

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

RAJYA SABHA

STARRED QUESTION NO. *1

ANSWERED ON 22.07.2024

PROJECTS TO IMPROVE AND INCREASE GROUNDWATER LEVEL

*1 SHRI KESRIDEVSINH JHALA

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether there is any project to improve groundwater level in the country, if so, the details thereof;
- (b) whether there is any plan to deepen water bodies such as lakes/dams/ reservoirs so as to increase the water storage capacity;
- (c) whether Government is updating the technology to clean rivers and water bodies; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

- (a) to (d) : A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. *1 TO BE ANSWERED ON 22.07.2024 IN RAJYA SABHA REGARDING “PROJECTS TO IMPROVE AND INCREASE GROUNDWATER LEVEL”

(a) Water being a State subject, the issues related to development, regulation and management of ground water is primarily the responsibility of the state governments. The Central Government provides technical support and financial assistance through its institutions and various centrally sponsored schemes. In this regard, the Ministry of Jal Shakti(MoJS) is implementing several projects and schemes to continuously monitor and improve the ground water levels in the country whose brief outline is given below.

The Central Ground Water Board (CGWB) is implementing ‘Ground Water Management & Regulation Scheme’(GWM &R)under which National Aquifer Mapping and Management Programme (NAQUIM) has been implemented. Under NAQUIM all the mappable areas of the country (~25 lakh sq km) have been covered and suitable scientific groundwater management plans at the block and district levels have been prepared and shared with the State Governments for implementation.

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. The Master Plan envisages construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Meters (BCM) of water.

Additionally, CGWB has taken up several demonstrative projects for construction of artificial recharge structures like Bridge cum Bandhara (BCB) at five locations in Maharashtra, works in selected Aspirational Districts, works in identified water stressed areas of Rajasthan comprising Jodhpur, Jaisalmer & Sikar districts etc.

MoJS is implementing Jal Shakti Abhiyan (JSA) since 2019 in the country in which special emphasis is being given for rainwater harvesting(RWH) / groundwater recharge. The 5th edition of JSA for 2024-25 with theme 'Nari Shakti se Jal Shakti' has been launched by the ministry in March 2024. JSA is implemented through local convergence of various schemes and funds and some of the major interventions undertaken under the Abhiyan include construction and repair of rainwater harvesting structures including rooftop & water conservation structures. Activities also include construction and desilting of existing water bodies like ponds, tanks etc. with an aim to augment storage capacity to reduce the groundwater stress.

MoJS is also implementing Atal Bhujal Yojana in select 80 water-stressed districts in identified 7 states, intending to improve the ground water levels and to ensure sustainable management of groundwater resources with community participation.

Department of Agriculture & Farmers’ Welfare (DA & FW) is implementing Per Drop More Crop Scheme since 2015-16, which focuses on enhancing water use efficiency at farm level through

Micro Irrigation. Under this centrally sponsored scheme, so far an area of 83.49 lakh hectare has been covered under Micro Irrigation in the country.

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 resulting in visible improvement in ground water situation in the project areas.

Moreover, The Central Ground Water Authority (CGWA) is working as the nodal agency for regulation and control of groundwater extraction in the country with an aim to discourage unbridled ground water extraction and ensuring sustainable ground water regime.

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/>

Similarly, several State Governments have initiated their own schemes targeting overall water resource improvement and management. Pani Bachao Paisa Kamao by Punjab, Mera Pani, Meri Virasat by Haryana, Mission Kakatiya by Telangana, Jal Jeevan Hariyali Yojana by Bihar, Jalyukt Shibir by Maharashtra, Sujalam Sufalam by Gujarat are few examples.

(b) Concerning deepening/rejuvenating the water bodies for increasing the storage capacity, 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.

Centrally sponsored scheme “Repair, Renovation & Restoration (RRR) of Water Bodies (WBs)” is a component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet Ko Pani (HKKP) being implemented by Ministry of Jal Shakti under which works like cleaning of traditional water bodies is taken up.

Dam Rehabilitation and Improvement Project (DRIP) Phase-I implemented during 2012-2021 had provision for need-based de-siltation of few reservoirs to restore their lost capacity to the extent possible. Currently, the DRIP Phase II and III scheme (2021-2031) is being implemented wherein too provision has been made for need based de-siltation of the reservoirs.

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.

Under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), works relating to Natural Resource Management (NRM) which include water conservation and water harvesting structures to augment and improve ground water are taken up. Large scale desiltation projects for traditional water bodies, rejuvenation of river stretches etc. have been conducted by various state governments under the Scheme.

(c) & (d) The Ministry is constantly exploring and harnessing new technologies for cleaning of rivers and water bodies. Under the Namami Gange programme of the Ministry, various innovative and new technologies have been adopted based on regulatory requirements and site conditions. The following are some of the important technologies being employed:

- i. Multi-storey Sewage Treatment Plants (STPs):
- ii. Nature-based sewage treatment using Constructed Wetlands
- iii. Packaged Sewage Treatment Plant – 'Johkasou':
- iv. Advance Oxidation Process (AOP):
- v. Electrocoagulation:
- vi. Mandatory Tertiary Treatment by filtration and disinfection to achieve the stringent norms for river revival.
