

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 4189**  
ANSWERED ON 19.03.2020

**DECLINING GROUND WATER LEVEL**

4189. SHRI ADHIKARI DEEPAK (DEV)

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the ground water level in various parts of the country has declined alarmingly and if so, the details thereof;
- (b) whether the Central Ground Water Authority (CGWA) has conducted any survey to ascertain the factors responsible for the decline in the ground water level; and
- (c) if so, the details and the outcome thereof?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT

(SHRI RATTAN LAL KATARIA)

(a) Central Ground Water Board is periodically monitoring the ground water levels throughout the Country on a regional scale, through a network of monitoring wells. In order to assess the decline in water level on a long-term basis, Pre-monsoon water level data collected by CGWB during Pre-monsoon 2019 has been compared with the decadal average (2009-2018). Analysis of water level data indicates that about 61% of the wells monitored have registered decline in ground water levels, mostly in the range of 0 – 2 m. Details are given at **Annexure**.

(b) & (c) Ground water levels in various parts of the Country are declining because of continuous withdrawal necessitated by increased demand of fresh water for various uses, vagaries of rainfall, increased population, industrialization & urbanization etc.

The Dynamic Ground Water Resources of the country are being periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments. As per the 2017 assessment, total Annual Ground Water Recharge is 432 Billion Cubic Meter (BCM) and the Annual Ground Water Extraction for all uses is 249 BCM, out of which around 221 BCM & 27 BCM is for irrigation use & industrial/domestic uses respectively.

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**ANNEXURE**

Annexure referred to in reply to part (a) of Unstarred Question No. 4189 to be answered in Lok Sabha on 19.03.2020 regarding “Declining Ground Water Level”.

