

GOVERNMENT OF INDIA  
MINISTRY OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 3663**  
ANSWERED ON 23.03.2017

**CONTAMINATION OF GROUND WATER**

†3663. SHRI JANAK RAM  
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Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) the separate permissible limits of chemicals/metals such as Fluoride, Aluminium, Nitrate, Arsenic, Lead, Cadmium, Chromium etc. in the ground water as fixed by the World Health Organisation;
- (b) whether the Government is aware that the ground water in the country including North Eastern Region and Assam is highly contaminated with toxic pollutants and said chemicals/metals and if so, the details and the present status thereof, State/UT-wise;
- (c) whether any study has been conducted on its impact on the health of people and drinking water supply in the country and if so, the details thereof and the follow up action taken thereon;
- (d) the details of the steps taken along with the ongoing schemes/projects/ programmes being implemented to tackle the situation and improve/recharge ground water level including the funds allocated/ released/spent for the purpose during the last three years, State/UT-wise; and
- (e) the future plan of the Government to improve the situation?

**ANSWER**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION  
(DR. SANJEEV KUMAR BALYAN)

- (a) As per the World Health Organisation (WHO) document 'Guidelines for drinking water quality, Fourth edition' published in 2011, the WHO limits for the different chemicals in drinking water are as follows:

S.No.	Contaminant	WHO limits (in mg/l)
1	Fluoride	1.5
2	Aluminium	No specific health based guideline
3	Nitrate	50
4	Arsenic	0.01
5	Lead	0.01
6	Cadmium	0.003
7	Chromium	0.05

- (b) The surveys and the ground water quality studies carried out by Central Ground Water Board (CGWB) and State departments have shown the sporadic occurrence of contaminants like Arsenic, Fluoride, Nitrate, Lead etc. in ground water above the permissible limits prescribed by Bureau of

Indian Standards (BIS). The names of the districts (including that of North East Region and Assam), which are partly affected by different contaminants in ground water are given at **Annexure-I**.

(c) Various studies on impact on health of the above chemicals have been undertaken/conducted by academic institutes, research organizations, think tanks etc., the reports of which are available in public domain.

(d) & (e) Steps taken by the Government to tackle the situation of ground water contamination includes:

- i.** Results of the chemical analysis of ground water are shared with concerned State agencies for awareness and intensive monitoring and remediation for drinking water use.
- ii.** Options such as surface water & ground water based piped water supply schemes, tapping deeper aquifer in case of Arsenic contaminated alluvial areas and ex-situ removal plants for Fluoride and Arsenic have been adopted by various States to deal with the menace of Arsenic and Fluoride contamination in ground water.
- iii.** Awareness generation programs in the Country on preventing ground water pollution and use of contaminated water, rain water harvesting and artificial recharge to ground water.
- iv.** Rural drinking water supply is a state subject. Government of India through Ministry of Drinking Water & Sanitation (MoDWS) supplements the efforts of the States by providing them with technical and financial assistance through the centrally sponsored National Rural Drinking Water Programme (NRDWP) for improving the coverage of clean drinking water to rural population. Up to 10% of National Rural Drinking Water Programme (NRDWP) funds allocated to States could be utilized for sustainability of drinking water sources through artificial recharge of ground water and other methods. State/ UT wise status of fund allotted, released and expenditure, under NRDWP, for the last 3 years i.e., 2013-14, 2014-15 , 2015-16 and during 2016-17 is given at Annexure-II.
- v.** CGWB carries out exploratory drilling to delineate contaminant free aquifer zones and successful exploratory wells are handed over to the concerned agencies in the States for utilization by them.

State/ UT -wise details of expenditure incurred under Natural Resource management, under MGNREGA are given at **Annexure-III**.

Further, steps taken by the Government for conservation of surface and ground water are available at the following URL [http://mowr.gov.in/writereaddata/GW\\_Depletion.pdf](http://mowr.gov.in/writereaddata/GW_Depletion.pdf).

