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GROUND WATER MANAGEMENT AND REGULATION

[Action Taken by the Government on the Observations/Recommendations of the Committee contained in their 74th Report (17th Lok Sabha)]

MINISTRY OF JAL SHAKTI

PUBLIC ACCOUNTS COMMITTEE
(2025-26)

FORTY FIRST REPORT

EIGHTEENTH LOK SABHA

LOK SABHA SECRETARIAT
NEW DELHI

PAC NO. - 2447

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MINISTRY OF JAL SHAKTI

Presented to Lok Sabha on: ***01.04.2026***

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L O K S A B H A S E C R E T A R I A T
N E W D E L H I

March, 2026 /Chaitra, 1948 (Saka)

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(2025-26)

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INTRODUCTION

I, the Chairperson, Committee on Public Accounts (2025-26), having been authorised by the Committee, do present this Forty First Report (Eighteenth Lok Sabha) on Action Taken by the Government on the Observations and Recommendations of the Committee contained in their Seventy Fourth Report (17th Lok Sabha) on **"Ground Water Management and Regulation"** relating to the Ministry of Jal Shakti.

2. The Seventy Fourth Report was presented to Lok Sabha/laid on the Table of Rajya Sabha on 20.09.2023. The Committee considered the draft Action Taken Report on the subject and adopted the same at their sitting held on 27.03.2026. Minutes of the Sitting of the Committee form appendix to the Report.

3. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in **bold** in the body of the Report.

4. The Committee place on record their appreciation of the assistance rendered to them in the matter by the Committee Secretariat and the office of the Comptroller and Auditor General of India.

5. An analysis of the Action Taken by the Government on the Observations/Recommendations contained in the Seventy Fourth Report (17th Lok Sabha) is given at Appendix-II

NEW DELHI:
27 March, 2026
6 Chaitra, 1948 (*Saka*)

K. C. VENUGOPAL
Chairperson,
Public Accounts Committee

CHAPTER - I

REPORT

This Report of the Public Accounts Committee deals with the Action Taken by the Government on the Observations and Recommendations of the Committee contained in their Seventy Fourth Report (17th Lok Sabha) on "Ground Water Management and Regulation". The Seventy Fourth Report was presented to Lok Sabha/laid in Rajya Sabha on 20.09.2023. It contained twenty nine Observations/Recommendations. The Action Taken Notes on all the Observations/Recommendations have been received from the Ministry of Jal Shakti, and are categorized as under:

(i) Observations/Recommendations which have been accepted by the Government:
Para Nos. 1, 2, 3, 4, 5, 6,7,8,9,10,11,12,13,14,15,16,

17,18,19,20,21,22,23,24,25,26,27,28 and 29

Total: 29
Chapter - II

(ii) Observations/Recommendations which the Committee do not desire to pursue in view of the replies received from the Government:
Para No. NIL

Total: 0
Chapter - III

(iii) Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and which require reiteration:
Para No. NIL

Total: 0
Chapter - IV

(iv) Observations/Recommendations in respect of which Government have furnished interim replies/no replies:
Para No. NIL

Total: 0
Chapter - V

3. The detailed examination of the subject by the Committee had revealed certain shortcomings/deficiencies on the part of the Ministry of Jal Shakti, which *inter-alia* included failure to prioritize sustainable water use; inadequate regulation of Ground water utilization and implementation of schemes on Ground Water Management and Regulation; the mechanism for management of ground water in the country; issues relating to regulation of ground water by CGWA and State Authorities etc. The Committee had accordingly given their observations/recommendations in their One hundred thirty second Report.

4. The Action Taken Notes furnished by the Ministry of Jal Shakti, on each of the Observations/Recommendations of the Committee contained in their Seventy Fourth Report have been reproduced in the relevant Chapters of this Report. The Committee will now deal with the action taken by the Government, on some of their Observations/Recommendations which either need reiteration or merit comments.

5. **The Committee desire the Ministry of Jal Shakti to furnish Action Taken Notes in respect of Observations/ Recommendations contained in Chapter I of the Report, positively within three months of the presentation of the Report to the Parliament.**

Recommendation No. 16

Non preparation of Ground Water Models

6. The Committee in their Original Report No. 74 (17th Lok Sabha) had recommended as under: -

> "The Committee note that Ground water models provide a tool to estimate ground water availability for various water use strategies and to determine the cumulative effects of increased water use and drought conditions. A ground water model is a numerical representation of the aquifer system capable of simulating historical and predicting future aquifer conditions. The purpose of the NAQUIM programme was to provide an Aquifer Response Model that can be used to develop reliable and timely information on ground water availability for the region to ensure adequate supplies or recognize inadequate supplies over a 15 year planning period. The Committee note that although CGWB has conducted aquifer mapping in a significant area, the completion of ground water modeling is limited to only 4.5 lakh sq. km. The Ministry's progress in groundwater modeling is visibly slow, and the Committee desire that urgent action may be taken to prioritize and expedite this crucial project within a specific timeframe."

