GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION LOK SABHA UNSTARRED QUESTION NO. †451 ANSWERED ON 17.11.2016

DEPLETION IN GROUNDWATER LEVEL

451. SHRI B.N. CHANDRAPPA SHRI D.K. SURESH SHRI SUNIL KUMAR SINGH

PROF. K.V. THOMAS SHRI ALOK SANJAR

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 per capita availability of water in different parts of the country has come down recently and groundwater level is depleting rapidly, if so, the details thereof and the reasons for the same along with 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 of the last as well as current plan period till date, State-wise; and

(d) the future plan of the Government to check depleting groundwater level and towards sufficient rain water harvesting in the country?

ANSWER

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

(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. The estimated per capita Average Annual Water Availability by 2025 is likely to be 1340.94 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 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. Central Ground Water Board (CGWB) under the Ministry of Water Resources, RD & GR carries out ground water monitoring, four times a year, on regional scale through a network of observation wells in the Country. Water level data for pre-monsoon 2016 compared with decadal mean of pre-monsoon (2006-2015) indicates decline in ground water level in 66% of the wells monitored. Details are given at **Annexure**.

(c) & (d) Several measures have been taken up by the Central Government to replenish ground water in the Country:

• The National Water Policy (2012) formulated by Ministry of Water Resources, RD & GR, inter-alia, advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The National Water Policy (2012) has been forwarded to all State Governments/ UTs and concerned Ministries/ Departments of Central Government for adoption of the policy.

• This Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for its regulation and development which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model bill.

• CGWB has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during 2013, involving ground water scientists/experts. The Master Plan 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. The augmented ground water resources will enhance the availability of water for drinking, domestic, industrial and irrigation purpose. The Master Plan has been circulated to all State Governments for implementation.

• Special focus is given through Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for water conservation and water harvesting structures to augment ground water. In addition, priority has been given for construction of farm ponds in the year 2016-17 to harvest rain water.

• One of the major activities under the 'Watershed Development' component of the 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)', inter-alia, includes rainwater harvesting.

• Besides, Central Ground Water Authority (CGWA) has issued advisories to the Chief Secretaries of all States and the Administrators of all UTs to take measures to promote/adopt artificial recharge to ground water / rain water harvesting. 30 States/UTs have made rain water harvesting mandatory by enacting laws or by formulating rules & regulations or by including provisions in Building bye-laws or through suitable Government Orders.

• 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.

• CGWB has been organizing mass awareness programmes in the Country to promote rain water harvesting and artificial recharge to ground water.

• MoWR, RD & GR has also launched 'Jal Kranti Abhiyan' (2015-16 to 2017-18) in order to consolidate water conservation and management in the Country through a holistic and integrated approach involving all stakeholders, making it a mass movement. 'Jal Gram Yojana' component of 'Jal Kranti Abhiyan' envisages selection of two villages in every district, preferably 'over-exploited' or facing acute water scarcity, as 'Jal Grams' to ensure optimum and sustainable utilization of water.

Annexure referred in reply to Lok Sabha Starred Question No. *451 for 17.11.2016 regarding "Depletion in Groundwater Level"

S. No.	Name of State	No. of wells Analysed	Rise		Fall		Wells showing no change	
			No.	%	No.	%	No.	%
1	Andhra Pradesh	547	236	43	308	56	3	0.5
2	Arunachal Pradesh	14	10	71	4	29	0	0.0
3	Assam	182	84	46	98	54	0	0.0
4	Bihar	551	180	33	369	67	2	0.4
5	Chandigarh	11	4	36	7	64	0	0.0
6	Chhattisgarh	616	165	27	451	73	0	0.0
7	Dadra & Nagar Haveli	12	6	50	6	50	0	0.0
8	Daman & Diu	10	2	20	8	80	0	0.0
9	Delhi	115	26	23	89	77	0	0.0
10	Goa	70	41	59	29	41	0	0.0
11	Gujarat	738	254	34	475	64	9	1.2
12	Haryana	643	184	29	454	71	5	0.8
13	Himachal Pradesh	95	36	38	59	62	0	0.0
14	Jammu & Kashmir	225	83	37	142	63	0	0.0
15	Jharkhand	212	86	41	126	59	0	0.0
16	Karnataka	1380	415	30	949	69	16	1.2
17	Kerala	1240	454	37	779	63	7	0.6
18	Madhya Pradesh	1343	502	37	838	62	3	0.2
19	Maharashtra	1487	437	29	1041	70	9	0.6
20	Meghalaya	17	6	35	11	65	0	0.0
21	Odisha	1103	395	36	705	64	3	0.3
22	Puducherry	6	5	83	1	17	0	0.0
23	Punjab	613	129	21	482	79	2	0.3
24	Rajasthan	829	346	42	481	58	2	0.2
25	Tamil Nadu	587	345	59	242	41	0	0.0
26	Telangana	377	66	18	308	82	3	0.8
27	Tripura	28	21	75	7	25	0	0.0
28	Uttar Pradesh	629	95	15	534	85	0	0.0
29	Uttarakhand	44	21	48	23	52	0	0.0
30	West Bengal	899	310	34	589	66	0	0.0
	Total	14623	4944	34	9615	66	64	0.4

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