

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO. 805

ANSWERED ON 24.07.2025

DECLINE IN GROUNDWATER LEVELS IN KERALA

805. DR. M P ABDUSSAMAD SAMADANI

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

- (a) whether the Government is aware of recent studies conducted by the Central Ground Water Board and the Kerala Ground Water Department indicating a 30 to 40 per cent decline in groundwater levels in the coastal and littoral regions of Kerala during the last decade;
- (b) if so, the details thereof and the major reasons identified for such depletion, including the impact of borewell proliferation, climate change and erratic monsoons;
- (c) whether the Government has any targeted plans or Centrally-assisted schemes to encourage traditional open well systems and regulate excessive extraction through borewells and tubewells, especially in vulnerable blocks like Kasaragod, Palakkad, Chittoor and Malampuzha and if so, the details thereof; and
- (d) the steps taken/proposed to be taken by the Government to recharge groundwater and improve water storage capacity in the State?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Central Ground Water Board (CGWB) monitors groundwater levels throughout the country including coastal and littoral regions of Kerala, four times in every year. In Kerala State, CGWB has monitored groundwater levels in coastal districts, through a network of established 330 Ground water monitoring wells. To assess long-term groundwater level fluctuations, water levels recorded in November 2024 have been compared with the decadal mean of November water levels (2014–2023) based on observations from 330 wells. Analysis of such water level data indicates that about 69% of the wells monitored have registered rise in ground water levels. The district-wise details for the decadal fluctuation in respect of the coastal districts is provided in **Annexure**.

The localised fall in water level is mainly in some urban pockets may be due to increased water abstraction and limited recharge and storage capacity.

(c) Regulation of extraction of groundwater in Kerala is being done by State Groundwater Authority of Kerala under the Kerala Ground Water (Control & Regulation) Act, 2002. As per the information received, the Authority is mandating Permit for the construction of new bore wells in notified areas such as Malampuzha, Chittur, Kasargode and NOC is mandated for groundwater extraction for industrial and infrastructural purposes in the State. Industries using groundwater as raw material/ water intensive industries shall not be granted NOC for groundwater withdrawal in notified areas as part of the regulation mechanism.

(d) Water being a State subject, the responsibility of addressing the ground water related issues lies primarily with the concerned State Governments. However, the Central Government facilitates the efforts of the State Governments by way of technical and financial assistance through its various schemes and projects. In this direction, the important steps taken by the Ministry of Jal Shakti and other central ministries for improvement of ground water resources of the country, including for the state of Kerala, are given below:-

- The Government is implementing Jal Shakti Abhiyan (JSA) in the country, including Kerala, since 2019 which is a mission mode and time bound programme for harvesting the rainfall and taking up water conservation activities. JSA is an umbrella campaign under which various ground water recharge and conservation related works are being taken up in convergence with various central and state schemes. As per the information available on JSA dashboard, a total of around 5.92 lakh water conservation and artificial recharge structures have been constructed/renovated in Kerala since 2021. Additionally, 14 Jal Shakti Kendras have been set up at district level for dissemination of water related knowledge and consultation by citizens.
- Central Ground Water Board (CGWB) has taken up National Aquifer Mapping and Management Programme (NAQUIM) with an aim to delineate aquifer disposition and their characterization. Entire mappable area of the country of around 25 lakh sq. km, including about 28,088 sq. km in Kerala, has been mapped under the scheme and district-wise ground water management plans, containing both demand and supply side measures, have been shared with the respective State/District administrations for implementation.
- Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB for the entire country, including Kerala and shared with States/UTs providing a broad outline for construction of around 1.42 crore rain water harvesting and artificial recharge structures in the country to harness 185 BCM (Billion cubic meter) of water. For Kerala, the Master plan recommends around 7.49 lakh structures.
- Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop Scheme in the country, including Kerala, since 2015-16, which focuses on enhancing water use efficiency at farm level through Micro Irrigation and better on-farm water management practices to optimize the use of available water resources.
- Mission Amrit Sarovar was launched by the Government of India, which aimed at developing and rejuvenating at least 75 water bodies in each district of the country for the purpose of increasing water storage and boosting ground water recharge. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country with active community participation, with 865 in Kerala.
- Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for regulation of its development, which also includes provision of rain water harvesting. So far, 21 States/UTs including Kerala have adopted and implemented the ground water legislation.

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 805 TO BE ANSWERED IN LOK SABHA ON 24.07.2025 REGARDING “DECLINE IN GROUNDWATER LEVELS IN KERALA”.

Decadal Water Level Fluctuation (in meters) with Mean (Post-Monsoon 2014 to 2023) and Post-Monsoon 2024 (Unconfined Aquifer) for Coastal and Littoral Regions of Kerala

District	No of wells analysed	Rise						Fall						Rise		Fall	
		0-2		2-4		>4		0-2		2-4		>4		No	%	No	%
		No	%	No	%	No	%	No	%	No	%	No	%				
ALAPUZHA	61	40	66	1	2	1	2	19	31	0	0	0	0	42	69	19	31
ERNAKULAM	27	18	67	0	0	0	0	8	30	1	4	0	0	18	67	9	33
KASRAGOD	12	7	58	1	8	1	8	3	25	0	0	0	0	9	75	3	25
KOLLAM	49	28	57	1	2	0	0	17	35	3	6	0	0	29	59	20	41
KOTTAYAM	21	10	48	0	0	0	0	10	48	1	5	0	0	10	48	11	52
KOZHIKODE	32	20	63	5	16	0	0	7	22	0	0	0	0	25	78	7	22
MALAP PURAM	20	17	85	1	5	0	0	2	10	0	0	0	0	18	90	2	10
PATHANA MTHITTA	16	11	69	0	0	0	0	5	31	0	0	0	0	11	69	5	31
THIRUVA NANTHAPURAM	48	31	65	3	6	0	0	13	27	1	2	0	0	34	71	14	29
THRISSUR	24	22	92	0	0	0	0	2	8	0	0	0	0	22	92	2	8
KANNUR	20	10	50	0	0	0	0	10	50	0	0	0	0	10	50	10	50
TOTAL	330	214	64.85	12	3.64	2	0.61	96	29.09	6	1.82	0	0.00	228	69.09	102	30.91
