

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA
REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 3148
ANSWERED ON 11.07.2019

GROUND WATER SHORTAGE

3148. SHRI ANTO ANTONY:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government has noticed that almost every State in the country is facing acute shortage of water and every year the underground water level is decreasing;
- (b) if so, the details thereof and the steps taken by the Government in this regard;
- (c) whether the Government has conducted any study in this regard;
- (d) if so, the details and the outcome thereof;
- (e) whether climate change has made any impact in decreasing the level of underground water and if so, the details thereof;
- (f) whether there is a report of United Nations that by 2030 the most precious thing in the world would be water and if so, the details thereof and the steps taken by the Government in this regard;
- (g) whether the Government is providing financial assistance for rain water harvesting; and
- (h) if so, the details thereof including the assistance given to the various States/ UTs during each of the last five years, State/ UT-wise?

ANSWER

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

(SHRI RATTAN LAL KATARIA)

(a) to (f) 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, 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 total Current Annual Ground Water Extraction is more than Annual Extractable Ground Water Resource. Categorization of 'Over Exploited' Blocks/ Mandals/ Talukas in India (2017) are given at **Annexure I**.

Ground water levels in various parts of the Country are declining because of continuous withdrawal due to reasons such as increased demand of fresh water for various uses, vagaries of rainfall, increased population, industrialization & urbanization, less amount of recharge due to deficient rainfall etc.

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 (**Annexure II**) indicates that about 61% of the wells monitored have registered decline in ground water levels.

Hon'ble Prime Minister has written a letter to all Sarpanchs on 08.06.2019 regarding the importance of water conservation and rain harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.

Government of India has launched the Jal Shakti Abhiyan which is a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks.

Water being a State subject, initiatives on water management including conservation and artificial recharge to ground water in the Country is primarily States' responsibility. Water resources projects including water harvesting/conservation projects are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priority. The other important initiatives taken up are available at the following URL:

http://mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf

(g) & (h) Financial assistance for construction of water harvesting structures is provided mainly through schemes like Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Integrated Watershed Management Programme (IWMP) and Pradhan Mantri Sinchayee Yojana (Per Drop More Crop). Under MGNREGA, water conservation and water harvesting structures to augment and improve ground water like underground dykes, earthen dams, stop dams, check dams with special focus on recharging ground water including drinking water sources are permissible activities. The State wise funds released during last five years are given at **Annexure-III**.

As per information received from Department of Land Resources, they have sanctioned 8214 watershed development projects in 28 States (except Goa) (during the period 2009-10 to 2014-15) covering an area of about 39.07 million hectare under Integrated Watershed Management Programme (IWMP). IWMP was amalgamated as the Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) in 2015-16. The activities being undertaken through the watershed development project inter alia include ridge area treatment, drainage line treatment, soil and moisture conservation, rain water harvesting, nursery raising, afforestation, horticulture, pasture development, livelihoods for assetless persons, etc.

The State wise details of projects sanctioned, area covered by the projects and funds released as Central share to States under WDC-PMKSY are given at **Annexure-IV**.

ANNEXURE- I

Annexure referred to in reply to part (a) to (f) of Unstarred Question No. 3148 to be answered in Lok Sabha on 11.07.2019 regarding “Ground water shortage”.

Categorization of ‘Over Exploited’ Blocks/ Mandals/ Talukas in India (2017)

S.No.	States / Union Territories	Total No. of Assessed Units	Over-Exploited	
			Nos.	%
	States			
1	Andhra Pradesh	670	45	7
2	Arunachal Pradesh	11	0	0
3	Assam	28	0	0
4	Bihar	534	12	2
5	Chhattisgarh	146	0	0
6	Delhi	34	22	65
7	Goa	12	0	0
8	Gujarat	248	25	10
9	Haryana	128	78	61
10	Himachal Pradesh	8	4	50
11	Jammu & Kashmir	22	0	0
12	Jharkhand	260	3	1
13	Karnataka	176	45	26
14	Kerala	152	1	1
15	Madhya Pradesh	313	22	7
16	Maharashtra	353	11	3
17	Manipur	9	0	0
18	Meghalaya	11	0	0
19	Mizoram	26	0	0
20	Nagaland	11	0	0
21	Odisha	314	0	0
22	Punjab	138	109	79
23	Rajasthan	295	185	63
24	Sikkim	4	0	0
25	Tamil Nadu	1166	462	40
26	Telangana	584	70	12
27	Tripura	59	0	0
28	Uttar Pradesh*	830	91	11
29	Uttarakhand	18	0	0
30	West Bengal **	268	0	0
	Total States	6828	1185	17
	Union Territories			
1	Andaman & Nicobar	36	0	0
2	Chandigarh	1	0	0
3	Dadra & Nagar Haveli	1	0	0
4	Daman & Diu	2	0	0
5	Lakshdweep	9	0	0
6	Puducherry	4	1	25
	Total UTs	53	1	2
	Grand Total	6881	1186	17

