

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 323
ANSWERED ON 25.02.2016

DEPLETION IN GROUNDWATER LEVEL

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

- (a) the State-wise per capita availability of water at present and its expected availability by 2025 along with current status of groundwater resources in the country;
- (b) Whether groundwater level is depleting rapidly and natural sources like rivers/ponds/canals/wells are drying up in the country and if so, the reasons for the same and the current level of groundwater in each State;
- (c) the details of schemes/programmes/ projects launched to tackle the situation and the funds made available/utilised under each scheme/programme/project during each year of the last as well as current plan till date, State-wise; and
- (d) the future plan of the Government to check depleting groundwater level, recharge groundwater including steps taken towards rain water harvesting?

ANSWER

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

(PROF.SANWAR LAL JAT)

(a) The average annual per capita availability of water in the Country, taking into consideration the population of the Country as per year 2011 Census is 1545 cubic meters. Details of State-wise per capita availability of water are not available as surface water resources are estimated basin-wise. As per the latest assessment (as on March 2011) of replenishable ground water resources, jointly assessed by Central Ground Water Board (CGWB) and State Ground Water Organizations, the total annual replenishable ground water resource in the Country is around 433 Billion Cubic Metres (BCM) and net annual ground water availability is 398 BCM.

(b) Ground water is continuously being exploited due to growth in population, increased industrialization and irrigation as a result of which ground water levels in various parts of the country are declining. State-wise details of ground water levels monitored by CGWB are given at **Annexure-I**.

(c) A Central Sector Scheme of 'Ground Water Management & Regulation' is operational for regulating the development of ground water. A component of Aquifer Mapping and Management Programme has been included in the Scheme during XII Plan for quantitative and qualitative characterisation of aquifers and development of aquifer-wise management plans. The total actual expenditure made under the Scheme during the last Plan Period and current Plan Period, years-wise is given at **Annexure –II**. CGWB had also undertaken a component of Demonstrative Rain Water Harvesting and Artificial Recharge Project during XI Plan under the above Scheme in priority areas. The project aimed at facilitating State Governments for replicating recharge projects in similar hydrogeological environment. During the XI Plan, 133 demonstrative recharge projects costing Rs. 99.87 crore were approved for construction of artificial recharge structures in 22 States. Although, the component has been discontinued during the XII Plan period, funds are still being released for spill over projects during XII Plan. State-wise and year-wise funds allocated & released for construction of recharge structures, during last and current Plan Period are given at **Annexure-III**.

(d) CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans. These management plans will be shared with the respective State Governments for community involvement. CGWB has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during the year 2013, which envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country, at an estimated cost of Rs. 79,178 crores to harness 85 BCM (Billion Cubic Metre) of water, in an area of 9,41,541 sq.km by harnessing surplus monsoon runoff to augment ground water resources. The Master Plan has been circulated to all State Governments for implementation. The National Water Policy (2012), has been formulated by Ministry of Water Resources, RD & GR which, inter-alia, advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through direct use of rainfall. The National Water Policy (2012) has been forwarded to all State/UT Governments and concerned Ministries/ Departments of Central Government for appropriate action. A National Water Mission has also been set up to, inter-alia, promote conservation of water resources.

ANNEXURE - I

Annexure referred to in reply to Lok Sabha Unstarred Question No. 323 to be answered on 25.02.2016 regarding “Depletion in Groundwater level”

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of Pre-monsoon, 2015

S. No.	Name of State	No. of wells Analysed	Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of											
			0-2		2-5		5-10		10-20		20-40		> 40	
			No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar Island	86	41	47.67	39	45.35	5	5.81	1	1.16	0	0.00	0	0.00
2	Andhra Pradesh	787	105	13.34	323	41.04	260	33.04	93	11.82	4	0.51	2	0.25
3	Arunachal Pradesh	13	1	7.69	5	38.46	5	38.46	2	15.38	0	0.00	0	0.00
4	Assam	191	20	10.47	122	63.87	45	23.56	4	2.09	0	0.00	0	0.00
5	Bihar	580	9	1.55	291	50.17	259	44.66	21	3.62	0	0.00	0	0.00
6	Chandigarh	11	0	0.00	2	18.18	2	18.18	4	36.36	3	27.27	0	0.00
7	Chhattisgarh	567	25	4.41	148	26.10	288	50.79	98	17.28	7	1.23	1	0.18
8	Dadra & Nagar Haveli	12	0	0.00	2	16.67	6	50.00	4	33.33	0	0.00	0	0.00
9	Daman & Diu	7	0	0.00	2	28.57	4	57.14	1	14.29	0	0.00	0	0.00
10	Delhi	114	3	2.63	24	21.05	30	26.32	30	26.32	17	14.91	10	8.77
11	Goa	41	3	7.32	19	46.34	14	34.15	5	12.20	0	0.00	0	0.00
12	Gujarat	794	18	2.27	151	19.02	273	34.38	262	33.00	85	10.71	5	0.63
13	Haryana	325	20	6.15	62	19.08	82	25.23	97	29.85	53	16.31	11	3.38
14	Himachal Pradesh	87	12	13.79	37	42.53	13	14.94	20	22.99	5	5.75	0	0.00
15	Jammu & Kashmir	222	69	31.08	99	44.59	36	16.22	10	4.50	8	3.60	0	0.00
16	Jharkhand	151	1	0.66	23	15.23	104	68.87	23	15.23	0	0.00	0	0.00
17	Karnataka	1442	150	10.40	393	27.25	580	40.22	302	20.94	17	1.18	0	0.00
18	Kerala	1417	118	8.33	407	28.72	648	45.73	230	16.23	13	0.92	1	0.07
19	Madhya Pradesh	1362	20	1.47	200	14.68	629	46.18	438	32.16	61	4.48	13	0.95
20	Maharashtra	1534	46	3.00	290	18.90	762	49.67	402	26.21	31	2.02	3	0.20
21	Meghalaya	17	2	11.76	13	76.47	2	11.76	0	0.00	0	0.00	0	0.00
22	Nagaland	10	0	0.00	2	20.00	6	60.00	1	10.00	1	10.00	0	0.00
23	Orissa	1254	128	10.21	475	37.88	633	50.48	18	1.44	0	0.00	0	0.00
24	Pondicherry	4	0	0.00	3	75.00	1	25.00	0	0.00	0	0.00	0	0.00
25	Punjab	686	17	2.48	99	14.43	150	21.87	237	34.55	183	26.68	0	0.00
26	Rajasthan	827	27	3.26	95	11.49	189	22.85	210	25.39	147	17.78	159	19.23
27	Tamil Nadu	593	65	10.96	174	29.34	216	36.42	107	18.04	25	4.22	6	1.01
28	Telangana	563	13	2.31	87	15.45	235	41.74	198	35.17	28	4.97	2	0.36
29	Tripura	28	4	14.29	17	60.71	7	25.00	0	0.00	0	0.00	0	0.00
30	Uttar Pradesh	754	31	4.11	259	34.35	298	39.52	144	19.10	22	2.92	0	0.00
31	Uttaranchal	37	0	0.00	16	43.24	8	21.62	12	32.43	1	2.70	0	0.00
32	West Bengal	894	45	5.03	266	29.75	352	39.37	202	22.60	29	3.24	0	0.00
	Total	15410	993	6.44	4145	26.90	6142	39.86	3176	20.61	740	4.80	213	1.38

