GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 473

ANSWERED ON 06.02.2025

SCHEMES FOR RAINWATER HARVESTING

473. DR. K SUDHAKAR

Will the Minister of **JAL SHAKTI** be pleased to state:

(a) the details of the schemes introduced by the Government to increase the practice of rainwater harvesting in the country;

(b) the steps taken/being taken by the Government to check the impact of water crisis and to manage the increasing problem in the country;

(c) whether any study on the groundwater tables is done in Karnataka and if so, the details thereof, particularly in Chikkaballapur, Karnataka; and

(d) the steps taken/being taken by the Government for increasing groundwater recharge and to improve groundwater tables in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Water is a State subject and the Central Government supplements the efforts of the States through technical and financial support. Water conservation through rainwater harvesting is one of the foremost priorities of the Government. Major steps taken by the Government for water conservation including rainwater harvesting thereby checking the water crisis and to manage the increasing problem in the country are as follows:

i. Government of India has been implementing a scheme namely Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which inter-alia includes water conservation and water harvesting structures.

ii. Financial assistance is given to various States under 15th Finance Commission tied grants which can be inter-alia utilized for rainwater harvesting.

iii. The Ministry of Jal Shakti has been implementing Jal Shakti Abhiyan (JSA) since 2019 on an annual basis. In the current year, Ministry of Jal Shakti is implementing Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) 2024, 5th in the series of JSAs, in all the districts (rural as well as urban) of the country. JSA: CTR is a convergence of various Central Government schemes and funds like MGNREGS, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More

Crop, Repair, Renovation and Restoration Components under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Finance Commission grants, State Government schemes, Corporate Social Responsibility (CSR) funds etc. One of the major interventions undertaken under the campaign includes water conservation and rainwater harvesting.

iv. Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 has provisions for harvesting the rainwater through storm water drains into water body (which is not receiving sewage/effluent). Through preparation of 'Aquifer Management Plan' cities targets to strategize groundwater recharge augmentation by developing a roadmap for improving rain water harvesting within city limits. Through IEC campaign, awareness is created about practices for water conservation like rainwater harvesting.

v. Ministry of Housing & Urban Affairs has formulated guidelines for the States to adopt measures suitable to local conditions, such as Unified Building Bye Laws (UBBL) of Delhi, 2016, Model Building Bye Laws (MBBL), 2016 and Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines, 2014 with adequate focus on requirement of rainwater harvesting and water conservation measures.

vi. Government of India is implementing Atal Bhujal Yojana, in 80 districts of 7 States, viz., Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh for a period of 5 years from 01.04.2020. The scheme marks a paradigm shift from groundwater development to groundwater management.

vii. Government of India has been implementing "Pradhan Mantri Krishi Sinchai Yojana (PMKSY)" with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc. PMKSY has three components/ schemes namely Har Khet Ko Pani (HKKP), Repair, Renovation & Restoration (RRR) Scheme of Water Bodies and Surface Minor irrigation (SMI) Scheme.

viii. The Ministry of Jal Shakti has set up the Bureau of Water Use Efficiency (BWUE) under the National Water Mission on 20.10.2022, to act as a facilitator for promotion of improving water use efficiency across various sectors namely irrigation, drinking water supply, power generation, industries, etc. in the country.

ix. Mission Amrit Sarovar was implemented in the recent times with provisions for creation/rejuvenation of at least 75 Amrit Sarovars in every district of the country with the purpose to harvest and conserve water.

x. Central Ground Water Board (CGWB) has completed the National Aquifer Mapping (NAQUIM) Project in the entire mappable area of about 25 lakh sq. km. which has been shared with the

respective State agencies for implementation. The management plans include various water conservation measures through recharge structures.

xi. CGWB has also prepared a Master Plan for Artificial Recharge to Groundwater- 2020 in consultation with States/UTs which is a macro level plan indicating various structures for the different terrain conditions of the country including estimated cost. The Master Plan has provisions for construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of monsoon rainfall.

xii. CGWB, under Ground Water Management & Regulation Scheme, has also implemented several successful artificial recharge projects in the country for demonstrative purpose which enable the State Governments to replicate the same in suitable hydro-geological conditions.

xiii. National Water Policy (2012) has been formulated by Department of Water Resources, RD & GR, which inter-alia advocates rainwater harvesting and conservation of water and also highlights the need for augmenting the availability of water through direct use of rainfall.

