Will the Minister of JAL SHAKTI be pleased to state:
(a) whether as per assessment of the Central Ground Water Board (CGWB) the extraction of groundwater in India has shown an 18 years decline;
(b) if so, the details thereof;
(c) whether the Government is planning to deploy a vast network of groundwater sensors that would continuously relay information on groundwater levels as well as the degree of contamination down to the taluk level;
(d) if so, the details thereof and the plan prepared therefor;
(e) whether the Government proposes to provide groundwater forecasts to farmers that would be useful for sowing;
(f) if so, the details thereof along with the steps taken by the Government in this regard;
(g) whether the forecasts and updated advisories would help the States to prepare the groundwater extraction policies; and
(h) if so, the details thereof along with the directions issued to the States in this regard?

**ANSWER**

**THE MINISTER OF STATE FOR JAL SHAKTI**

**SHRI BISHWESWAR TUDU**

(a) & b) The Dynamic Ground Water Resources of the country are being periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments. As per these assessments, in the last 18 years, the Stage of Ground water Extraction, i.e the ratio of total ground water extraction for all uses to the net annual extractible ground water has remained in the range of 58% (in the year 2004) to 63% (in the year 2017) for the country as a whole. However, due to the cumulative and consistent efforts by the central and various state governments along with field agencies working in the area, the Stage of Ground water Extraction has shown a declining trend since 2017 and as per the latest assessment carried out in 2023, the figure stands at 59%.

Similarly, the total percentage of Overexploited, critical and semi-critical (OCS) assessment units in the country have reduced to 24.92% in 2023 from 35.92% in 2017 and 28.2% in 2004 also percentage of safe units has increased from 62.64%(2017) and 71.3%(2004) to 73.14% in the year 2023.
Ministry of Jal Shakti, under its various schemes has taken steps to instal about 20,000 additional piezometers and 31,000 Digital Water Level Recorders (DWLRs) with telemetry in various parts of the country for continuous monitoring of ground water related data. Further, the network of piezometers and DWLRs in the country is being continuously expanded to improve the accuracy and quality of data available. In addition to the above, various states have also installed their own piezometers and DWLRs for the purpose of monitoring ground water levels.

Regarding ground water quality, Central Ground Water Board (CGWB), as part of its ground water quality monitoring program and various scientific studies it conducts, generates ground water quality data of the country on a regional scale by way of collecting and analysing ground water samples from its network of monitoring wells spread throughout the country. Further, the Ministry has also initiated steps to automate the process of ground water quality monitoring.

Central Ground Water Board (CGWB) regularly generates and publishes data relating to ground water level, quality and dynamic ground water resource assessment which are shared with all concerned central and state ministries and departments, including the Ministry of Agriculture & Farmers’ Welfare (MoAFW) for using in forecasts, advisories issued by them like the Crop Weather Watch Group Reports (CWWG).

Further, this Ministry is running the community led participatory ground water management scheme, viz. the Atal Bhujal Yojana in 8213 water stressed Gram Panchayats of 7 states, viz. Haryana, Rajasthan, Gujarat, Maharashtra, Karnataka, Madhya Pradesh and Uttar Pradesh. Under this scheme, creating awareness and sensitization of community members, mainly farmers, is done at local level followed by collection and publishing of ground water related data for each GP. The data is used by the village members of the GP for preparing water budget followed by Water Security Plan (WSP) for their GP. The water budget and WSP delve into the water availability and requirement of a particular GP and suggest measures to bridge the gap, with a major thrust on reducing the demand by resorting to crop diversification and efficient irrigation techniques.

The data published by CGWB is regularly used by various implementing ministries and departments in planning the extraction and use of ground water. The finding and recommendations of National Aquifer Mapping and Management Programme (NAQUIM) studies are being used by various state governments and agencies for planning interventions for artificial recharge, regulation of ground water extraction, construction of contaminant free wells, construction of irrigation wells in feasible areas etc.

Further, the Dynamic Ground Water Resources Assessment of the country is being carried out periodically by Central Ground Water Board (CGWB) jointly with States/UTs and since 2022, this has been turned into an annual exercise. These assessment reports, inter alia, include estimation of ground water availability (block level data is generated) and extraction for various uses like domestic, industrial and agriculture. These reports are also being utilized by various State Governments and agencies in planning agriculture related activities and preparation of ground water extraction policies.

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