

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2274**  
TO BE ANSWERED ON 09.08.2021

**Decline in water availability**

2274. DR. AMEE YAJNIK:  
SHRI NEERAJ DANGI:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) details of decline in water availability per capita in the last five years;
- (b) whether over 80% of the urban domestic water supply is met solely through groundwater and whether the national water demand is anticipated to doubly exceed supply; and
- (c) steps taken by Government to reduce reliance on borewells and tanker supplied water through increased investments in suitable rainwater harvesting and ground water recharging methods?

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(SHRI ASHWINI KUMAR CHOUBEY)**

(a) & (b) Per capita water availability was assessed as 1545 cubic metres per year in 2015 and Central Water Commission (CWC) has estimated that the availability will decrease to 1486 cubic metres in 2021. The Annual Ground Water Extraction for all uses is 245 BCM out of which 24 BCM (10%) have been utilized for domestic purpose including both Urban and Rural areas of the Country, as per assessment in 2020.

(c) The important steps taken by the Central Government for sustainable ground water management including optimizing ground water utilization, promoting rain water harvesting and recharging ground water, etc. in the country are:

- Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by CGWB 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 envisages 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. DPR has to be prepared by the concerned line department at an implementable level like any other water supply project or city development project. Implementation has been proposed to be through existing schemes only and no separate scheme/fund has been envisaged for implementation. The “Master Plan for Artificial Recharge to Ground Water in India - 2020” is available at <http://cgwb.gov.in/MasterPlanGWRecharge2020.pdf>
- 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, 19 States/UTs have adopted and implemented the ground water legislation.

- Central Ground Water Authority (CGWA) has been constituted under Section 3 (3) of the “Environment (Protection) Act, 1986” for the purpose of regulation and control of ground water development and management in the Country. CGWA has advised States/UTs to take measures to promote/adopt artificial recharge to ground water / rain water harvesting. CGWA grants No Objection Certificates (NOCs) for ground water abstraction to Industries, Infrastructure units and Mining projects in feasible areas in certain States/UTs where regulation is not being done by the respective State/UTs. The latest guidelines for control and regulation of groundwater extraction with pan-India applicability was notified by the Ministry on 24 September 2020 and is available at [http://jalshakti-dowr.gov.in/sites/default/files/CGWA\\_GWExtraction\\_Notification\\_24-09-2020.pdf](http://jalshakti-dowr.gov.in/sites/default/files/CGWA_GWExtraction_Notification_24-09-2020.pdf)
- Ministry of Jal Shakti has launched Jal Shakti Abhiyan (JSA) - a campaign for water conservation and water security. During the campaign, officers, groundwater experts and scientists from the Government of India will work together with State and district officials in India’s most water-stressed districts for water conservation and water resource management.
- In compliance to the decision taken by the Committee of Secretaries, an ‘Inter-Ministerial Committee’ under the Chairmanship of Secretary (WR, RD & GR) has been constituted to take forward the subject of ‘Push on Water Conservation Related Activities for Optimum Utilization of Monsoon Rainfall’.
- Central Ground Water Authority (CGWA) has issued directions under Section 5 of “The Environment Protection Act, 1986” for mandatory Rain Water Harvesting/Roof Top Rain Water Harvesting for all target areas in the Country including UTs. While granting ‘No Objection Certificate (NOC)’ for drawing ground water, CGWA insists for mandatory rain water harvesting as per the guidelines issued.
- Central Ground Water Board (CGWB) under DoWR, RD & GR 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.
- Besides, 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 with community participation. The management plans are shared with the respective State Governments for taking appropriate measures.
- The Ministry of Rural Development in consultation and agreement with the Department of Water Resources, RD & GR and the Ministry of Agriculture & Farmers’ Welfare has developed an actionable framework for Natural Resources Management (NRM), titled “Mission Water Conservation” to ensure gainful utilization of funds for water conservation/management, water harvesting, soil and moisture conservation, groundwater recharge, flood protection, land development, Command Area Development and Watershed Management
- Model Building Bye Laws (MBBL) 2016 circulated by Ministry of Housing & Urban Affairs include provisions for Rainwater Harvesting and it has been shared with all

the States / UTs. So far 33 States / UTs have adopted the provisions of rainwater harvesting of MBBL-2016.

- Department of Water Resource, RD&GR has instituted National Water Awards to incentivise good practices in water conservation and ground water recharge.
- Mass awareness programmes (Trainings, Seminars, Workshops, Exhibitions, Trade Fairs and Painting Competitions etc.) are conducted from time to time each year under the Information, Education & Communication (IEC) Scheme of DoWR, RD & GR in various parts of the Country to promote rain water harvesting and artificial recharge to ground water.

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