

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1520**  
ANSWERED ON 08.03.2021

**INCREASING GROUNDWATER LEVELS**

1520 SHRI BHASKAR RAO NEKKANTI  
SHRI KAMAKHYA PRASAD TASA

Will the MINISTER OF JAL SHAKTI be pleased to state:

- (a) whether Jal Shakti Abhiyan has led to an increase in groundwater level, surface water storage capacity, soil moisture in farmlands and increased plant cover
- (b) if so, the details thereof including the national and State-wise data on the abovementioned parameters
- (c) if not, the reasons therefor
- (d) whether Government has commissioned a study of the water scarcity crisis in the country and
- (e) if so, the details thereof and if not, the reasons therefor?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT  
(SHRI RATTAN LAL KATARIA)

(a) & (b) Jal Shakti Abhiyan (JSA), a time-bound, mission mode water conservation campaign, was implemented in the July - November 2019 period, in only 1,592 blocks out of 2,836 blocks of 256 water-stressed districts of the country. These blocks fell under critical or over-exploited groundwater category, where groundwater was being exploited faster than it could be replenished. During JSA, five target interventions to promote water conservation and water resource management, viz. water conservation & rainwater harvesting, renovation of traditional & other water-bodies/tanks, reuse and recharge of borewells, watershed development and intensive afforestation etc were implemented. Huge public awareness in water conservation/harvesting was generated due to JSA and further, it has been observed that various stakeholders, viz. Government departments/agencies, NGOs, Panchayats, individuals etc. have started taking steps towards water conservation. The outcome of JSA is improved water conservation. Further, 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 November 2020 has been compared with the decadal average (2010-2019). Analysis of water level data (**Annexure I**) indicates that about 62% of the wells monitored have registered rise in ground water levels. Increase in ground water level is the cumulative effect of various factors including regulation and augmentation of ground water by the State and Central Government.

(c) Does not arise.

(d) & (e) No specific study has been commissioned for the water scarcity crisis in the country. However, Dynamic Ground Water Resources of the country are periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments. As per the 2017 assessment, out of the total 6881 assessment units (Block/ Taluks/ Mandals/ watersheds/ Firkas) in the country, 1186 units in 17 States/UTs have been categorized as 'Over-exploited' where the Annual Ground Water Extraction is more than Annual Extractable Ground Water Resource. 313 units have been categorized as 'Critical', 972 units as 'Semi-critical'.

Central Water Commission is monitoring live storage status of 130 reservoirs of the country on weekly basis and issues weekly bulletin on every Thursday. The total live storage capacity of these 130 reservoirs is 174.233 BCM which is about 67.58% of the live storage capacity of 257.812 BCM approximately.

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Annexure referred to in reply to part (a) to (b) of Rajya Sabha Unstarred Question No.1520 to be answered on the 08.03.2021 regarding "INCREASING GROUNDWATER LEVELS".