xiv. Department of Land Resources (DoLR) implements Watershed Development Component of Pradhan Mantri Krishi Sinchai Yojana (WDC-PMKSY) for the development of rainfed and degraded lands in the country. The activities undertaken, inter-alia, include ridge area treatment, drainage line treatment, soil and moisture conservation, rainwater harvesting, nursery raising, pasture development, livelihoods for asset-less persons etc. WDC-PMKSY, through these interventions, seeks to ensure sustainable development through improved natural resource management and better resilience of farmers to climate change

(c) CGWB monitors groundwater levels throughout the country including the state of Karnataka, four times in every year during the months of March/April/May, August, November and January. The district-wise water level, including Chikkaballapura District, measured for the Month of November 2024 for the State of Karnataka is given in **Annexure I**. As indicated by post-monsoon 2024 water levels, approximately 83% of the analyzed wells in Chikkaballapura District recorded water levels between 0 to 2 meters below ground level.

In order to assess the long term fluctuation in ground water level in the State of Karnataka, the water level data collected by CGWB in Karnataka during November 2024 has been compared with the decadal mean of November (2014-2023). District-wise Decadal Water Level Fluctuation with Mean (Post-Monsoon 2014 to 2023) and Post-monsoon 2024 in respect of Karnataka is presented in **Annexure II**. Analysis of water level data indicates that all of the analyzed wells for Chikkaballapur district are showing an increase in water levels.

(d) The Government has undertaken several initiatives to enhance groundwater recharge and improve water tables across the country. The Jal Shakti Abhiyan (JSA) was launched in 2019 as a mission-mode water conservation campaign in 256 water-stressed districts. To sustain these efforts, the Catch The Rain (CTR) campaign was initiated in 2020, which later subsumed into Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) in

2021, covering both rural and urban areas nationwide. Now an annual campaign, JSA: CTR focuses on rainwater harvesting, water conservation and artificial recharge structures.

Expanding on this vision, the Jal Sanchay Jan Bhagidari (JSJB) initiative was launched on September 6, 2024, in Surat, Gujarat, in the virtual presence of the Hon'ble Prime Minister. This special initiative, under JSA:CTR, aims to scale up Gujarat's Jal Sanchay program nationwide, promoting collaborative community-driven water conservation efforts.

JSJB focuses on enhancing water management through low-cost, scientifically designed artificial recharge structures, ensuring active participation from local communities, industries, and other stakeholders. By fostering broad involvement, the initiative provides a sustainable solution to India's growing water challenges.

JSJB aims to create one million low-cost recharge structures across urban and rural India, using a combination of scientific technology and traditional methods. The initiative promotes active participation and sustainable water management by involving local communities, industries, NGOs, and government bodies.

It's a public-private partnership model which draws funding from not only government schemes like MGNREGA, AMRUT, PMKSY etc but also from mobilization of private finance like Industry - CSR , Philanthropy, individual donors, crowdfunding etc for people's participation, ownership and sustainability.

Additionally, the State Government of Karnataka has reported that, under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the Karnataka Government has implemented various measures to enhance groundwater recharge and improve the water table, focusing on water conservation, watershed management and sustainable agriculture. Key initiatives include the construction of check dams, percolation tanks, farm ponds, recharge wells and borewell recharge structures, along with desilting and deepening of traditional water bodies. Watershed management efforts such as contour trenches, bunds, afforestation and gully plugging have been undertaken to help reduce runoff and improve infiltration. Additionally, community-led water budgeting, training programs and convergence with Jal Shakti Abhiyan and Atal Bhujal Yojana has further strengthened these efforts. Over the years, substantial progress has been made, with 1,46,590 water conservation works undertaken in 2024-25 and a total expenditure of ₹560.05 crore, contributing significantly to groundwater recharge and sustainable water management.

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ANNEXURE I

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 473 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "SCHEMES FOR RAINWATER HARVESTING".