**ANNEXURE - I**

**Annexure referred in reply to Lok Sabha Unstarred Q.No. 3663 for reply on 23.03.2017 regarding “Contamination of Ground Water”**

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 )	Heavy metals: Lead (above 0.01 mg/l) Cadmium (above 0.003 mg/l) Chromium (above 0.05 mg/l)
1	<b>Andhra Pradesh</b>	Srikakulam, Visakhapatnam, East-Godavari, West-Godavari Krishna, Guntur, Prakasam, Nellore, Kadapa, Kurnool, Ananthapur,	Visa khapatnam, West- Godavari Krishna, Guntur, Prakasam, Nellore, Chittoor Kadapa, Kurnool, Ananthapur, Sirkakulam	Srikakulam, Vizianagaram, Visa khapatnam, East- Godavari, West-Godavari Krishna, Guntur, Prakasam, Nellore, Chittoor Kadapa, Kurnool, Ananthapur,	Guntur, Kurnool, Nellore	Vishakhapatnam Krishna, Guntur, Nellore, Kurnool, Chittoor, Cuddapah,	
2	<b>Telangana</b>	Adilabad, Nizamabad, Karimnagar, Warangal Khammam, Medak, Mehboob Nagar, Nalgonda,	Adilabad, Karimnagar, Khammam, Warangal, Mahabubnagar, Medak, Nalgonda, Rangareddy, Nizamabad	Adilabad, Nizamabad, Karimnagar, Warangal Khammam, Hyderabad, Mahabubnagar, Medak, Nalgonda, Rangareddy,	Nalgonda,	Adilabad, Hyderabad, Karimnagar, Mahabubnagar, Medak, Nalgonda, Nizamabad, Ranga Reddy	Lead : Rangareddy, Nalgonda Cadmium: Rangareddy Chromium: Rangareddy
3	<b>Assam</b>		Goalpara, Kamrup, KarbiAnglong, Nagaon, Golaghat, Karimganj		Sivsagar, Jorhat, Golaghat, Sonitpur, Lakhimpur, Dhemaji, Hailakandi, Karimganj, Cachar, Barpeta, Bongaigaon, Goalpara, Dhubri, Nalbari, Nagaon, Morigaon, Kamrup, Darrang & Baksha	Cachar, Darrang, Dhemaji, Dhubri, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, KarbiAnglong, Karimganj, Kokrajhar, Lakhimpur, Morigaon, Nagaon, Nalbari, Sibsagar, Sonitpur	
4	<b>Arunachal Pradesh</b>					Changlang , East Siang, Lohit, Papumpare	
5	<b>Bihar</b>		Aurangabad, Banka, Bhagalpur, Gaya, Jamui, Kaimur( Bhabua),	Aurangabad, Banka, Bhagalpur, Bhojpur,	Begusarai, Bhagalpur, Bhojpur, Buxar,	Aurangabad, Begusarai, Bhojpur, Buxar, East	

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 )	Heavy metals: Lead (above 0.01 mg/l) Cadmium (above 0.003 mg/l) Chromium (above 0.05 mg/l)
			Munger, Nawada, Rohtas, Jahanabd, Lakhisarai, Sheikhpura, Nalanda	Darbhangha, Kaimur(Bhabua), Patna, Rohtas, Saran, Siwan	Darbhangha, Katihar, Khagaria, Kishanganj, Lakhisarai, Munger, Patna, Purnea, Samastipur, Saran, Vaishali E.Champaran, Gopalganj, Lohardaga, Madhepura, Muzaffarpur Saharsa, Siwan, W Champaran	Champaran, Gopalganj, Katihar, Khagaria, Kishanganj, Lakhiserai, Madhepura, Muzaffarpur, Nawada, Rohtas, Saharsa, Samastipur, Siwan, Supaul, West Champaran	
6	Chhattisgarh		Bastar, Balod , Balrampur, Bemetra, Bijapur , Durg, Kanker, Kondagaon, Korba, Koriya, Raigarh, Surajpur, Surguja	Bastar, Bilaspur, Dantewada, Dhamtari, Jashpur, Kanker, Kawardha, Korba, Mahasamund, Raigarh, Raipur, Rajnandgaon	Rajnandgaon	Bastar, Dantewada, Kanker, Koriya,	Lead: Korba Cadmium: Korba Chromium:Korba
7	Delhi	New Delhi, North , South, East, West, North West, South West	East Delhi, New Delhi, North West Delhi, South Delhi, South West Delhi, North Delhi, West Delhi	East Delhi, Central Delhi, New Delhi, North Delhi, North West Delhi, South Delhi, South West Delhi, West Delhi	East, North east		Lead : Along Najafgarh drain in North, West and South-west districts Cadmium : Southwest Chromium : Northwest, South, New Delhi, East
8	Goa					North Goa , South Goa	
9	Gujarat	Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Jamnagar, Junagadh, Kachchh, Kheda, Mahesana, Navsari, Patan, Porbandar, Rajkot, Sabarkantha, Surat, Surendranagar, Vadodara, Narmada	Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Gandhinagar, Jamnagar, Junagadh, Kachchh, Mehesana, Panchmahals, Patan, Porbandar, Rajkot, Sabarkantha, Surendranagar, Vadodara	Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Jamnagar, Junagadh, Kachchh, Kheda, Mehesana, Narmada, Navsari, Panchmahals, Patan, Porbandar, Rajkot,	Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Kachchh, Mehesana, Patan, Rajkot, Surendranagar, Vadodara	Ahmedabad, Banaskantha, Bhavnagar, Kachchh, Mehesana,Narmada,	