7. Action Taken by Ministry

"Aquifer conceptual models have been developed for all NAQUIM covered areas. Numerical modelling was taken up by CGWB in identified priority areas. Ground Water Modelling for nearly 2 lakh sq. km was carried out through IIT, Kanpur and IISC Bengaluru and nearly 2.5 lakh sq. km was carried out using in house resources. Ground Water Modelling reports are also being submitted by project proponents for issuance of NOCs for ground water abstraction in relevant cases.

Taking the learnings from all these studies, CGWB is preparing a detailed action plan for development of regional groundwater models. Further, the Centre of Excellence for groundwater modelling is also being strengthened.

Capacity building and creation of state of the art technical infrastructure are the key requirements for taking up ground water modelling on a large scale. The ministry has done detailed deliberations for identifying the challenges in this area and to chalk out a roadmap for augmenting the proficiency of CGWB. To strengthen its capabilities in groundwater modelling, CGWB is in the process of procuring required hardware, software, collaborating with esteemed scientific organizations having necessary expertise in the field and is also providing trainings to officers. All these efforts are expected to provide a significant impetus to improve the quality and quantity of ground water modelling studies being taken up by CGWB."

8. Vetting Comments of Audit

"The Outcome of the action taken by Ministry towards increasing ground water modelling may be furnished to the PAC.

As the PAC wants urgent actions, the timeline of various targets may be provided."

9. Final Reply of Ministry

"As informed earlier, ground water flow models have been prepared for an area of around 4.5 lakh sq km. till 2023.

During 2023-24, a total of 15 officers of CGWB were imparted specialised training on groundwater flow modelling and these officers developed groundwater flow models covering 25,000 sq km taking the total coverage to 4.75 lakh sq km.

An additional 1 lakh sq km is targeted to be covered by 2026 covering parts of three basins, viz. Cauvery, Tapi and Ramganga. The studies are in process.

Further, to promote groundwater modelling based decision making, Central Ground Water Authority has made groundwater modelling mandatory in impact assessment reports for specific cases."

Comments of the Committee

10. The Committee had noted that the Ministry's progress in groundwater modeling is visibly slow and desired that urgent action may be taken to prioritize and expedite this crucial project within a specific timeframe. The Ministry in their ATN have stated that during 2023-24, a total of 15 officers of CGWB were imparted specialised training on groundwater flow modelling and these officers developed groundwater flow models covering 25,000 sq km taking the total coverage from 4.5 lakh sq km to 4.75 lakh sq km and that an additional 1 lakh sq km is targeted to be covered by 2026 covering parts of three basins, viz. Cauvery, Tapi and Ramganga. The studies are in process. However, the outcome of the study and its overall impact has not been specified. The ATN further states that to promote groundwater modelling based decision making, Central Ground Water Authority has made groundwater modelling mandatory in impact assessment reports for specific cases. The Committee desire to be apprised of the final outcome in this regard.

Recommendation No. 25

Target 6 b- Local communities' participation in water management

11. The Committee in their Original Report No. 74 (17th Lok Sabha) had recommended as under: -

> "Regarding Target 6-b, the Committee note that the National Water Policy (2012) envisages that declining ground water levels in over-exploited areas need to be arrested by introducing improved technologies of water use, incentivizing efficient water use and encouraging community based management of aquifers. The Committee highlight the lack of action taken on promoting local community participation in groundwater management, which was initially proposed under the Ground Water Management and Regulation Scheme. Although the Atal Bhujal Yojana has been launched in seven states, the Committee urge the Ministry to expand its scope to cover the entire country and provide updates on the outcomes achieved through the scheme. As the participatory management was envisaged to enable the community and stake holders to monitor and manage the ground water as common pool resources themselves, a coordinated effort involving Government departments, research institutes, Panchayati Raj Institutions, civil society organizations and stakeholders at village level is a pre- requisite. The Committee urge the Ministry to involve local communities in coordination with Members of Legislative Assemblies, Panchayati Raj Institutions and State government functionaries at the village level in cleaning, desilting and restoring water bodies which can act as natural recharge points. The local administration may be instructed to monitor water levels in reservoirs/ponds/ wells/baolis etc. through use of technologies like Geo Tagging and Remote Sensing."

