GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 708

ANSWERED ON 29.07.2024

ANNUAL GROUNDWATER RECHARGE

†708. DR. DHARMASTHALA VEERENDRA HEGGADE

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

(a) whether Government has assessed the Total Annual Ground Water Recharge in the country in the year 2023 and if so, the details thereof;

(b) whether Total Annual Ground Water Recharge for the entire country, as in 2023 has increased or decreased, the details thereof;

(c) whether Government is aware that out of 234 Assessment Taluks in Karnataka, 44 Taluks have been categorised as "Over Exploited" and would become economically unviable for extraction of groundwater for agriculture production and if so, the details thereof; and

(d) whether Government proposes any groundwater management Programme/ Scheme to deal with the crisis and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) The Dynamic Ground Water Resources Assessment of the country is being carried out annually by Central Ground Water Board (CGWB) jointly with States/UTs. As per the 2023 assessment, Total Annual Ground Water Recharge for the entire country is 449.08 Billion Cubic Meter (BCM) and the Annual Extractable Ground Water Resource is 407.21 BCM. The Annual Ground Water Extraction for all uses stands at 241.34 BCM and the Stage of Ground Water Extraction (SoE), which is the ratio of Annual Ground Water Extraction for all uses (irrigation, industrial and domestic uses) over Annual Extractable Ground Water Resources is assessed as 59.26% for the country as a whole.

(b) The total annual groundwater recharge for the country in the year 2022 was assessed as 437.6 BCM, while for the year 2023 it was 449.08 BCM which shows an increase of 11.48 BCM in total annual groundwater recharge for the country.

(c) As per the Assessment for the state of Karnataka in 2023, out of 234 Assessment Units (AUs), 44 units (18.8 %) have been categorized as ‘Over Exploited’. However, the assessment is dynamic in nature and with suitable demand and supply side interventions ground water quality and quantity in any unit can be substantially improved.

(d) Water being a State subject, sustainable development and management of groundwater resources is primarily the responsibility of the State Government. 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 sustainable development of ground water resources in the country, including in the state of Karnataka are given below:-

- CGWB has taken up National Aquifer Mapping and Management Programme(NAQUIM) with an aim 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 / implementation. Based on the NAQUIM recommendation, a total of 103 Artificial Recharge structures (Multi Arch Check Dams - MACD) were identified for construction in Gauribidanur taluk, Chikballapur district by Dept. of Rural Development and Panchayat Raj (RDPR), Govt. of Karnataka under MNREGS.
- Further, in the state of Karnataka, NAQUIM 2.0 studies are being carried out in priority areas of Doddballapur taluk, Navalgund taluk, Channapatna taluk, Baikampady Industrial area, Mangaluru and Bangalore Urban District to provide issue based scientific inputs for groundwater management.
- 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. In Karnataka State, the plan aims at constructing 61225 rain water harvesting and artificial recharge structures to harness around 149. 64 MCM of rainwater.
- The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 in which special emphasis is being given for rainwater harvesting / groundwater recharge. Currently, JSA 2024 is being implemented in 10 water stressed districts of Karnataka under which various ground water recharge and conservation related works are being taken up in convergence with various central and state schemes.
- Atal Bhujal Yojana (ATAL JAL) is being implemented in 80 water stressed districts in 7 States, including the state of Karnataka. Atal Bhujal Yojana is a community led scheme for participatory ground water management focussing on demand side management of ground water. In Karnataka, the scheme is being implemented in 1199 Gram Panchayats covering 41 taluks (OE and water stressed) of 14 districts.
- Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop Scheme in the country 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.

- The Central Ground Water Authority (CGWA) has been constituted under MoJS 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. Abstraction cum use of Groundwater in the country is regulated by CGWA by way of issuing NOCs as per the provisions of its Guidelines dated 24.09.2020 which have pan India applicability.
- 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. As an outcome nearly 69,000 Amrit Sarovars have been constructed/ rejuvenated throughout the country.
- Ministry of Housing & Urban Affairs is currently implementing Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 Scheme under which Rejuvenation of water bodies and wells in urban areas is one of the main components. Mission promotes water source conservation, recycle/ reuse of treated used water, by involving community at large.

In addition to the above, the Government of India has taken several other significant initiatives for the improvement of groundwater situation in the country which can be seen through link below-
https://jalshakti-dowr.gov.in/document/steps-taken-by-the-central-government-to-control-water-depletion-and-promote-rain-water-harvesting-conservation/

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