

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA
UNSTARRED QUESTION NO. 715

ANSWERED ON 29.07.2024

WATER STRESS IN THE COUNTRY

†715. SHRI BRIJ LAL SHRI NARESH BANSAL

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

- (a) the steps taken and schemes introduced by Government to increase the practice of rainwater harvesting in the country;
- (b) the schemes of Government to manage the increasing water stress in the country and the details thereof; and
- (c) the steps taken to control floods and drought situations 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/UTs 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 and rainwater harvesting to reduce water stress and address water scarcity 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 constructions and repair or rainwater harvesting structures including rooftop and water harvesting structures.
- 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.
- 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. 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.
- x. 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.
- xi. CGWB, under Ground Water Management & Regulation Scheme, has also implemented several successful artificial recharge projects in the country for demonstrative purpose which enables the State Governments to replicate the same in suitable hydro-geological conditions.
- xii. 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.

- xiii. 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 rainwater harvesting.
- xiv. The activity of installing rainwater harvesting structures at the Gram Panchayat level has been included in the Panchayat Development Plan (PDP) for Panchayats to opt for the same as per their needs for execution from XV Finance Commission (FC) funds or any other available funds with them.

(c) Flood management including erosion control falls within the purview of the States. Flood management and anti-erosion projects are formulated and implemented by concerned State Governments from own resources as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and also promotional financial assistance for management of floods in critical areas. To strengthen the structural measures of flood management, Ministry of Jal Shakti had implemented Flood Management Programme (FMP) during XI & XII Plan for providing Central Assistance to States for works related to flood management, anti-erosion, drainage development, anti-sea erosion, etc. which subsequently continued as a component of "Flood Management and Border Areas Programme" (FMBAP) for the period from 2017-18 to 2020-2021 and further extended during 2021-22 to 2025-2026 with limited outlay.

Further, Central Water Commission (CWC) issues station-specific flood forecasts to concerned stakeholders at identified river locations. This includes inflow forecasts at identified reservoirs for proper reservoir regulation. Presently, flood forecasts are issued by CWC at 340 stations as per Standard Operating Procedure. The network has been established in consultation with State Govt./Project authorities which also includes stations on the river passing through/ nearby metropolitan cities. Dissemination of flood forecasts is through a dedicated website <https://ffs.india-water.gov.in/>. In addition to short range forecast, CWC also prepares 7 days advisory flood forecast through basin specific mathematical models using IMD weather forecast product and near real time satellite rainfall estimates. These flood advisories are disseminated through web Portal <https://aff.india-water.gov.in/home.php> to stakeholders.

To address drought situations in the country, the Government of India has implemented several initiatives aimed at improving water use efficiency, expanding irrigation coverage and promoting sustainable agricultural practices. Government of India launched "Pradhan Mantri Krishi Sinchayi Yojana (PMKSY)" in 2015-16 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. Department of Agriculture & Farmers Welfare is implementing Per Drop More Crop (PDMC) focusing on enhancing water use efficiency at farm level through micro irrigation such as drip and sprinkler irrigation systems.

In 2019, the National Water Mission under the Ministry of Jal Shakti launched the "Sahi Fasal" campaign to nudge the farmers in the water stressed areas to grow crops which are not water intensive, but use water very efficiently; and are economically remunerative; are healthy and nutritious; suited to the agro-climatic-hydro characteristics of the area; and are environmentally friendly. The campaign aims to reduce the cultivation of water-intensive crops and promote alternatives that require less water, thus conserving water resources and preventing drought.