12. Action Taken by Ministry:

"Government of India launched Jal Shakti Abhiyan (JSA) in 2019, a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. JSA is being continued since then and the 5th edition of JSA for 2024-25 with theme 'Nari Shakti se Jal Shakti' has been launched by the ministry in March 2024.

Hon'ble Prime Minister has launched Amrit Sarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country by involving local communities through convergence.

The objective of Atal Bhujal Yojana is sustainable ground water management through community participation in selected water stressed areas in the participating states of the country.

To achieve these objectives, concerted efforts are being made by all stake holders including Government departments, civil society organizations and local stake holders.

NGOs are engaged by the participating States as District Implementation Partners (DIPs) which facilitate handholding of the Gram Panchayats (GP) in various aspects of the scheme, including development of water budgets and Water Security Plans (WSPs) and community mobilization. Further, trainings & capacity building at Gram Panchayat level is done for Village Water & Sanitation Committees (VWSCs). Various State Government departments are involved for implementation of the interventions under WSPs.

Multidisciplinary experts having requisite experience in executing/supporting the scheme with focus of water management through community participation have been engaged by NPMU, SPMU and DPMU for effective implementation of the scheme.

As part of the institutional arrangement for implementation of Atal Bhujal Yojana and for overall administration management and coordination of the scheme, a National Inter-Departmental Steering Committee has been constituted as apex body with the Secretary (DoWR, RD & GR) as Chairman and representatives of M/o Agriculture & Farmers Welfare, D/o Land Resources, D/o Rural Development, D/o Panchayati Raj, D/o Drinking Water & Sanitation, M/o New & Renewable Energy, Ministry of Power, NITI Aayog and Secretaries of Nodal Departments of participating States as members.

The proposal for expansion of Atal Bhujal Yojana is under consideration. Further, Repair, Renovation & Restoration (RRR) of Water Bodies (WBs) is a, component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet Ko Pani (HKKP) a Centrally sponsored scheme which is being implemented by Ministry of Jal Shakti. Under the scheme, financial assistance is being provided to the State Governments for renovation, repair and restoration of identified water bodies.

Government has recently completed the first Census of Water bodies in convergence with the Sixth round of Minor Irrigation Census (reference year 2017-18), under the centrally sponsored scheme- “Irrigation Census”. The objective of the scheme is to develop a national database of all water bodies in the country.

In the India-WRIS portal, both rural and urban water bodies are being mapped, with each water body having been assigned a unique identification number.”

13. Vetting Comments of Audit

Steps being taken to expand the scope to cover entire country and updates on its outcomes achieved may be intimated to the PAC.

14. Final Reply of Ministry

The proposal for the expansion of Atal Bhujal Yojana to cover additional water stressed states is under consideration. Department of Expenditure, Government of India (**DoE**) vide its Office Memorandum dated 05.08.2024 has accorded 'in-principle’ approval for expansion of Atal Bhujal Yojana with an outlay of Rs. 8,200 crore in five States with the condition that the scheme may be restructured as a Centrally Sponsored Scheme. Therefore, all 5 states have been requested to provide their consent to the scheme being converted from Central Sector Scheme to a Centrally Sponsored Scheme.

Further, understanding the need to promote participatory ground water management through diverse means, a new campaign titled ‘Jal Sanchay Jan Bhagidari’- A Community-Driven Path to Water Sustainability in India has been launched by the Hon’ble Prime Minister on September 6, 2024, in Surat, Gujarat with a vision to make rain water harvesting a mass movement in the country. Under JSJB, community led construction of rain water harvesting & artificial recharge structures across the country has been taken up in mission mode with a vision to install more than a million such structures in various public and private buildings in towns and villages, by bringing all stakeholders together.”