ANNEXURE - II

Annexure referred to in reply to **Lok Sabha Unstarred Question No. 323** to be answered on **25.02.2016** regarding **“Depletion in Groundwater level”**

**PLAN-WISE AND YEAR-WISE EXPENDITURE OF
GROUND WATER MANAGEMENT & REGULATION SCHEME
DURING XI AND XII PLAN**

	XI Plan					XII Plan			
Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (as on 31 st January, 2016)
Expenditure (Rs. in Crore)	48.15	54.38	68.91	81.05	130.85	118.65	83.18	124.89	83.77

ANNEXURE – III

Annexure referred in reply to Lok Sabha Unstarred Question No. 323 to be answered on 25.02.2016 regarding “Depletion in Groundwater level”
**State-Wise and Year-Wise Approved Cost and Funds Released during Last and Current Plan Period under the Demonstrative Rain Water Harvesting and
 Artificial Recharge Projects (Rs. in Lakh)**

SN	Name of States/UTs	Year 2008-09		Year 2009-10		Year 2010-11		Year 2011-12		Spill over IInd Instal. Released 2012-13	Spill over IInd Instal. Released 2013-14	Spill over IInd Instal. Released 2014-15	Total (XI & Spill over in XII Plan)		
		Approved Cost	Released Funds	Approved Cost	Released Funds	Approved Cost	Released Funds	Approved Cost	Released Funds				Approved Cost	Released Funds	
1	Andhra Pradesh			130.0200	91.0140				39.0060				130.02	130.02	
2	Arunachal Pradesh	259.668	77.9				103.8670	233.4400	227.6100	83.730			493.11	493.11	
3	Bihar							96.0100	67.2100			28.8	96.01	96.01	
4	Chandigarh					776.0300	543.2210					231.3	776.03	774.52	
5	Chhattisgarh							268.8000	150.4000			108.45	268.80	258.85	
6	Delhi							43.4400	30.4100			13.029	43.44	43.44	
7	Gujarat					316.2400	221.3680			44.859		20.423	316.24	286.65	
8	Himachal Pradesh							250.0170	165.1400			83.352	1.53	250.02	250.02
9	Jammu & Kashmir													136.70	
10	Jharkhand					16.4900	11.5430	174.8560	122.4000			52.4565	4.9470	191.35	191.35
	Jharkhand			Additional Funds								14.6100			14.61
11	Karnataka			109.1580	76.4100	96.5850	67.6100	382.3500	303.0000	33.4560	107.615		588.09	588.09	
12	Kerala	39.05	11.715				10.8150	55.0860	55.0740	4.050			94.14	81.65	
13	Madhya Pradesh					431.8600	302.3020	429.0500	331.0740			38.754	60.75	860.91	732.88
14	Maharashtra					15.1500	10.6050		4.5450				15.15	15.15	
15	Nagaland							224.1400	141.3400	82.800			224.14	224.14	
16	Orissa							464.3600	325.0400			139.32	464.36	464.36	
17	Punjab	179.453	53.836					80.8800	56.6200				260.33	110.46	
18	Rajasthan							404.7770	235.0552	10.282	38.8	58.62	404.78	342.76	
19	Tamil Nadu	111	33.3	415.3500	368.4450		0.0000		112.6050	12.000			526.35	526.35	
20	Telangana					75.1800	52.6400	368.2100	255.0340	135.712			443.39	443.39	
21	Uttar Pradesh			720.0630	504.4400	1060.6400	728.5000	1505.5300	1269.4900			451.684	3286.23	2954.11	
22	West Bengal	111.091	33.327				44.4360		33.3273				111.09	111.09	
	TOTAL	700.262	210.078	1374.5910	1040.3090	2788.1750	2096.9070	5124.4160	4015.6575	406.889	733.82545	766.034	9987.44	9269.70	