Note

Blocks- Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala,

Taluks -Karnataka, Goa, Gujarat, Maharashtra

Mandals - Andhra Pradesh, Telangana

Districts/Valley- Arunachal Pradesh, Assam, Himachal

Islands - Lakshadweep, Andaman & Nicobar Islands

Firka-Tamil Nadu

Region - Puducherry

UT - Chandigarh, Dadar & Nagar Haveli, Daman & Diu

Tehsil-NCT Delhi

***Uttar Pradesh:** There are total 820 block and 10 Cities

****The** Ground Water resources assessment as on 2013

ANNEXURE- II

Annexure referred to in reply to part (a) to (f) of Unstarred Question No. 3148 to be answered in Lok Sabha on 11.07.2019 regarding “Ground water shortage”.

S. No.	Name of State	No. of wells Analysed	Rise		Fall		Wells showing no change	
			No	%	No	%	No	%
1	Andhra Pradesh	714	194	27	518	73	2	0.3
2	Arunachal Pradesh	18	2	11	16	89	0	0.0
3	Assam	230	111	48	119	52	0	0.0
4	Bihar	619	195	32	419	68	5	0.8
5	Chandigarh	12	4	33	8	67	0	0.0
6	Chhattisgarh	602	237	39	352	58	13	2.2
7	Dadra & Nagar Haveli	18	2	11	16	89	0	0.0
8	Daman & Diu	11	5	45	5	45	1	9.1
9	Delhi	73	36	49	37	51	0	0.0
10	Goa	64	18	28	46	72	0	0.0
11	Gujarat	657	244	37	413	63	0	0.0
12	Haryana	279	94	34	184	66	1	0.4
13	Himachal Pradesh	101	81	80	20	20	0	0.0
14	Jammu & Kashmir	204	86	42	118	58	0	0.0
15	Jharkhand	271	103	38	168	62	0	0.0
16	Karnataka	1098	217	20	881	80	0	0.0
17	Kerala	1427	661	46	762	53	4	0.3
18	Madhya Pradesh	1099	532	48	567	52	0	0.0
19	Maharashtra	1645	401	24	1241	75	3	0.2
20	Meghalaya	53	39	74	14	26	0	0.0
21	Odisha	1064	730	69	334	31	0	0.0
22	Pondicherry	6	0	0	6	100	0	0.0
23	Punjab	245	74	30	170	69	1	0.4
24	Rajasthan	893	301	34	588	66	4	0.4
25	Tamil Nadu	612	177	29	318	52	117	19.1
26	Telangana	557	188	34	366	66	3	0.5
27	Tripura	75	31	41	44	59	0	0.0
28	Uttar Pradesh	581	157	27	423	73	1	0.2
29	Uttarakhand	42	15	36	27	64	0	0.0
30	West Bengal	358	178	50	177	49	3	0.8
Total		13628	5113	38	8357	61	158	1.2

Annexure referred to in reply to part (g) to (h) of Unstarred Question No. 3148 to be answered in Lok Sabha on 11.07.2019 regarding “Ground Water Shortage”.

Water conservation and Water Harvesting fund released under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