District-wise Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2024 (Unconfined Aquifer)															
Sr. No.	State/UT Name	District Name	No of well analysed	No./Percentage of wells showing depth to water level (mbgl) in the range of											
				0 to 2		2 to 5		5 to 10		10 to 20		20 to 40		> 40	
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	Karnataka	Bagalkote	25	6	24.0	9	36.0	8	32.0	1	4.0	1	4.0	0	0.0
2	Karnataka	Ballari	10	4	40.0	4	40.0	2	20.0	0	0.0	0	0.0	0	0.0
3	Karnataka	Bengaluru Rural	10	4	40.0	3	30.0	2	20.0	1	10.0	0	0.0	0	0.0
4	Karnataka	Bengaluru Urban	18	7	38.9	10	55.6	1	5.6	0	0.0	0	0.0	0	0.0
5	Karnataka	Bidar	32	6	18.8	14	43.8	10	31.3	2	6.3	0	0.0	0	0.0
6	Karnataka	Chamarajanagara	17	8	47.1	3	17.6	5	29.4	1	5.9	0	0.0	0	0.0
7	Karnataka	Chikkaballapura	6	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0
8	Karnataka	Chikkamagaluru	69	17	24.6	28	40.6	23	33.3	1	1.4	0	0.0	0	0.0
9	Karnataka	Chitradurga	24	12	50.0	8	33.3	4	16.7	0	0.0	0	0.0	0	0.0
10	Karnataka	Dakshina Kannada	91	12	13.2	31	34.1	43	47.3	5	5.5	0	0.0	0	0.0
11	Karnataka	Davangere	40	26	65.0	13	32.5	0	0.0	1	2.5	0	0.0	0	0.0
12	Karnataka	Dharwad	24	10	41.7	7	29.2	5	20.8	2	8.3	0	0.0	0	0.0
13	Karnataka	Gadag	19	4	21.1	5	26.3	8	42.1	1	5.3	1	5.3	0	0.0
14	Karnataka	Hassan	62	25	40.3	18	29.0	17	27.4	2	3.2	0	0.0	0	0.0
15	Karnataka	Haveri	22	9	40.9	9	40.9	4	18.2	0	0.0	0	0.0	0	0.0
16	Karnataka	Kalaburagi	53	20	37.7	24	45.3	7	13.2	2	3.8	0	0.0	0	0.0
17	Karnataka	Kodagu	71	13	18.3	22	31.0	27	38.0	9	12.7	0	0.0	0	0.0
18	Karnataka	Kolar	20	11	55.0	9	45.0	0	0.0	0	0.0	0	0.0	0	0.0
19	Karnataka	Koppal	21	7	33.3	11	52.4	3	14.3	0	0.0	0	0.0	0	0.0
20	Karnataka	Mandya	38	19	50.0	13	34.2	6	15.8	0	0.0	0	0.0	0	0.0
21	Karnataka	Mysuru	50	23	46.0	17	34.0	7	14.0	3	6.0	0	0.0	0	0.0
22	Karnataka	Raichur	38	11	28.9	13	34.2	14	36.8	0	0.0	0	0.0	0	0.0
23	Karnataka	Ramanagara	26	13	50.0	9	34.6	3	11.5	1	3.8	0	0.0	0	0.0
24	Karnataka	Shivamogga	77	18	23.4	21	27.3	33	42.9	5	6.5	0	0.0	0	0.0
25	Karnataka	Tumakuru	35	20	57.1	12	34.3	2	5.7	1	2.9	0	0.0	0	0.0
26	Karnataka	Udupi	68	4	5.9	24	35.3	37	54.4	3	4.4	0	0.0	0	0.0
27	Karnataka	Uttara Kannada	75	18	24.0	28	37.3	24	32.0	5	6.7	0	0.0	0	0.0
28	Karnataka	Vijayanagar	16	10	62.5	6	37.5	0	0.0	0	0.0	0	0.0	0	0.0
29	Karnataka	Vijayapura	55	15	27.3	32	58.2	8	14.5	0	0.0	0	0.0	0	0.0
30	Karnataka	Yadgir	24	7	29.2	10	41.7	7	29.2	0	0.0	0	0.0	0	0.0
		Total	**1136**	**364**	**32.04**	**414**	**36.44**	**310**	**27.29**	**46**	**4.05**	**2**	**0.18**	**0**	**0.00**

ANNEXURE II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 473 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "SCHEMES FOR RAINWATER HARVESTING".