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 )	Heavy metals: Lead (above 0.01 mg/l) Cadmium (above 0.003 mg/l) Chromium (above 0.05 mg/l)
				Sabarkantha, Surat, Surendranagar, Vadodara			
10	Haryana	Ambala, Bhiwani, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Mohendragarh, Panipat, Rewari, Rohtak, Sirsa, Sonapat	Ambali, Bhiwani, Fatehabad, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendergarh, Panchkula, Palwal, Panipat, Rewari, Rohtak, Sirsa, Sonapat, Yamuna Nagar	Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendargarh, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonipat, Yamuna Nagar	Ambala, Bhiwani, Faridabad, Fatehabad, Hissar, Jhajjar, Jind, Karnal, Panipat, Rohtak, Sirsa, Sonapat, Yamunanagar, Mahendergarh, Palwal	Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendargarh, Panipat, Rohtak, Sirsa, Sonipat, Yamuna Nagar	Lead: Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Mahendragarh, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonapat. Cadmium: Bhiwani, Gurgaon, Jhajjar, Jind, Kaithal, Rewari, Rohtak. Chromium: Fatehabad
11	Himachal Pradesh			Una, Solan, Hamirpur, Kangra, Mandi, Kullu	Kangra		
12	Jammu & Kashmir		Jammu, Kathua	Jammu, Kathua, Anantnag, Kupwara	Jammu, Kathua, Rajouri	Baramulla, Budgam, Kathua, Kupwara, Pulwama, Srinagar	Lead: Jammu (Gangyal), Bari Brahma, Kathua Cadmium: Kathua
13	Jharkhand		Bokaro, Dhanbad, Garhwa, Giridih, Godda, Gumla, Koderma, Pakur Palamu, Ranchi, Sahebganj, Khunti	Chatra, Garhwa, Godda, Gumla, Lohardaga, Pakur, Palamu, PaschimiSinghbhum, PurbiSinghbhum, Ranchi, Sahibganj	Sahebganj	Chatra, Deoghar, East Singhbhum, Giridih, Ranchi, West Singhbhum	Lead: Jamshedpur
14	Karnataka	Bagalkote, Bangalore-Rural, Bangalore-Urban, Belgaum, Bellary, Bijapur, Chamarajanagara, Chikballapur, Chikmagalur, Chitradurga,	Bagalkot, Bangalore(Rural), Bangalore(Urban),Belgaum, Bellary, Bidar, Bijapur, Chikaballapur Chamarajanagar, Chikmagalur, Chitradurga,	Bagalkot, Bangalore, Belgaum, Bellary, Bidar, Bijapur, Chikmagalur, Chitradurga, Davanagere, Dharwad, Gadag,	Raichur and Yadgir district	Bagalkot, Bangalore, Belgaum, Bellary, Bidar, Bijapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere,	