Fund released to State/UT under MGNREGA (2016-17 to 2019-20)						
Sl No.	States/UTs	2014-15	2015-16	2016-17 *	2017-18 #	(Rs. in lakh) 2018-19 \$
1	Andhra Pradesh	290314.10	307380.33	394021.19	512763.00	761458.36
2.	Arunachal Pradesh	2704.16	4395.10	15675.99	20679.65	19800.64
3.	Assam	50023.46	87830.06	125459.79	112366.54	105037.23
4.	Bihar	95968.24	102412.26	166740.56	246888.44	289194.25
5.	Chhattisgarh	150570.49	106341.30	223193.55	289885.21	308997.05
6.	Gujarat	35442.93	30598.72	64323.81	82505.07	106079.98
7.	Haryana	16715.29	12470.72	28771.33	30140.64	35625.15
8.	Himachal Pradesh	35542.86	39610.32	38860.83	58684.46	78034.36
9.	Jammu and Kashmir	52171.08	55801.83	80408.52	125417.69	79334.12
10.	Jharkhand	72433.41	97879.90	167914.17	135264.57	154629.50
11.	Karnataka	171687.07	99155.27	225864.88	295632.54	304975.56
12.	Kerala	158758.02	152633.88	158248.96	185406.40	235473.91
13.	Madhya Pradesh	245163.12	236732.20	344891.62	376889.92	470364.71
14.	Maharashtra	79951.77	123834.73	165708.93	185828.74	201918.84
15.	Manipur	21997.13	25532.29	34370.41	15778.89	28698.66
16.	Meghalaya	27785.90	22182.56	86069.23	87060.44	79654.70
17.	Mizoram	11141.23	28517.36	14451.26	20081.04	40288.92
18.	Nagaland	11305.27	26665.95	50152.80	110492.88	19560.20
19.	Odisha	103530.34	147941.05	189526.84	219834.66	222418.39
20.	Punjab	18948.18	24533.37	49073.46	61895.86	60000.32
21.	Rajasthan	297609.87	269583.23	481816.86	472828.41	549230.58
22.	Sikkim	7386.41	8623.44	13262.56	10571.15	9762.58
23.	Tamil Nadu	378180.33	547037.47	455277.91	583166.13	498193.66
24.	Telangana	191996.00	182484.92	180684.74	253920.33	297094.62
25.	Tripura	63662.48	135894.19	101629.14	40440.50	44462.89
26.	Uttar Pradesh	251341.40	269569.44	391584.94	369177.65	547575.02
27.	Uttarakhand	28636.22	45076.65	51435.08	71685.06	61194.75
28.	West Bengal	374495.29	471174.20	537722.79	592702.95	737344.61
29.	Andaman and Nicobar Islands	1301.94	1035.72	801.40	966.07	761.93
30.	Dadra and Nagar Haveli	0.00	0.00	0.00	0.00	484.00
31.	Daman & Diu	0.00	0.00	0.00	0.00	0.00
32.	Lakshadweep	45.06	11.85	0.00	26.71	15.97
33.	Puducherry	739.69	1292.57	346.92	1569.03	1475.36
34.	Goa	137.95	246.82	425.85	56.05	48.83
	Total	3247686.69	3664479.70	4838716.32	5570606.67	6259189.67

*Including Rs. 56268.00 lakh of failed FTOs of all NeFMS State/UT during financial year 2016-17.

Including Rs. 136890.498 lakh deducted against wage expenditure on account of rejected transaction amount credited back during financial year 2017-18.

\$ Including Rs. 156046.92 lakh of failed transactions during financial year 2018-19.

ANNEXURE- IV

Annexure referred to in reply to part (g) to (h) of Unstarred Question No. 3148 to be answered in Lok Sabha on 11.07.2019 regarding “Ground water shortage”.

State-wise details of number of projects sanctioned, area covered by the projects and funds released as Central share under WDC-PMKSY.

(Area in Million Ha, Amount in Rs Crore)

Sl. No.	State	Sanctioned (from 2009-10 to 2014-15) @		Central share released (from 2009-10 to 2018-19) [#]
		Total No. of Projects	Area of the Projects	
1	Andhra Pradesh	432	1.810	987.92
2	Arunachal Pradesh	156	0.467	244.33
3	Assam	372	1.577	454.08
4	Bihar	123	0.612	151.31
5	Chhattisgarh	263	1.195	307.88
6	Gujarat	610	3.103	1288.64
7	Haryana	88	0.362	98.70
8	Himachal Pradesh	163	0.840	283.58
9	Jammu & Kashmir	159	0.652	230.82
10	Jharkhand	171	0.911	191.52
11	Karnataka	571	2.569	1872.94
12	Kerala	83	0.423	109.30
13	Madhya Pradesh	517	2.937	1409.87
14	Maharashtra	1186	5.128	2413.95
15	Manipur	102	0.491	149.10
16	Meghalaya	96	0.236	173.03
17	Mizoram	89	0.373	259.89
18	Nagaland	111	0.476	499.30
19	Odisha	310	1.700	1004.31
20	Punjab	67	0.314	60.42
21	Rajasthan	1025	5.764	2415.27
22	Sikkim	15	0.066	22.08
23	Tamil Nadu	270	1.368	924.94
24	Telangana	330	1.399	593.01
25	Tripura	65	0.213	200.21
26	Uttarakhand	65	0.346	131.08
27	Uttar Pradesh	612	3.045	808.49
28	West Bengal	163	0.693	178.15
	Total	8214	39.07	17464.12

@ Sanctioned under the erstwhile Integrated Watershed Management Programme (IWMP), which has been amalgamated as the Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) with effect from 2015-16.

[#] including releases under the erstwhile IWMP.

Note: 1) WDC-PMKSY is not operational in the Union Territories.

2) There is no sanctioned project in Goa.