Comments of the Committee

15. The Committee had desired that the Ministry should expand scope of Atal Bhujal Yojana to cover the entire country and provide updates on the outcomes achieved through the scheme. The Ministry in their ATN have stated that the proposal for the expansion of Atal Bhujal Yojana to cover additional water stressed states is under consideration. The Department of Expenditure, Government of India (DoE) *vide* its Office Memorandum dated 05.08.2024 has accorded 'in-principle’ approval for expansion of Atal Bhujal Yojana with an outlay of Rs. 8,200 crore in five States with the condition that the scheme may be restructured as a Centrally Sponsored Scheme. Therefore, all 5 states have been requested to provide their consent to the scheme being converted from Central Sector Scheme to a Centrally

Sponsored Scheme. The Committee, therefore, desire that latest status of Atal Bhujal Yojana to cover entire country and updates on its outcomes achieved, be intimated to it. The Committee had also desired that local administration be instructed to monitor water levels in reservoirs/ponds/wells/baolis, etc. through use of technologies like Geo Tagging and Remote Sensing. The Committee, therefore, desire to be apprised of the steps taken in this direction, including bringing the local political dispensation on board to effectively actualize it.

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CHAPTER II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Observation/ Recommendation No. 1

Audit noticed that during the period 2004 to 2017, the stage of extraction of ground water had increased from 58 to 63 percent in the country. Four States/UTs (Delhi, Haryana, Punjab and Rajasthan) had a stage of extraction of more than 100 percent, indicating that extraction of ground water surpassed the recharge levels of ground water. At the district level, in 24 States /UTs, 267 districts had stage of extraction ranging from 64 per cent to 385 per cent. The Committee note that to prevent high extraction of Ground Water, several initiatives in collaboration with States/UTs have been taken up. The Committee also note that many State Governments have implemented their own schemes for water resources management, including ground water. In the light of India being the largest user of ground water in the world, where Ground Water extraction stands at 245 billion cubic metre (BCM) accounting for around 25 percent of global withdrawals and where Ground Water is pegged at around 64 percent of irrigation needs and 80 percent of drinking water needs of the country, the Committee feel that there is a need for translating the initiatives into concrete results. The fact that four states had exceeded 100% extraction and 267 districts had stage of extraction ranging from 64 per cent to 385 per cent, is a clear indication of the failure to prioritize sustainable water use. The Committee strongly urge the Ministry to persuade the State governments to take immediate and stringent measures to curb excessive extraction of ground water and ensure long-term viability of groundwater resources.

Action Taken by Ministry

Ministry of Jal Shakti is at the forefront of efforts being made in the country for conservation of ground water resources. In addition to promoting and running several schemes and projects in this direction, the ministry is also coordinating with the State Governments and other agencies for stringent regulation and sustainable management of ground water resources, which is one of the major priorities of the Government of India. Major Programmes/Schemes being implemented by Ministry of Jal Shakti include i) Jal Shakti Abhiyan, ii) Ground Water Management and regulation Scheme, iii) Atal BhujalYojana and iv) National Hydrology Project. These are being complemented by Watershed Development Component under PMKSY, implemented by Dept of Land Resources, AmritSarovar Mission and other water conservation interventions under MGNREGA etc.

It is to be noted that several State Governments also have implemented/are implementing schemes for conservation of water resources like Kudimaramath (Tamilnadu), PaaniBachao Paisa Kamao (Punjab), Jal JeevanHaryali (Bihar), NeeruChettu (Andhra Pradesh), Mission Kakatiya (Telangana), SujalamSafalam Jal Abhiyan (Gujarat), JalyuktShivarAbhiyan (Maharashtra), Mukhyamantri Jal SwawlambanYojana (Rajasthan).

Regarding lawful regulation of ground water abstraction, The Central Ground Water Authority (CGWA) has been constituted under MoJS under section 3(3) of the Environment

(Protection) Act, 1986 for the purpose of regulation and control of ground water development and management in the country. Abstraction cum use of Groundwater in the country is regulated by CGWA by way of issuing NOCs as per the provisions of its Guidelines dated 24.09.2020 which have pan India applicability.

Concerted efforts of Central Government, State Governments and other agencies are helping in preventing further deterioration and even improving ground water scenarios. Recent assessment (2023) of dynamic ground water resources by CGWB and State agencies shows that overall stage of ground water extraction has decreased from 63.33% in 2017 to 59.26% in 2023. Further, the proportion of "safe" assessment units have increased from 62.6% in 2017 to 73.1% in 2023 while the number of over-exploited assessment units have decreased from 17% to 11% during the same period. Successive assessment of ground water resources during 2017,2020, 2022 and 2023 have shown consistent improvement in ground water scenario. Post monsoon water levels for the year 2022 when compared with average post monsoon water level of last ten years (2012-21) show that about 61% of the wells monitored have registered rise in ground water levels.