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		Dakshina Kannada, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kodagu/ Coorg, Kolar, Koppal, Mandya, Mysore, Raichur, Ramanagara, Shimoga, Tumkur, Udupi, Uttara Kannada, Yadgir	Davanagere, Dharwad, Dakshina Kannada, Gadag, Gulburga, Hassan, Haveri, Kolar, Koppal, Mandya, Mysore, Raichur, Ramnagara , Shimoga, Tumkur, Yadgir, Uttara Kannada, Udupi	Gulburga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mandya, Raichur. Shimoga, Udupi, Uttara Kannada		Gulburga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mysore, Raichur, Shimoga, Tumkur, Udupi, Uttara Kannada	
15	Kerala	Trivandrum, Kollam, Kottayam, Ernakulam	Palakkad, Alappuzha, Idukki, Ernakulam, Thiruvananthapuram	Alappuzha, Idukki, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thiruvananthapuram, Thrissur, Wayanad		Alappuzha, Ernakulam, Idukki, Kannur, Kasaragod, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Quilon, Thiruvananthapuram, Thrissur, Wayanad	Lead: Ernakulam , Kollam Chromium: Kollam
16	Madhya Pradesh	Balaghat, Bhind, Chhatarpur, Gwalior, Indore, Jhabua, Kargone, Morena, Neemuch, Ratlam, Rewa, Satna, Seohore, Sheopur, Shivpuri, Ujjain	Alirajpur, Balaghat, Barwani, Betul, Bhind, Bhopal, Chhatarpur, Chhindwara, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Harda, Jabalpur, Jhabua, Kargon, Mandla, Mandsaur, Morena, Narsinhpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Sagar, Satna, Seohore, Seoni, Shahdol, Shajapur, Sheopur, Sidhi, Shivpuri, Singrauli, Ujjain, Vidisha	Alirajpur, Anuppur, Ashok Nagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, , Dindori, Guna, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Khandwa, Kargon, Katni, Mandla, Mandsaur, Morena, Narsinhapur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Seohore, Seoni, Shahdol, Shajapur, Sheopur, Shivpuri, Sidhi, Singrauli, Tikamgarh, Ujjain, Umaria, Vidisha	Betual, Burhanpur, Chhindwara, Dhar, Khandwa, Mandsaur, Neemuch, Umaria	Balaghat, Barwani, Betul, Bhind, Bhopal, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Hoshangabad, Indore, Jabalpur, Jhabua, Khandwa, Katni, Mandla, Mandsaur, Narsinghpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Seohore, Seoni, Shahdol, Shajapur, Shivpuri, Sidhi, Tikamgarh, Ujjain, Umaria, Vidisha, East Nimar	Lead: Balaghat, Barwani, Damoh, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Raisen, Rajgarh, Satna, Seohore, Shajapur, Shivpuri, Vidisha
17	Maharashtra	Ahmednagar, Akola, Amravati, Aurangabad, Beed,	Ahmednagar, Beed, Chandrapur, Bhandara, Dhule, Gadchiroli,	Ahmednagar, Akola, Amravati, Aurangabad,		Ahmednagar, Amravati, Beed, Buldana,	Lead: Ahmed Nagar, Akola,

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		Bhandara,Buldhana, Chandrapur,Dhule,Jalgaon, Jalna, Nagpur, Nasik, Pune,Raigard, Sangli,Satara, Solapur, Thane,Yavatmal	Gondia, Jalna, Nagpur, Nanded, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Wardha,Yavatmal	Beed, Bhandara, Buldana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Mumbai, Nagpur, Nanded, Nandurbar, Nasik, Osmanabad, Parbhani, Pune, Sangli, Satara, Solapur, Wardha, Washim, Yavatmal		Chandrapur, Dhule, Gadchiroli, Jalna, Kohlapur, Latur, Nandurbar, Nashik, Osmanabad, Parbhani, Ratnagiri, Satara, Thane, Wardha, Washim, Yavatmal	Aurangabad, Beed, Buldana, Dhule, Gadchiroli, Jalna, Kolhapur, Latur, Nagpur, Nanded, Osamabad, Parbhani, Pune, Sangli, Wardha, Washim, Yavatmal
18	Manipur				Bishnupur, Thoubal	Bishnupur, Thoubal	
19	Meghalaya					East Garo Hills, East Khasi Hills, Jaintia Hills	
20	Nagaland					Dimapur	
21	Odisha	Balasore, Bhadrak, Ganjam, Jagatsingpur, Jajpur, Kendrapara, Puri	Angul, Balasore, Bargarh, Bhadrak, Bolangir, Boudh, Cuttack, Deogarh Dhenkanal, Jajpur, Kandhamal ,Keonjhar, Khurda, Mayurbhanj, Nayagarh, Nawapara, Ganjam, Jagatsinghpur, Kalahandi, Koraput, Puri, Rayagada, Sambalpur, Sonapur, Sundargarh	Angul, Balasore, Bargarh, Bhadrak, Bolangir, Baudh, Cuttack, Deogarh, Dhenkanal, Gajapati, Ganjam, J.Singhpur, Jajpur, Jharsuguda, Kalahandi, Kendrapara, Keonjhar, Khurda, Koraput, Malkangiri, Mayurbhanj, Nawapada, Nayagarh, Phulbani, Puri, Sambalpur, Sundergarh, Sonpur	Gajapati	Balasore, Bargarh, Bhadrak, Cuttack, Deogarh, J.Singhpur, Jajpur, Jharsuguda, Kalahandi, Kandmahal, Keonjhar, Kendrapara,Khurda, Koraput, Mayurbhanj, Nayagarh, Puri, Rayagada, Sambalpur, Sundergarh, Sonpur	Chromium (Hexavalent) - Sukinda valley in Sukinda block of Jajpur District
22	Punjab	Bhatinda, Faridkot, Ferozpur, Gurudaspur, Mansa, Moga, Muktsar Patiala, Sangrur	Amritsar, Barnala, Bhatinda, Fazilka, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Pathankot, Patiala, Ropar, Sangrur, SAS Nagar (Mohali), Tarn-Taran	Amritsar, Barnala, Bhatinda, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Hoshiarpur, Jalandhar, Kapurthala, Ludhiana, Mansa, Moga, Muktsar, NawanShahr, Patiala, Ropar, Rupnagar, Sangrur, Tarn-Taran	Mansa, Amritsar, Gurdaspur, Hoshiarpur, Kapurthala, Ropar, Faridkot, Nawashahar, Sangrur, Taran Taran	Bhathinda, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Hoshiarpur, Mansa, Rupnagar, Sangrur	Lead: Amritsar, Bathinda, Ferozepur, Gurdaspur, Muktsar, Ropar Cadmium: Fatehgarh Sahib, Ludhiana, Nawansahar,

