

GOVERNMENT OF INDIA  
MINISTRY OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 2349**  
ANSWERED ON 16.03.2017

**PRESERVATION OF GROUND WATER**

2349. SHRI GEORGE BAKER  
PROF. RICHARD HAY

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) the percentage of ground water being used for drinking vis-a-vis irrigation purposes in the country, State/UT-wise;
- (b) whether the Government is aware that the level of ground water in the country is depleting, the surface water is getting polluted and the rain water is not being properly protected;
- (c) if so, the details and the facts thereof along with the reasons therefor;
- (d) the steps taken by the Government to preserve ground/surface/rain water in the country so far; and
- (e) whether the Government is planning to use the treated water for irrigation in the country and if so, the details thereof along with the time by which it is likely to be introduced?

**ANSWER**

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

(a) As per the latest assessment of Ground Water Resources of the country jointly carried out by Central Ground Water Board (CGWB) and State Ground Water Departments, as on March-2013, the State/UT-wise details of percentage of ground water being used for drinking and irrigation purposes are given at **Annexure -I.**

(b) & (c) Ground water is primarily being used for irrigation, drinking and industrial purposes due to growing urbanization, industrialization and population, as a result of which, ground water levels in various parts of the Country are declining. State-wise details are given at **Annexure – II.**

Central Water Commission (CWC) is monitoring water quality at 396 key locations covering 246 rivers. Number of stations having concentration more than permissible limits of BIS are shown in **Annexure- III.**

(d) 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)

(e) One of the objectives, inter-alia, of Pradhan Mantri Krishi Sinchai Yojna (PMKSY) is to explore the feasibility of reusing treated municipal waste water for peri-urban agriculture and attract greater private investment in precision irrigation system.

**ANNEXURE - I**

Annexure referred in reply to Lok Sabha Unstarred Question No. 2349 dated 16.03.2017 regarding “Preservation of Ground Water”

**State / UT Wise Percentage of Ground Water Draft for Irrigation and Domestic & Industrial Use (As on 31st March 2013)**

Sl. No.	States / Union Territories	Irrigation Draft (bcm)	Percentage of irrigation draft with respect to Total Draft (%)	Domestic and industrial Draft (bcm)	Percentage of Domestic & Industrial Draft with respect to Total Draft (%)	Total Draft (bcm)
	<b>States</b>					
1	Andhra Pradesh	7.29	89.97	0.81	10.03	8.10
2	Arunachal Pradesh	0.002	23.32	0.007	76.68	0.01
3	Assam	4.06	85.65	0.68	14.35	4.74
4	Bihar	10.36	81.38	2.37	18.62	12.73
5	Chhattisgarh	3.76	85.44	0.64	14.56	4.40
6	Delhi	0.14	35.49	0.25	64.51	0.39
7	Goa	0.02	39.94	0.03	60.06	0.05
8	Gujarat	12.30	91.54	1.14	8.46	13.44
9	Haryana	13.32	95.70	0.60	4.30	13.92
10	Himachal Pradesh	0.16	60.18	0.11	39.82	0.27
11	Jammu & Kashmir	0.20	16.86	0.98	83.14	1.18
12	Jharkhand	0.63	46.47	0.72	53.53	1.35
13	Karnataka	8.76	89.83	0.99	10.17	9.76
14	Kerala	1.18	44.85	1.45	55.15	2.63
15	Madhya Pradesh	17.95	92.72	1.41	7.28	19.36
16	Maharashtra	15.93	93.31	1.14	6.69	17.07
17	Manipur	0.004	83.79	0.001	16.21	0.004
18	Meghalaya	0.0080	66.67	0.0040	33.33	0.0120
19	Mizoram	0	0.00	0.00104	100.00	0.00104
20	Nagaland	0.00	0.00	0.03	100.00	0.03
21	Odisha	4.14	82.60	0.87	17.40	5.02
22	Punjab	34.05	97.80	0.77	2.20	34.81
23	Rajasthan	13.79	87.78	1.92	12.22	15.71
24	Sikkim	-		-	-	-
25	Tamil Nadu	12.98	90.39	1.38	9.61	14.36
26	Telangana	7.00	90.18	0.76	9.82	7.77
27	Tripura	0.093	56.56	0.072	43.44	0.165
28	Uttar Pradesh	48.35	91.64	4.41	8.36	52.76

