

PRESS RELEASE

COMPTROLLER AND AUDITOR GENERAL OF INDIA

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CAG's Audit Report on Ground Water Management and Regulation Presented in Parliament

Report of Comptroller and Auditor General of India on Ground Water Management and Regulation: Union Government, Department of Water Resources, River Development & Ganga Rejuvenation was laid on the floor of the Parliament today. This Report no 9 of 2021 contains the observations of the Performance Audit of Ground Water Management and Regulation for the period 2013-18. Matters relating to the period subsequent to 2017-18 have also been included, wherever necessary.

The ground water scenario in India is beset by challenges due to the competing needs of agriculture, industrialisation and the pressures of increasing population in the context of uncertain rainfall. Contamination and depletion of ground water also leads to vulnerability of livelihoods besides posing a serious health risk. Accordingly, we decided to take up a Performance Audit of Ground Water Management and Regulation with the objective of ascertaining the overall framework for ground water sector in India through a holistic perspective by examining whether:

- 1) the mechanism for management of ground water in India is adequate, efficient and effective;
- 2) ground water regulations are implemented efficiently and effectively;
- 3) the targets and objectives of the schemes on Ground Water Management and Regulation were achieved efficiently and effectively; and
- 4) appropriate steps have been taken to achieve the relevant targets under Sustainable Development Goal 6 relating to ground water.

Key Audit findings

Management of Ground Water

The percentage of utilisation of ground water with respect to recharge, known as stage of extraction of ground water in the country was 63 per cent. In 13 States/UTs, the stage of extraction was higher than the national stage of extraction. Four States/UTs (Delhi, Haryana, Punjab and Rajasthan) had a stage of extraction of more than 100 per cent, indicating that extraction of ground water has surpassed the recharge of ground water in these states. At

the district level, in 24 States/UTs, 267 districts had stage of extraction more than 63 per cent ranging from 64 per cent to 385 per cent. During the period 2004 to 2017, the stage of extraction of ground water has increased from 58 to 63 per cent. During the same period, the percentage of safe blocks has decreased while the percentage of blocks categorised as semi-critical, critical and over-exploited has steadily increased. As per the data for 2015 based on 15,165 locations in 32 States tested by CGWB, ground water had levels of contaminants higher than permissible limits of Arsenic (697 locations), Fluoride (637 locations), Nitrate (2,015 locations), Iron (1,389 locations) and Salinity (587 locations). There was shortage of human resources in CGWB and in the Departments/Agencies dealing with ground water at State/UT level.

As of December 2019, 19 States/UTs had enacted legislation for management of Ground Water. In four of these States, the legislation was only partially implemented; in six other States, enactment of the ground water legislation was pending for various reasons. The remaining States/UTs had not taken action to enact legislation for Ground Water.

Ground Water Regulation

Central Ground Water Authority (CGWA) was constituted (January 1997) for the purpose of regulation and control of ground water management and development and to issue necessary directions for this purpose. Various deficiencies were noticed in regulations such as operations without NOC, delay in grant and renewal of NOCs. There were numerous cases in which conditions stipulated in the NOCs were violated. Despite the widespread violations, CGWA issued (2013-18) show cause notices to only 99 project proponents.

Out of a sample of 328 cases in 18 States where the Consent to Operate (CTO) granted to a project proponent included a condition which required NOC for Ground Water extraction, 253 projects (77 per cent) were operating without NOCs. In 15 States, 3,189 Bureau of Indian Standards (BIS) licenses were issued to packaged drinking water units since 2013, of which in 2,475 cases (78 per cent), the project proponents were operating without obtaining NOCs from CGWA.

Implementation of schemes on Ground Water Management and Regulation

A Central Sector Scheme on 'Ground Water Management and Regulation' was approved for implementation during XII Plan period (2012-17) with an estimated cost of ₹ 3,319 crore and an overall objective of proper assessment and management of ground water resources so as to ensure its sustainability. The scheme was continued during 2017-20 at an estimated cost of ₹ 992 crore. Against the Budget Estimate of ₹ 2,349.48 crore for 2012-19, the Actual Expenditure under the Scheme was ₹ 1,109.73 crore. As against an area of 24.8 lakh sq. km was identified for Aquifer Mapping in the country. CGWB covered an area of 13 lakh sq. km (52 per cent) as of September 2020. Further, Aquifer Mapping Reports for only 6.5 lakh sq.

km. were finalised and ground water modelling for approximately 3 lakh sq. km. were completed as of September 2020. Although an outlay of ₹ 575.38 crore was provided for the period 2013-17 under the component Participatory Ground Water Management (PGWM) in accordance with the National Water Policy 2012, no expenditure was incurred. No action was taken on four out of 12 recommendations made (December 2012) by an Expert Group constituted for benchmarking of various activities of CGWB with international best practices, on capacity building in CGWB.

Sustainable Development Goals and Ground Water

Against the target value for percentage annual ground water withdrawal against net annual availability of 70 *per cent* under *target 6.4*, the national level was at 63 *per cent*. However, there were eight States/UTs where this value was higher than the target of 70 *per cent*. Out of 534 districts in 22 States/UTs, 202 districts had stage of extraction ranging from 71 *per cent* to 385 *per cent*. No action was taken in respect of *target 6 b* relating to supporting and strengthening the local communities water management.

BSC/SS/TT