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							Patiala, Ropar, Sangrur, Sasnagar, Tarantaran Chromium: Amritsar, Bathinda, Gurdaspur, Kapurthala, Mansa, Ropar, Barnala, Sangrur, Sasnagar, Tarantaran
23	Rajasthan	Ajmer, Alwar, Baran, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittorgarh, Churu, Dausa, Dhaulpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Rajasamand, Sawai-Madhampur, Sikar, Sirohi, Tonk, Udaipur	Ajmer, Alwar, Banswara, Barmer, Bharatpur, Baran, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, Sikar, Sawai Madhopur, Tonk, Udaipur	Ajmer, Alwar, Banswara, Baran, Barmer, Bundi, Bharatpur, Bhilwara, Bikaner, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, Sikar, Sawai Madhopur, Tonk, Udaipur	Ganganagar	Ajmer, Alwar, Banswara, Baran, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, SawaiMadhopur, Tonk, Udaipur	Lead: Jhunjhunu Dist (Khetri Copper Deposit), Pali, Jaipur (Sambhar Lake, Sanganer)
24	Tamil Nadu	Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Karur, Kancheepuram, Krishnagiri, Karur, Nagapattinam, Namakkal, Madurai, Perambalur, Pudukottai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai, Thiruchirappalli, Tirunelveli, Tirupur Vellore, Trichchirappalli, Tuticorin, Villupuram, Virudhunagar,	Coimbatore, Dharmapuri, Dindigul, Erode, Karur, Kancheepuram, Krishnagiri, Namakkal, Madurai, Pudukottai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai, Thiruchirappalli, Tirunelveli, Tirupur Vellore,	Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Karur, Kanyakumari, Karur, Madurai, Namakkal, Nilgiris, Perambalur, Pudukottai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai, Thanjavur, Tirunelveli,	Ariyalur Cuddalore, Nagapattinam, Ramnathapuram, Tiruvallur, Tirunelveli, Thiruvarur, Trichchirappalli, Tuticorin	Namakkal, Salem	Lead : Dindigul, Tiruvallur, Kancheepuram Cadmium : Tiruvallur Chromium: Cuddalore, Dindigul, Erode, Kanchipuram, Tiruvallur