**State-wise Decadal Water Level Fluctuation with Mean [November (2010 to 2019)] and November 2020**

S. No.	Name of State	No. of wells Analysed	Rise						Fall						Rise		Fall		Wells showing no change	
			0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		No	%	No	%	No	%
			No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	688	395	57.4	92	13.4	38	5.5	146	21.2	12	1.7	5	0.7	525	76	163	24	0	0
2	Arunachal Pradesh	3	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	100	0	0	0	0
3	Assam	158	113	71.5	5	3.2	2	1.3	35	22.2	3	1.9	0	0.0	120	76	38	24	0	0
4	Bihar	536	284	53.0	41	7.6	4	0.7	184	34.3	17	3.2	6	1.1	329	61	207	39	0	0
5	Chandigarh	11	3	27.3	2	18.2	0	0.0	5	45.5	0	0.0	1	9.1	5	45	6	55	0	0
6	Chhattisgarh	700	261	37.3	41	5.9	15	2.1	312	44.6	53	7.6	18	2.6	317	45	383	55	0	0
7	Dadra & Nagar Haveli #	17	11	64.7	2	11.8	1	5.9	3	17.6	0	0.0	0	0.0	14	82	3	18	0	0
8	Daman & Diu	9	7	77.8	0	0.0	0	0.0	2	22.2	0	0.0	0	0.0	7	78	2	22	0	0
9	Delhi	80	11	13.8	3	3.8	4	5.0	31	38.8	19	23.8	12	15.0	18	23	62	78	0	0
10	Goa	65	7	10.8	0	0.0	1	1.5	50	76.9	7	10.8	0	0.0	8	12	57	88	0	0
11	Gujarat	736	279	37.9	93	12.6	116	15.8	179	24.3	49	6.7	20	2.7	488	66	248	34	0	0
12	Haryana	312	83	26.6	5	1.6	7	2.2	94	30.1	44	14.1	78	25.0	95	30	216	69	1	0
13	Himachal Pradesh	88	31	35.2	3	3.4	2	2.3	47	53.4	3	3.4	2	2.3	36	41	52	59	0	0
14	Jammu & Kashmir	163	42	25.8	3	1.8	2	1.2	106	65.0	9	5.5	1	0.6	47	29	116	71	0	0
15	Jharkhand	276	162	58.7	42	15.2	17	6.2	49	17.8	5	1.8	1	0.4	221	80	55	20	0	0
16	Karnataka	1316	632	48.0	181	13.8	123	9.3	325	24.7	33	2.5	22	1.7	936	71	380	29	0	0
17	Kerala	1334	537	40.3	24	1.8	6	0.4	738	55.3	23	1.7	6	0.4	567	43	767	57	0	0
18	Madhya Pradesh	1294	594	45.9	160	12.4	43	3.3	372	28.7	83	6.4	42	3.2	797	62	497	38	0	0
19	Maharashtra**	3611	1815	50.3	592	16.4	262	7.3	869	24.1	53	1.5	20	0.6	2669	74	942	26	0	0
20	Meghalaya	23	13	56.5	1	4.3	0	0.0	9	39.1	0	0.0	0	0.0	14	61	9	39	0	0
21	Nagaland	2	0	0.0	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0	0	0	2	100	0	0
22	Odisha	1204	762	63.3	47	3.9	6	0.5	366	30.4	19	1.6	3	0.2	815	68	388	32	1	0
23	Pondicherry	6	0	0.0	0	0.0	0	0.0	4	66.7	2	33.3	0	0.0	0	0	6	100	0	0
24	Punjab	250	55	22.0	10	4.0	3	1.2	89	35.6	38	15.2	54	21.6	68	27	181	72	1	0
25	Rajasthan	962	271	28.2	89	9.3	69	7.2	288	29.9	105	10.9	137	14.2	429	45	530	55	3	0
26	Tamil Nadu	629	211	33.5	64	10.2	44	7.0	192	30.5	55	8.7	62	9.9	319	51	309	49	1	0
27	Telangana	549	200	36.4	121	22.0	177	32.2	45	8.2	3	0.5	3	0.5	498	91	51	9	0	0
28	Tripura	21	18	85.7	0	0.0	0	0.0	2	9.5	1	4.8	0	0.0	18	86	3	14	0	0
29	Uttar Pradesh	632	264	41.8	43	6.8	14	2.2	240	38.0	48	7.6	23	3.6	321	51	311	49	0	0
30	Uttarakhand	47	13	27.7	2	4.3	1	2.1	21	44.7	8	17.0	2	4.3	16	34	31	66	0	0
31	West Bengal	633	264	41.7	65	10.3	42	6.6	167	26.4	45	7.1	49	7.7	371	59	261	41	1	0
<b>Total</b>		<b>16355</b>	<b>7341</b>	<b>44.9</b>	<b>1731</b>	<b>10.6</b>	<b>999</b>	<b>6.1</b>	<b>4971</b>	<b>30.4</b>	<b>738</b>	<b>4.5</b>	<b>567</b>	<b>3.5</b>	<b>10071</b>	<b>62</b>	<b>6276</b>	<b>38</b>	<b>8</b>	<b>0</b>

\*\* State Govt Data used in respect of Maharashtra

# November 2019 data used in respect of Dadra Nagar Haveli

Source: CGWB

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