DEPLETION OF GROUNDWATER LEVEL IN METRO CITIES

Relevant for: Environment | Topic: Environmental Pollution - Air, Water, Soil & E-waste

Central Ground Water Board (CGWB) is periodically monitoring the ground water levels throughout the Country including metro cities on a regional scale, through a network of monitoring wells. In order to assess the decline in water level on a long-term basis, the water level data collected by CGWB during November 2020 has been compared with the decadal average (2010-2019). Analysis of water level data indicates about 33% of the wells monitored have registered decline in ground water levels in the range of 0 - 2 m. Decline of more than 4.0 m has also been observed in few pockets of Delhi, Chennai, Indore, Coimbatore, Madurai, Vijayawada, Dehradun, Jaipur, Allahabad, Ghaziabad, Kanpur, and Lucknow.

CGWB has not carried out any survey to measure the total demand and the existing supply of water in big cities of the countries.

Water being a State subject, initiatives on water management including water conservation and water harvesting and making available adequate drinkable water to citizens in the Country is primarily States' responsibility. However, important measures taken by the Central Government for conservation, management of ground water and effective implementation of rain water harvesting in the country including making available adequate drinkable water can be accessed a t the following URL: http://jalshakti-dowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Feb2021.pdf. Some of the important initiatives in this regard are also listed in subsequent paras.

Government of India launched Jal Shakti Abhiyan (JSA) in 2019, a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. In this regard, teams of officers from Central Government along-with technical officers from Ministry of Jal Shakti were deputed to visit water stressed districts and to work in close collaboration with district level officials to undertake suitable interventions.

In addition, Ministry of Jal Shakti has taken up the "Jal Shakti Abhiyan: Catch the Rain" (JSA:CTR) with the theme "Catch the Rain - Where it Falls When it Falls" to cover all the blocks of all districts (rural as well as urban areas) across the country during 22nd March 2021 to 30th November 2021. The campaign was launched by the Hon'ble Prime Minister on 22 March 2021.

Ministry of Jal shakti, Department of Water Resources, RD & GR (DoWR, RD & GR) is implementing Atal Bhujal Yojana (Atal Jal), a Rs.6,000.00 crore Central Sector Scheme, for sustainable management of ground water resources with community participation. Atal Jal is being implemented in 81 water stressed districts and 8774 Gram Panchayats of seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

National Aquifer Mapping and Management program (NAQUIM) is being implemented by CGWB as part of Ground Water Management and Regulation (GWM & R) Scheme, a Central Sector scheme. NAQUIM envisages mapping of aquifers (water bearing formations), their characterization and development of Aquifer Management Plans to facilitate sustainable management of Ground Water Resources in the country. NAQUIM outputs are shared with

States/UTs for suitable interventions.

Central Ground Water Board (CGWB) in consultation with States/UTs has prepared 'Master Plan for Artificial Recharge to Groundwater - 2020', which is an improvement of the earlier Master Plan – 2013. The Master Plan – 2020 is basically a macro level plan indicating various structures for the different terrain conditions of the country including estimated cost. The Master Plan - 2020 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 with an estimated cost of about Rs. 1.33 Lakh Crores.

Central government generally supports artificial groundwater recharge/water harvesting works in the country through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and Prime Minister Krishi Sinchayee Yojana - Watershed Development component (PMKSY-WDC), 'Surface Minor Irrigation (SMI) and Repair, Renovation and Restoration (RRR) of Water Bodies schemes' a component of PMKSY (launched in 2015-16).

Ministry of Housing & Urban Affairs (MoHUA) 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, wherein adequate focus has been given on requirement of rainwater harvesting and water conservation measures. As per MBBL, all buildings having a plot size of 100 sq.m. or more shall mandatorily include the complete proposal of rainwater harvesting. 33 States/ UTs have adopted the features of these Bye Laws.

A number of States have done notable work in the field of water conservation/harvesting for sustainable management of water resources. In this regard mention can be made of 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'Jalyukt Shibar' in Maharashtra, 'Sujalam Sufalam Abhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, Neeru Chettu' in Andhra Pradesh, Jal Jeevan Hariyali in Bihar, 'Jal Hi Jeevan' in Haryana among others.

Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) since August, 2019 to provide potable tap water supply of prescribed quality to every rural household in the country by 2024. Under JJM, while planning water supply schemes to provide tap water supply to house-holds, priority is given to quality-affected habitations. While allocating the funds to States/ UTs in a particular financial year, 10% weightage is given to the population residing in habitations affected by chemical contaminants including Arsenic and Fluoride, as on 31st March of the preceding Financial Year.

MoHUA supplements the efforts of the States/ UTs through its programmes and policies. Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is one of such programmes, which was launched on June 25, 2015, in selected 500 cities and towns across the country. The Mission focuses on development of basic urban infrastructure in the AMRUT cities, such as water supply, sewerage & septage management, storm water drainage, green spaces & parks, and non-motorized urban transport.

This Information was given by the Minister of State for Jal Shakti, Shri Bishweswar Tudu in a written reply in Rajya Sabha today.

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BY/AS

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