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				Thiruvallur, Trichy, Tuticorin, Vellore, Villupuram, Virudhunagar			
25	Tripura					Dhalai, North Tripura, South Tripura, West Tripura,	
26	Uttar Pradesh	Agra, Aligarh, Firozabad, Hamirpur, Kashganj,Kanpur Nagar, Mathura, Rae Bareli,Unnao	Agra, Aligarh, Allahabad ,Auraiya, Banda ,Bulandshahar ,Etah,Etawah,, Farrukhabad, Fatehpur, , Firozabad, G B Nagar, Ghaziabad, Hathras,Jaunpur, Kannauj , Kanpur Nagar, Kasganj (Kashiram Nagar), Lalitpur, Mahoba, Mainpuri, Mathura, Maunath Bhanjan, Pratapgarh, Rai Bareli, Shajahanpur, Sonbhadra, Sultanpur, Varanasi and Unnao	Agra, Aligarh, Allahabad, Ambedkar Nagar, Auraiya, Azamgarh, Badaun, Baghpat, Balrampur, Banda, Barabanki, Bareilly, Basti, Bijnor, Bulandsahr, Chitrakoot, Etah, Fatehpur, Firozabad, GB Nagar, Ghaziabad, Ghazipur, Hamirpur, Hardoi, Hathras, Jaunpur, Jhansi, Kannauj, Kanpur Dehat, Lakhimpur, Mahoba, Mathura, Meerut, Mau, Moradabad, Muzaffarnagar, Mirzapur, Raebarelli, SantRavidas Nagar, Shajahanpur, Sitapur, Sonbhadra, Sultanpur, Shravasti, Siddarth Nagar, Unnao	Bahraich, Balia, Balrampur, Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Gorakhpur, LakhimpurKheri, Meerut, Mirzapur, Muradabad, Rai Bareilly, SantKabir Nagar, Shajahanpur, Siddarthnagar, SantRavidasNagar, Unnao, Azamgarh, Bahraich, Badaun, Deoria, Jhansi, Kausambi, Kushinagar, Pilibhit, Maunath Bhanjan,	Azamgarh, Ballia, Balrampur, Etawah, Fatehpur, Gazipur, Gonda, Hardoi, KanpurDehat, Kanpur Nagar, Lakhimpur, Lalitpur, Mau, Siddartnagar, Unnao	Lead: Muzzafar Nagar, Mathura, Moradabad, Allahabad, Bhadohi, Ghaziabad, Jaunpur, Kanpur, Raebareli, Sonbhadra Cadmium: Varanasi city, Unnao Chromium : Kashi Vidyapeeth, Varanasi, Kanpur, Unnao
27	Uttarakhand			Dehradun, Haridwar, Udhamsinghnagar			
28	West Bengal	Howrah, N 24 Parganas, PurbaMedinipore, S 24 Parganas	Bankura, Birbhum, Dakshindinajpur, Malda, Purulia, Uttardinajpur, South 24 Praganas	Bankura, Bardhaman	Bardhaman, Hooghly, Howrah, Malda, Murshidabad, Nadia, N-24 Parganas, S- 24 Parganas,	Bankura, Bardhaman, Birbhum, Dakhindinajpur, E. Midnapur, Howrah, Hugli, Jalpaiguri, Kolkatta, Murshidabad,	Lead: Malda, Murshidabad, Nadia, N-24 Pargana, S-24 Pragana, Kolkata

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 )	Heavy metals: Lead (above 0.01 mg/l) Cadmium (above 0.003 mg/l) Chromium (above 0.05 mg/l)
					Kochbihar	N-24 Parganas, Nadia, S- 24 Parganas, West Uttardinajpur, Midnapur	Cadmium: N-24 Praganas, S-24 Praganas Chromium: N-24 Praganas, Murshidabad
29	Andaman & Nicobar					Andaman	
30	Daman & Diu				Diu		

**ANNEXURE - II**

**Annexure referred in reply to Lok Sabha Unstarred Q.No. 3663 for reply on 23.03.2017 regarding “Contamination of Ground Water”**

**State/UT-wise status of fund allotted, released and expenditure under NRDWP for the year 2013-14, 2014-15, 2015-16 and 2016-17**

