GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1701

ANSWERED ON 05.12.2024

GROUNDWATER RECHARGE

†1701. SHRI NARAYAN TATU RANE

Will the Minister of JAL SHAKTI be pleased to state:

(a) the steps taken/being taken by the Government to recharge ground water in water-scarce cities of Maharashtra;

(b) whether the Government has any policy for groundwater recharge in Maharashtra;

(c) if so, the details thereof; and

(d) the details of Government policy for monitoring Total Dissolved Solids (TDS) level of groundwater in Maharashtra, district and city-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Though water is a State subject, Central Government has taken a number of important measures for conservation and sustainable management of ground water and effective implementation of rain water harvesting and artificial recharge measures in both rural and urban areas of the country, including in the cities of Maharashtra. Some of the important ones are mentioned below:-

- i. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 in which is a mission mode and time bound programme for harvesting the rainfall and taking up water conservation activities. Currently, JSA 2024 is being implemented in the country with special focus on 151 water stressed districts of the country, including 7 such districts in Maharashtra. 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.
- ii. Central Ground Water Board (CGWB) has prepared Master Plan for Artificial Recharge to Groundwater- 2020 and shared it with States/UTs providing a broad outline for construction of around 1.42 crore rain water harvesting and artificial recharge structures in the country with estimated cost. Master plan for the state of Maharashtra recommends construction of about 56 lakh structures for harnessing rain-water.

- iii. CGWB is implementing Ground Water Management & Regulation (GWM &R) Scheme under which it 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 2.59 lakh sq km of Maharashtra, has been mapped under the scheme and management plans have been shared with the respective State governments and District authorities for implementation. The management plans mainly focus on methods for sustainable development of ground water which includes rain water harvesting and artificial recharge measures.
- iv. 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. 35 States/ UTs have adopted the features of these Bye Laws.
- v. For sustainable management of ground water resources in urban areas, Ministry of Housing & Urban Affairs (MoHUA) has come up with Shallow Aquifer Management(SAM) project, to explore and showcase different ways in which shallow aquifers can be rejuvenated in order to augment the overall water security of cities. Various initiatives like revival of heritage wells, injection borewells, percolation beds, recharge shafts etc. were taken up in select 10 cities, including Pune and Thane in Maharashtra, resulting in visible improvement in ground water situation in the project areas.
- vi. In addition to the above, CGWB has constructed several artificial recharge structures in water stressed areas of Maharashtra like under Aspirational District Programme in Osmanabad (121 structures), innovative Bridge-cum-Bhandaras (5 structures) in Wardha & Amravati districts etc.

(b) & (c) Water being a State subject, formulation of policy/guidelines for management of water resources is mainly the responsibility of the States. However, the Ministry of Jal Shakti has formulated the National Water Policy (2012) which, *inter-alia*, advocates rainwater harvesting and conservation of water and highlights the need for augmenting the availability of water through direct use of rainfall.

(d) CGWB has adopted a Standard Operating Procedure (SOP) for Ground Water Quality Monitoring in the country for various chemical parameters including EC/TDS. As per SOP, a background groundwater quality monitoring has been recommended once in 5 years for all monitoring stations across the country and

wherever the contaminants are in excess of prescribed standards, regular trend monitoring of those locations (twice a year; pre and post monsoon) is to be done.

Also Central Ground Water Board (CGWB) generates ground water quality data including Electrical Conductivity(EC)/Total Dissolved Solids (TDS) of the entire country including Maharashtra on a regional scale as part of its ground water quality monitoring program and various scientific studies. The data of ground water quality is shared with state governments and also placed in public domain through its web site. Analysis of EC/TDS data for May 2023 shows that in various districts of Maharashtra, TDS values ranged from a minimum of 136 in Sindhudurg (average value) to a maximum of 1173 (avg value) in Solapur.

Further, Department of Drinking Water & Sanitation is implementing Jal Jeevan Mission (JJM) in partnership with States/UTs to provide potable tap water supply to every rural household of the country. Water quality monitoring & surveillance is one of the components of the mission. Under this, the water samples from the villages are regularly tested inter alia for Total Dissolved Solids (TDS), through a robust network of drinking water quality testing laboratories at different levels viz. State, Regional, District, subdivision and/ or block level.