**State-wise Decadal Water Level Fluctuation With Mean [Premonsoon (2009 to 2018)] and Premonsoon 2019**

S. No	Name of State	No. of wells Analysed	Range in m				Rise						Fall						Rise		Fall		Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		No	%	No	%	No	%
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	714	0.01	7.26	6	9.32	166	23.2	18	2.5	10	1.4	348	48.7	122	17.1	48	6.7	194	27	518	73	2	0.3
2	Arunachal Pradesh	18	0.54	2.45	0.1	5.94	1	5.6	1	5.6	0	0.0	8	44.4	7	38.9	1	5.6	2	11	16	89	0	0.0
3	Assam	230	0.01	7.1	0.01	4.53	89	38.7	17	7.4	5	2.2	112	48.7	5	2.2	2	0.9	111	48	119	52	0	0.0
4	Bihar	619	0.01	5.34	0.01	11.65	172	27.8	20	3.2	3	0.5	349	56.4	46	7.4	24	3.9	195	32	419	68	5	0.8
5	Chandigarh	12	0.01	2.47	0.24	5.49	2	16.7	2	16.7	0	0.0	4	33.3	3	25.0	1	8.3	4	33	8	67	0	0.0
6	Chhattisgarh	602	0.01	14.65	0.01	15.34	143	23.8	58	9.6	36	6.0	253	42.0	71	11.8	28	4.7	237	39	352	58	13	2.2
7	Dadra & Nagar Haveli	18	0.08	2.39	0.06	8.75	1	5.6	1	5.6	0	0.0	9	50.0	4	22.2	3	16.7	2	11	16	89	0	0.0
8	Daman & Diu	11	0.04	2.66	0.02	0.52	5	45.5	2	18.2	0	0.0	2	18.2	2	18.2	0	0.0	7	64	4	36	0	0.0
9	Delhi	73	0	13.23	0.05	8.88	28	38.4	5	6.8	3	4.1	12	16.4	16	21.9	9	12.3	36	49	37	51	0	0.0
10	Goa	64	0.01	8.29	0	4.29	17	26.6	0	0.0	1	1.6	43	67.2	2	3.1	1	1.6	18	28	46	72	0	0.0
11	Gujarat	697	0.01	12.36	0.02	18.96	169	24.2	59	8.5	32	4.6	284	40.7	77	11.0	76	10.9	260	37	437	63	0	0.0
12	Haryana	279	0.01	8	0.02	19.12	79	28.3	9	3.2	6	2.2	106	38.0	37	13.3	41	14.7	94	34	184	66	1	0.4
13	Himachal Pradesh	101	0.04	6.63	0.11	3.86	69	68.3	10	9.9	2	2.0	15	14.9	5	5.0	0	0.0	81	80	20	20	0	0.0
14	Jammu & Kashmir	204	0.01	4.29	0	4.32	78	38.2	7	3.4	1	0.5	104	51.0	12	5.9	2	1.0	86	42	118	58	0	0.0
15	Jharkhand	271	0.03	5.31	0.02	9.97	81	29.9	19	7.0	3	1.1	131	48.3	27	10.0	10	3.7	103	38	168	62	0	0.0
16	Karnataka	1098	0.01	14.72	0.0	17.22	157	14.3	34	3.1	26	2.4	595	54.2	207	18.9	79	7.2	217	20	881	80	0	0.0
17	Kerala	1427	0.0	7.01	0.0	10.09	623	43.7	31	2.2	7	0.5	701	49.1	48	3.4	13	0.9	661	46	762	53	4	0.3
18	Madhya Pradesh	1319	0.01	17.72	0.01	18.91	451	34.2	121	9.2	75	5.7	475	36.0	114	8.6	83	6.3	647	49	672	51	0	0.0
19	Maharashtra	1645	0.0	18.42	0.0	18.01	314	19.1	61	3.7	26	1.6	698	42.4	342	20.8	201	12.2	401	24	1241	75	3	0.2
20	Meghalaya	53	0.01	6.2	0.09	1.21	37	69.8	1	1.9	1	1.9	14	26.4	0	0.0	0	0.0	39	74	14	26	0	0.0
21	Odisha	1064	0.01	7.07	0.01	4.78	593	55.7	110	10.3	27	2.5	311	29.2	19	4.0	4	0.4	730	69	334	31	0	0.0
22	Pondicherry	6			0.13	2.58	0	0.0	0	0.0	0	0.0	5	83.3	1	16.7	0	0.0	0	0	6	100	0	0.0
23	Punjab	245	0.0	15.11	0.02	9.94	67	27.3	5	2.0	2	0.8	101	41.2	30	12.2	39	15.9	74	30	170	69	1	0.4
24	Rajasthan	893	0.0	14	0.01	18.43	202	22.6	51	5.7	48	5.4	324	36.3	119	13.3	145	16.2	301	34	588	66	4	0.4
25	Tamil Nadu	612	0.0	11.53	0.02	12.54	126	20.6	27	4.4	17	2.8	214	35.0	129	21.1	99	16.2	170	28	442	72	0	0.0
26	Telangana	557	0.01	10.15	0.01	13.97	149	26.8	23	4.1	16	2.9	186	33.4	84	15.1	96	17.2	188	34	366	66	3	0.5
27	Tripura	75	0.01	3.99	0.01	3.21	28	37.3	3	4.0	0	0.0	41	54.7	3	4.0	0	0.0	31	41	44	59	0	0.0
28	Uttar Pradesh	592	0	12.94	0	13.07	144	24.3	14	2.4	4	0.7	354	59.8	58	9.8	17	2.9	162	27	429	72	1	0.2
29	Uttarakhand	42	0.01	5.45	0.02	12.83	12	28.6	2	4.8	1	2.4	17	40.5	5	11.9	5	11.9	15	36	27	64	0	0.0
30	West Bengal	653	0.01	12.09	0	16.09	278	42.6	71	10.9	22	3.4	194	29.7	54	8.3	31	4.7	371	57	279	43	3	0.5
	<b>Total</b>	<b>14194</b>					<b>4281</b>	<b>30.2</b>	<b>782</b>	<b>5.5</b>	<b>374</b>	<b>2.6</b>	<b>6010</b>	<b>42.3</b>	<b>1649</b>	<b>11.6</b>	<b>1058</b>	<b>7.5</b>	<b>5437</b>	<b>38.3</b>	<b>8717</b>	<b>61.4</b>	<b>40</b>	<b>0.3</b>

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