State-wise Financial Status under NRDWP																	
S.No.	State	Fin.Year 2013-14				Fin.Year 2014-15				Fin.Year 2015-16				Fin.Year 2016-17 as on 14.3.2017			
		Opening Balance as on 1.4.2013	Allocation	Release	Exp.	Opening Balance as on 1.4.2014	Allocation	Release	Exp.	Opening Balance as on 1.4.2015	Allocation	Release	Exp.	Opening Balance as on 1.4.2016	Allocation	Release upto 14/03/2017	Exp.
1	Andaman and Nicobar	0.78	1.04	0.09	0.64	0.28	0.86	0.81	0.43	0.67	0.38	0.16	0	0.83	0.45	0.22	0
2	Andhra Pradesh	113.62	635.44	631.52	662.4	82.74	372.43	377.78	427.08	33.44	156.69	170.05	190.6	14.51	181.02	172.56	121.02
3	Arunachal Pradesh	17.99	218.23	237.32	230.97	25.77	87.21	109.83	119.5	16.09	58.08	65.4	66.23	15.26	101.39	100.5	51.37
4	Assam	199.82	470	524.97	635.18	92.7	501.1	585.32	586.88	92.64	268.26	284.11	216.2	160.83	402.15	346.5	152.38
5	Bihar	217.82	432.38	348.94	307.43	259.33	441.07	399.11	381.9	276.54	229.6	202.73	295.38	183.89	314.97	299.11	345.15
6	Chattisgarh	67.61	136.13	135.2	172.38	31.56	159.08	150.74	173.08	12.05	63.69	60.83	64.64	8.24	70.65	65.49	50.27
7	Goa	5.95	5.5	0	2.22	3.73	4.61	0	0	3.73	2.08	1.66	0	5.39	2.44	1.19	3.35
8	Gujarat	247.13	533.73	515.07	627.95	134.24	509.48	405.58	491.44	48.38	240.13	238.91	274.78	12.5	281.14	276.42	197.56
9	Haryana	85.59	229.46	229.52	301.15	13.96	218.09	277.98	228.82	63.13	97.65	122.65	150.74	35.19	114.71	111.01	57.76
10	Himachal Pradesh	67.78	150.51	130.81	153.33	45.27	131.84	120.89	120.18	45.97	65.2	64.38	69.88	40.48	69.65	63.31	55.98
11	Jammu and Kashmir	141.95	462.43	414.82	499.79	59.11	461.33	474.41	458.03	75.49	199.4	192.12	222.16	45.44	233.29	225.14	100.99
12	Jharkhand	122.36	172.85	253.28	277.96	102.26	169.86	175.18	206.88	89.26	126.85	132.09	133.7	99.65	115.86	98.13	125.47
13	Karnataka	256.64	868.76	897.29	928.81	237.76	623.2	563.91	622.37	179.31	307.62	278.08	366.68	90.71	360.07	331.34	174.52
14	Kerala	93.31	155.58	212.04	265.1	40.87	115.59	124.1	131.86	33.11	52.78	48.05	64.45	16.71	62.54	57.22	29.97
15	Madhya Pradesh	143	404.81	474.95	483.98	133.97	397.18	440.18	399.94	174.38	181.76	193.73	387.62	8.93	213.87	199.96	149.17
16	Maharashtra	553.97	788.48	690.27	657.46	587.39	780.06	748.23	901.96	433.66	344.16	330.88	584	180.69	413.57	380.04	279.46
17	Manipur	28.66	58.75	55.3	57.17	27.09	90.35	88.54	92.25	23.38	28.98	27.92	43.44	7.87	41.83	40.61	18.66
18	Meghalaya	34.12	92.18	103.4	114.81	22.89	59.61	69.5	81.02	11.6	30.52	31.24	30.92	12.2	42.02	40.42	25.85
19	Mizoram	24.78	38.41	44.89	33.37	36.3	42.43	34.5	39.81	30.99	17.71	17.32	23.16	25.15	25.33	24.49	9.14
20	Nagaland	3.69	61.31	61.07	52.38	12.38	108.19	101.44	86.45	27.37	39.27	38.53	61.9	4.25	37.93	36.84	14.28
21	Odisha	67.61	244.25	317.07	288.08	106.02	205.69	230.67	257.29	87.41	96.9	103.19	150.64	39.96	114.99	106.73	69.74
22	Puducherry	0.88	1.59	0.06	0	0.94	1.62	0	0	0.98	0.74	0	0	0.98	0.86	0.29	0
23	Punjab	26.04	96.89	147.95	159.05	14.94	93.88	97.38	90.23	22.1	39.77	42.79	36.57	28.31	46.02	45.79	48.15
24	Rajasthan	389.85	1231.05	1332.49	1572.96	199.22	1194.46	1304.64	1386.79	117.07	547.17	526.75	480.21	163.61	1114.56	1063.56	293.59
25	Sikkim	44.95	16.88	26.56	71.25	1.31	30.38	31.7	32.03	0.98	10.64	12.05	12.49	0.54	14.77	14.42	5.92
26	Tamil Nadu	185.44	304.63	387.11	527.57	44.97	367.36	382.46	432.39	5.48	169.5	182.35	164.85	27.49	157.6	155.19	129.51
27	Telangana	-	-	-	-	0	200.65	212.24	189.25	22.99	88.77	97.71	106.42	16.72	117.03	113.14	93.65
28	Tripura	6.27	59.29	89.93	94.19	3.4	62.06	68.31	64.81	8.18	28.07	31.68	39.97	0.8	39.48	38.26	24.41
29	Uttar Pradesh	539.18	923.18	804.92	858.5	485.61	1006.43	1073.22	1146.18	412.65	477.69	490.31	690.46	272.38	653.77	575.24	283.1
30	Uttarakhand	174.27	159.66	87.61	138.59	124.32	135.01	111.48	152.94	82.87	63.57	60.06	98.91	44.01	90.87	68.33	58.03
31	West Bengal	398.59	490.63	485.83	757.11	143.68	436.53	431.09	480.72	96.94	199.68	216.85	288.75	25.49	438.91	437.55	349.11
	<b>Total</b>	<b>4259.65</b>	<b>9444.03</b>	<b>9640.28</b>	<b>10931.78</b>	<b>3074.01</b>	<b>9007.64</b>	<b>9191.22</b>	<b>9782.51</b>	<b>2528.84</b>	<b>4233.31</b>	<b>4264.58</b>	<b>5315.75</b>	<b>1589.01</b>	<b>5873.74</b>	<b>5489</b>	<b>3317.56</b>

