

Rejuvenation of lakes and groundwater in Bengaluru

2773. SHRI RAJEEV CHANDRASEKHAR: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) what is Central Government proposing to check the looming water crisis in Bengaluru due to groundwater depletion, and the destruction and pollution of the city's lakes;

(b) whether the Central Government allocated or released any funds under any schemes to Karnataka for the rejuvenation of lakes in Bengaluru; and

(c) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA): (a) As per the information provided by Central Ground Water Board (CGWB) under Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD&GR), water being a State subject, initiatives on water management including conservation and artificial recharge to groundwater and revival of water bodies in the country is primarily States' responsibility. However, steps taken by the Central Government for conservation of groundwater in the country including Karnataka are:

- The National Water Policy (2012) formulated by MoWR, RD&GR advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The policy has been forwarded to all States/UTs including Karnataka and concerned Ministries/ Departments of Central Government for adoption.
- MoWR, RD&GR has circulated a Model Bill to all the States/UTs to enable them to enact suitable groundwater legislation for regulation of its development, which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the groundwater legislation on the lines of Model Bill including Karnataka.
- CGWB has prepared a conceptual document titled "Master Plan for Artificial Recharge to Ground Water-2013" which provides information about area-specific artificial recharge techniques to augment groundwater resources based on the availability of source water and capability of subsurface

formations to accommodate it. The Master Plan envisages construction of about 1,049 artificial recharge/rainwater harvesting structures in Bengaluru urban and 1,802 in Bengaluru rural areas. The Master Plan is available in public domain and has also been circulated to the State Governments for implementation including Karnataka.

- 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 groundwater development and management in the country. So far, CGWA has notified 162 areas in the country. In Karnataka, 22 assessment units have been notified including Bengaluru (North) and Bengaluru (South) taluka of Bengaluru (Urban) District.
- CGWB regularly undertakes training programmes and Information, Education and Communication (IEC) activities for capacity building and awareness creation of stakeholders on the importance of water conservation and rainwater harvesting in augmenting the groundwater resources.
- CGWB has taken up Aquifer Mapping and Management programme from the XII Plan, under the scheme of Ground Water Management and Regulation. Aquifer Mapping is aimed at delineating aquifer disposition and their characterization for preparation of aquifer/area specific groundwater management plans. So far, in Karnataka, aquifer maps and management plans have been prepared for an area of 84,043 km² under this programme.
- Model Building Bye Laws, 2016 circulated by Ministry of Housing and Urban Affairs (MoH&UA) include provisions for Rainwater Harvesting. As per these, Bangalore Water Supply and Sewerage Board (BWSSB) amended its rules and provided for rainwater harvesting structures by every owner with an area of more than 2,400 sq.ft. or every owner who proposes to construct a new building with plot area more than 1,200 sq.ft.

The Ministry of Environment, Forest and Climate Change (MoEF&CC) is currently implementing a Centrally sponsored scheme namely, National Plan for Conservation of Aquatic Eco-systems (NPCA) for conservation and management of identified wetlands (includes lakes) in the country on cost sharing basis between Central Government and respective State Governments. The scheme covers various activities such as interception, diversion and treatment of wastewater, shoreline protection, lake front development,

in-situ cleaning *i.e.* desilting and deweeding, storm water management, bioremediation, catchment area treatment, lake beautification, survey and demarcation, biofencing, fisheries development, weed control, biodiversity conservation, education and awareness creation, community participation, etc. The Central assistance is based on the proposals received from the State Governments, conformity with the guidelines and budget availability.

For more effective conservation and management of wetlands (includes lakes) in the country, the MoEF&CC in consultation with the States, Union Territories, Central line Ministries and other stakeholders, have notified the Wetlands (Conservation and Management) Rules, 2017 superseding the Wetlands (Conservation and Management) Rules, 2010.

Further, in order to supplement the efforts of the State Governments, Government of India (through MoWR, RD&GR) provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes and programmes such as Accelerated Irrigation Benefits Programme (AIBP) and scheme for Repair, Renovation and Restoration (RRR) of water bodies etc.

The RRR of water bodies scheme aims at increasing irrigation potential by improvement and restoration of water bodies along with other multiple objectives like enhancing the tank storage capacity, ground water recharge, increased availability of drinking water, improvement of catchment of tank commands etc. Under this scheme, as per the guidelines, water bodies with water spread area of 2 to 10 ha. in urban areas and more than 5.0 ha. in rural areas are considered for inclusion.

(b) and (c) Under the scheme of NPCA, so far, MoEF&CC had provided financial assistance of ₹ 2.63 crore (Central share) for conservation and management of seven lakes in Bengaluru namely, Vengaiahnkere Lake, Nagvara Lake, Jarganahalli Lake, Lal Bagh, Bellandur Lake, Gowramma Lake and Hombalamma Lake.

As per the information provided by BWSSB, projects totalling to ₹887.97 crore relating to sewerage system and STPs in Bengaluru have been approved/initiated under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) programme of MoH&UA. Apart from other benefits, these projects will help in rejuvenating lakes in Bengaluru by reducing the pollution load being discharged into them.

No proposal from the State of Karnataka has been received under RRR of water bodies Scheme so far.