29	Uttarakhand	0.84	85.15	0.15	14.85	0.99
30	West Bengal	10.84	91.53	1.00	8.47	11.84
	<b>Total States</b>	<b>228.16</b>	<b>90.23</b>	<b>24.71</b>	<b>9.77</b>	<b>252.87</b>
	<b>Union Territories</b>					
1	Andaman & Nicobar	0.0001	2.70	0.0035	94.59	0.0037
2	Chandigarh	0	0.00	0	0.00	0
3	Dadara & Nagar Haveli	0.008	36.74	0.013	63.26	0.020
4	Daman & Diu	0.008	79.96	0.002	20.04	0.010
5	Lakshdweep	0.00000	0.00	0.00237	100.00	0.00237
6	Puducherry	0.124	80.77	0.029	19.23	0.153
	<b>Total UTs</b>	<b>0.139</b>	<b>73.45</b>	<b>0.050</b>	<b>26.50</b>	<b>0.189</b>
	<b>Grand Total</b>	<b>228.30</b>	<b>90.22</b>	<b>24.76</b>	<b>9.78</b>	<b>253.06</b>

BCM → Billion Cubic Meters

**ANNEXURE - II**

Annexure referred in reply to Lok Sabha Unstarred Question No. 2349 dated 16.03.2017 regarding “Preservation of Ground Water”

**State-wise Decadal Water Level Fluctuation with Mean [Pre-monsoon (2006 to 2015)] and Pre-monsoon 2016**

S. No.	Name of State	No. of wells Analysed	Rise		Fall	
			No	%	No	%
1	Andhra Pradesh	547	236	43	308	56
2	Arunachal Pradesh	14	10	71	4	29
3	Assam	182	84	46	98	54
4	Bihar	551	180	33	369	67
5	Chandigarh	11	4	36	7	64
6	Chhattisgarh	616	165	27	451	73
7	Dadra & Nagar Haveli	12	6	50	6	50
8	Daman & Diu	10	2	20	8	80
9	Delhi	115	26	23	89	77
10	Goa	70	41	59	29	41
11	Gujarat	738	254	34	475	64
12	Haryana	643	184	29	454	71
13	Himachal Pradesh	95	36	38	59	62
14	Jammu & Kashmir	225	83	37	142	63
15	Jharkhand	212	86	41	126	59
16	Karnataka	1380	415	30	949	69
17	Kerala	1240	454	37	779	63
18	Madhya Pradesh	1343	502	37	838	62
19	Maharashtra	1487	437	29	1041	70
20	Meghalaya	17	6	35	11	65
21	Odisha	1103	395	36	705	64
22	Pondicherry	6	5	83	1	17
23	Punjab	613	129	21	482	79
24	Rajasthan	829	346	42	481	58
25	Tamil Nadu	587	345	59	242	41
26	Telangana	377	66	18	308	82
27	Tripura	28	21	75	7	25
28	Uttar Pradesh	629	95	15	534	85
29	Uttarakhand	44	21	48	23	52
30	West Bengal	899	310	34	589	66
<b>Total</b>		<b>14623</b>	<b>4944</b>	<b>34</b>	<b>9615</b>	<b>66</b>

Note: 64 wells show no change in water level

**Annexure -III**

Annexure referred in reply to **Lok Sabha Unstarred Question No. 2349** dated **16.03.2017** regarding **“Preservation of Ground Water”**

Number of Central Water Commission stations having concentration more than permissible limits of BIS

<b>Chemical Parameter</b>	<b>No. of stations having concentration more than permissible limits of IS 10500:2012</b>
pH	12
Electrical Conductivity	3
Magnesium	1
Total Hardness	2
Chloride	1
Sulphate	1
Iron	22
Fluoride	15
Dissolved Oxygen	17
Biochemical Oxygen Demand	36
Cadmium	7
Chromium	14
Copper	49
Lead	47
Nickel	73
Iron	183