Categorisation of changes in water level between Mean of Post-monsoon 2014 to 2023 with Post-monsoon 2024 (Unconfined Aquifers)															
Sr. No.	State/UT	District Name	No of wells analysed	No./Percentage of wells showing fluctuation to water level (m) in the range of											
				Rise						Fall					
				0 to 2		2 to 4		> 4		0 to 2		2 to 4		> 4	
1	Karnataka	Bagalkote	24	14	58.3	3	12.5	2	8.3	1	4.2	3	12.5	1	4.2
2	Karnataka	Ballari	10	3	30.0	5	50.0	0	0.0	2	20.0	0	0.0	0	0.0
3	Karnataka	Bengaluru Rural	9	7	77.8	2	22.2	0	0.0	0	0.0	0	0.0	0	0.0
4	Karnataka	Bengaluru Urban	18	10	55.6	1	5.6	0	0.0	7	38.9	0	0.0	0	0.0
5	Karnataka	Bidar	31	13	41.9	4	12.9	2	6.5	11	35.5	0	0.0	1	3.2
6	Karnataka	Chamarajanagara	16	5	31.3	4	25.0	1	6.3	5	31.3	1	6.3	0	0.0
7	Karnataka	Chikkaballapura	6	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0	0	0.0
8	Karnataka	Chikkamagaluru	67	41	61.2	10	14.9	3	4.5	13	19.4	0	0.0	0	0.0
9	Karnataka	Chitradurga	24	9	37.5	8	33.3	6	25.0	1	4.2	0	0.0	0	0.0
10	Karnataka	Dakshina Kannada	89	63	70.8	5	5.6	2	2.2	16	18.0	1	1.1	0	0.0
11	Karnataka	Davangere	38	25	65.8	4	10.5	1	2.6	7	18.4	1	2.6	0	0.0
12	Karnataka	Dharwad	24	12	50.0	7	29.2	4	16.7	1	4.2	0	0.0	0	0.0
13	Karnataka	Gadag	19	8	42.1	6	31.6	3	15.8	2	10.5	0	0.0	0	0.0
14	Karnataka	Hassan	62	35	56.5	8	12.9	9	14.5	9	14.5	0	0.0	1	1.6
15	Karnataka	Haveri	21	8	38.1	4	19.0	6	28.6	3	14.3	0	0.0	0	0.0
16	Karnataka	Kalaburagi	51	31	60.8	8	15.7	1	2.0	11	21.6	0	0.0	0	0.0
17	Karnataka	Kodagu	65	43	66.2	3	4.6	3	4.6	13	20.0	2	3.1	0	0.0
18	Karnataka	Kolar	19	12	63.2	4	21.1	0	0.0	3	15.8	0	0.0	0	0.0
19	Karnataka	Koppal	20	12	60.0	3	15.0	3	15.0	2	10.0	0	0.0	0	0.0
20	Karnataka	Mandya	34	19	55.9	3	8.8	1	2.9	7	20.6	4	11.8	0	0.0
21	Karnataka	Mysuru	47	28	59.6	9	19.1	2	4.3	7	14.9	1	2.1	0	0.0
22	Karnataka	Raichur	36	18	50.0	0	0.0	2	5.6	10	27.8	4	11.1	1	2.8
23	Karnataka	Ramanagara	26	17	65.4	1	3.8	1	3.8	7	26.9	0	0.0	0	0.0
24	Karnataka	Shivamogga	75	50	66.7	2	2.7	0	0.0	22	29.3	1	1.3	0	0.0
25	Karnataka	Tumakuru	33	19	57.6	6	18.2	3	9.1	4	12.1	1	3.0	0	0.0
26	Karnataka	Udupi	58	30	51.7	0	0.0	1	1.7	22	37.9	4	6.9	1	1.7
27	Karnataka	Uttara Kannada	75	34	45.3	2	2.7	0	0.0	36	48.0	0	0.0	2	2.7
28	Karnataka	Vijayanagar	16	6	37.5	4	25.0	5	31.3	1	6.3	0	0.0	0	0.0
29	Karnataka	Vijayapura	54	23	42.6	7	13.0	5	9.3	15	27.8	1	1.9	1	1.9
30	Karnataka	Yadgir	20	13	65.0	1	5.0	0	0.0	4	20.0	2	10.0	0	0.0
		Total	**1087**	**611**	**56.21**	**127**	**11.68**	**66**	**6.07**	**242**	**22.26**	**26**	**2.39**	**8**	**0.74**

*7 wells show no change in water level.

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