangiri
Nawapara,
Rayagada,
Sambalpur,
Sundargarh

14. Punjab Bhatinda, Bhatinda, Bhatinda, Ludhiana
including Sangrur, Sangrur, Faridkot, Mandi,
Chandigarh Faridkot, Mansa, Ferozepur, Gobindgarh
Firozpur. Moga, Patiala,
Feorzepur, Sangrur,
Faridkot, Chandigarh
Muktsar,
Patiala

15. Rajasthan Bharatpur Bikaner, Ajmer, Ajmer, Pali,
Jaipur, Alwar, Barmer, Alwar, Udaipur,
Nagaur, Dungarpur Bhilwara, Bharatpur, Khetri.
Jalore, Bikaner, Bikaner,
Sirohi, Dungarpur, Bundi,
Jodhpur Ganganagar, Churu,
Hanumangarh Dholpur,
Jaipur, Ganganagar
Jaisalmer, Jaipur,
Jalore, Jaisalmer,
Jhunjhunu, Jhalawar,
Jodhpur, Jhunjhunu,
Nagaur, Jodhpur,
Pali, Nagaur,
Rajsamand, Sawai
Sikar, Madhopur,
Sirohi Udaipur.

16. Tamil Karaikal, Dharmapuri, Coimbatore Manali,

Nadu	Pondic-	Salem, Periyar,	North
herry,		Erode,	Arcot.
Nagapa-		Vellore, Ambedkar	
ttanam,		Namakkal, Nagar, T.	
Quide-		Tiruchir- Kottabom-	
Millet,		apalli, man,	
Puduko-		Ramanatha- Dindigul-	
ttai,		puram, Anna, V.R.	
Ramananth		Villupuram, Padayachi	
apuram,		Cuddalore,	
North		Tirunelveli	
Arcot-			
Ambedkar,			
Dharampuri			
Salem,			
Trichy,			
Coimbatore			
17. Tripura	Dharamna		
garKaule			
shaher,			
Khowai,			
Ambasa,			
Amapur			
and			
Parts of			
Agartala			
Valley			
18. Uttar	Fatehpur,	Aligarh, Ballia Singrauli	
Pradesh.	Mathura,	Raibareli, Agra,	
Mainpuri,	Lakihmpur	Banda,	Basti,
Banda.	Kheri,	Etawah,	Kanpur,
Lucknow,	Ghaziabad,	Jaunpur,	
Uanna,	Hamirpur,	Allahabad	
Kanpur,	Jaunpur,		
Hardoi,	Jhansi,	Saharanpur	
Bulands-	Kanpur,		
hahar,	Aligarh,	Aligarh.	
Agra,	Mathura,		
Mathura,	Pilibhit,		
Ghaziabad,	Mainpuri		
Meerut,			
Firozabad,			
Etah,			
Fatehgarh,			
Mainpuri,			
Mahoba,			
Allahabad,			
Varanasi			
19. Uttaranchal	Nainital		
20. West	Midna-	Birbhum,	Uttar
Bengal	pore,	Howrah,	Dinajpur,
Howrah,	North 24	Malda,	24 Howrah,
Hooghli,	Parganas	Birbhum,	Parag-
Bankura		Murshidabad	anas bad,
			Nadia,
			South- Nadia.
			24
			Parag-
			anas,
			Nadia,
			Hoogly,
			Murshid-
			abad,
			Bardh-
			aman
			Howrah
21. NCT of Najafgarh	North-West, City	Alipur,	
Delhi	West, South- Shahdara	Kanjhawa-	
Kanjhawala	West	and	la,
and		Mehrauli	Najafgarh
Mehrauli		Blocks	

Blocks.

West,
South-west

Mehrauli
City and
Shahdara
Blocks.