GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION LOK SABHA STARRED QUESTION NO. †*290 ANSWERED ON 15.03.2018

CONSERVATION/RECHARGING OF NATURAL WATER SOURCES

†*290. DR. RAMESH POKHRIYAL "NISHANK" SHRI MANSHANKAR NINAMA

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

(a) the steps being taken by the Government to deal with the problem of drinking water due to drying up of natural sources in the Himalayan region during the last few years;

(b) whether the Government has taken any steps for proper conservation and recharging of natural sources of water and if so, the details thereof;

(c) whether any monitoring system has been put in place by the Government in coordination with the concerned Ministries to monitor the status of natural sources of water and if so, the details thereof; and

(d) whether any concrete steps are being taken to develop new technology for conservation and upgradation of conventional water sources and if so, the details thereof?

ANSWER

THE MINISTER OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION, ROAD TRANSPORT & HIGHWAYS AND SHIPPING

(SHRI NITIN JAIRAM GADKARI)

(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 †*290 TO BE ANSWERED IN LOK SABHA ON 15.03.2018 REGARDING "CONSERVATION/RECHARGING OF NATURAL WATER SOURCES" ASKED BY DR. RAMESH POKHRIYAL "NISHANK" & SHRI MANSHANKAR NINAMA, MPs.

(a) to (c) The water sources dry up because of a number of reasons including excessive extraction of ground and surface water mainly for irrigation and industrial purposes, inadequate recharge of water in the sources (both surface water and ground water) due to insufficient rains, depletion of tree cover and undergrowth in forests and catchment areas, etc. The anthropogenic activities such as changes in land use patter, cutting of slopes and natural factor (seismic activities, temperature and precipitation variability due to climatic change) are responsible for drying up of springs and streams particularly in the Lesser Himalayan region.

Ministry of Drinking Water and Sanitation is implementing National Rural Drinking Water Programme (NRDWP) through the concerned Departments in the States by making the drinking water available to the rural people while drawing/treating the water from the ground or surface water resources.

Water being a State subject, conservation, efficient management and recharging of natural sources of water are undertaken by the respective State governments. Central Government supplements the efforts of the State Governments by providing technical and financial assistance through various schemes and programmes such as Pradhan Mantri Krishi Sinchai Yojana, Mahatma Gandhi National Rural Employment Guarantee Scheme, Repair, Renovation & Rehabilitation of Water Bodies, etc.

The steps taken by the Central Government for monitoring, conservation and recharging of water resources are as follows:

- Central Ground Water Board (CGWB) under this Ministry carries out ground water level monitoring four times annually on regional scale and ground water quality monitoring once in a year all over the country including Himalayan region. The data is shared with the State Government.
- During the last three years, CGWB has constructed 49 Exploratory Wells in the Himalayan Region for various scientific studies. Out of these, 32 exploratory wells have been handed over to State governments for water supply.
- CGWB has taken up National Aquifer Mapping and Management Program (NAQUIM) in the Country. The program aims delineation and characterization of aquifers and preparation of aquifer management plans to ensure sustainability of ground water resources for all purposes including agriculture. The management Plans prepared under the program are shared with concerned State Governments for necessary implementation.

- 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 the ground water resources based on the availability of source water and capability of subsurface formations to accommodate it. The Master Plan envisages construction of about 1.11 crore artificial recharge structures in urban and rural areas at an estimated cost of Rs. 79178 crore. The Master Plan is available in public domain and has also been circulated to the State Governments for its implementation.
- An MOU has been signed between CGWB and Geological survey of India, Dehradun for "Spring Rejuvenation Studies between North-Almora Thrust and South–Almora Thrust" falling in Almora district of Uttarakhand.
- CGWB has been rendering technical guidance for installation of roof top rainwater harvesting systems in Darjeeling, West Bengal and Gangtok, Sikkim.
- Technical guidance is being been provided by CGWB to the Army units located in Kargil District for Snow Water Harvesting as a means for recharging of tube wells / springs for drinking purposes.
- CGWB carries out training programs and IEC activities for capacity building and awareness creation among stakeholders on the importance of water conservation and rainwater harvesting in augmenting the ground water resources.
- The National Water Policy (2012) formulated by Ministry of Water Resources, RD & GR, inter-alia, 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 National Water Policy (2012) has been forwarded to all State Governments/UTs and concerned Ministries/Departments of Central Government for adoption.
- Central Water Commission (CWC) under this Ministry carries out hydrological observation on all important / major rivers in the country. This Ministry has launched Development of Water Resources Information System (DWRIS) with the objective of development and maintenance of Water Resources Information System which includes collection of Hydro-Meteorological and Water Quality Data, its validation, storage and dissemination to the users for calculating water availability in the basins, management of water resources, planning and designing of water resources structure along and across the rivers, flood forecasting, etc.

(d) The National Institute of Hydrology (NIH) under this Ministry has undertaken an action research study to rejuvenate 22 village ponds in identified villages of Baghpat, Ghaziabad, Meerut, Muzaffarnagar districts in western Uttar Pradesh. Department of Science and Technology has supported following Research and Development (R&D) projects in the area of conservation of conventional water resources:

- Rainwater based community managed sustainable solution for selected water scarce villages of District Mewat (Haryana) through ground water recharge by harvesting rain water and its storage in community-based tanks, which has benefitted families across villages in Mewat region of Haryana.
- Under Amrit Jalam Pariyojana, an innovative technical solution with strong community capacity building component for a cluster of 15 villages of Chirawa block in Rajasthan covering 19,000 people has been completed to address the challenges of low per capita availability and quality deficit of available water for specified uses through two pronged approach of water conservation techniques to recharge groundwater and tapping of rainwater as alternate safe source for potable water needs using rain water harvesting tanks, recharge wells, monitoring wells, ponds, soak pits, improved toilets and appropriate plantation.