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**ANNEXURE - III**

Annexure referred in reply to Lok Sabha Unstarred Q.No. 3663 for reply on 23.03.2017 regarding “Contamination of Ground Water”

S.No.	State	Public Works Relating To Natural Resources Management			
		Expenditure on NRM Works (Takenup) (Rs. in lakhs)			
		2013-14	2014-15	2015-16	2016-17 as on 25/11/2016
1	Andaman And Nicobar	0.00	0.00	0.00	0.00
2	Andhra Pradesh	56003.81	83119.04	219432.52	189981.93
3	Arunachal Pradesh	98.22	399.54	1868.42	2557.24
4	Assam	9758.91	11433.52	18665.37	38223.79
5	Bihar	40169.25	33835.59	61890.80	57977.07
6	Chhattisgarh	37116.44	65617.32	67409.62	114121.39
7	Goa	43.99	141.35	102.46	61.69
8	Gujarat	8966.14	11585.08	21996.53	27798.67
9	Haryana	13161.48	8310.48	8366.58	12505.24
10	Himachal Pradesh	25923.62	19775.22	17392.75	14260.47
11	Jammu And Kashmir	8744.96	7219.05	19881.00	10137.48
12	Jharkhand	26845.20	33504.56	47635.36	64774.43
13	Karnataka	63559.02	53394.09	66917.40	73188.61
14	Kerala	63726.45	96234.91	85322.61	87527.47
15	Lakshadweep	21.34	16.26	5.12	0.00
16	Madhya Pradesh	62363.71	71975.88	63030.27	77220.00
17	Maharashtra	23765.64	58760.03	71854.35	57118.64
18	Manipur	1774.11	6857.71	8190.30	14817.83
19	Meghalaya	2876.07	5535.52	5948.88	15608.11
20	Mizoram	1301.22	5271.73	18758.93	3214.07
21	Nagaland	1645.17	1002.40	5017.35	13390.84
22	Odisha	20831.79	43189.39	78241.99	79490.56
23	Puducherry	740.40	465.00	804.47	759.38
24	Punjab	6644.96	9063.86	13969.24	20517.96
25	Rajasthan	60465.18	127798.51	162566.90	165193.72
26	Sikkim	2717.34	2000.17	3013.84	3563.56
27	Tamil Nadu	273071.92	247359.05	383893.37	299741.51
28	Telangana	75.23	41262.74	89834.18	60227.42
29	Tripura	45119.33	48183.66	75173.24	51531.31
30	Uttar Pradesh	41211.54	57814.94	122144.42	188714.19
31	Uttarakhand	9293.70	8320.78	13238.56	15272.69
32	West Bengal	103911.95	165325.65	213617.76	227503.12
	<b>Total</b>	<b>1011948.09</b>	<b>1324773.03</b>	<b>1966184.59</b>	<b>1987000.39</b>