While the above early signs of improvement in ground water scenario are heartening, the momentum is to be maintained. To ensure scientific management of ground water resources, in addition to continuing the existing activities, Ministry of Jal Shakti has taken the following new initiatives:

i. Government of India launched Jal Shakti Abhiyan (JSA) in 2019, a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. JSA is being continued since then and the 5th edition of JSA for 2024-25 with theme 'Nari Shakti se Jal Shakti' has been launched by the ministry in March 2024.

ii. Hon'ble Prime Minister has launched AmritSarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of AzadikaAmritMahotsav.

iii. CGWB has taken up National Aquifer Mapping& Management Programme (NAQUIM) to delineate and characterise the aquifer system in the country. Further, under NAQUIM 2.0 studies are being carried out in the water stressed priority areas.

iv. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB with States/UTs providing a broad outline of the project and expected investments. 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 Meter (BCM) of water.

v. Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for regulation of its development. So far, 21 States/UTs have adopted and implemented the ground water legislation.

vi. Several Trainings and Public Interaction Programmesare being organized at grassroots level to spread awareness among the masses to reduce the dependence on groundwater and restore the water table.

vii. Ministry of Jal Shakti has initiated assessment of dynamic ground water resources of the country on annual basis from 2022, for which necessary guidelines have been shared with State Governments. Based on advice of Ministry of Jal Shakti, States have constituted State Level Committees and assessments for the years 2022 and 2023 have already been completed.

viii. The Atal BhujalYojana, a unique participatory groundwater management scheme, is being run in the selected seven states with close coordination between central and state governments is proposed to be expanded and extended. The proposal in this regard has been initiated.

Ministry of Jal Shakti had organized the first All India State Water Ministers Conference in January 2023. Taking it forward, Ministry of Jal Shakti also organized the "All India Secretaries' Conference'' on "Water Vision@2047" - Way Ahead on 23rd and 24th January, 2024.

Vetting comments of Audit

The outcome/ effectiveness of mentioned initiatives/programs to curb excessive extraction of ground water to ensure long-term viability of groundwater resources in terms of data pertaining to raised audit points may be furnished to PAC.

FinalReply of Ministry

The outcomes/effectiveness of mentioned initiatives/programs to curb excessive extraction of ground water to ensure long-term viability of groundwater resources are already explained in the reply. Recent assessment (2023) of dynamic ground water resources by CGWB and State agencies shows that overall stage of ground water extraction has decreased from 63.33% in 2017 to 59.26% in 2023. Further, the proportion of "safe" assessment units have increased from 62.6% in 2017 to 73.1% in 2023 while the number of over-exploited assessment units have decreased from 17% to 11% during the same period.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 2

Keeping in view, the heterogeneous nature of topography, rainfall and state specific policy on Ground Water across the country, the availability of water may vary from State to State. While there are drought prone regions with very minimal rainfall, there are also regions in the country where there is excess precipitation. The Committee while noting that certain State governments have successfully utilised floodwater for recharging groundwater recommend that such practices may be emulated, wherever feasible, through creation of a series of reservoirs across the floodplains of affected rivers, during monsoon season, for recharging the ground water and for mitigating the flood situation. In order to encourage prudent groundwater extraction practices, the Committee also recommend that the government incentivize and expedite groundwater projects that have demonstrated a tangible impact on ground water extraction levels. The Committee further observe that

uncontrolled use of bore well technology leads to exploitation of groundwater at higher rates than the rate of water recharge, which may cause drastic depletion of groundwater. The Committee, therefore, recommend that installation/ use of bore wells be regulated and consider making it mandatory for placing metering systems with all the bore-wells.

Action Taken by Ministry

In order to encourage prudent ground water management practices, Ministry of Jal Shakti has taken various initiatives including:

i) compilation of best practices,
ii) implementation of demonstrative projects,
iii) sharing the ground water management plans prepared as a part of NAQUIM etc.,
iv) preparation of Master Plans for artificial recharge,
v) introducing guidelines for regulation and control of ground water extraction.

With respect to creation of reservoirs in flood plains, the Ministry fully accepts and supports the recommendation of the Committee as the same is an accepted practice for flood mitigation and ground water recharge. However, it may be appreciated that water resources projects, including those involving construction of new water reservoirs for storage, rainwater catchment, flood mitigation and management, are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priority. The government of India provides technical support and partial financial assistance to a few identified projects under the ongoing schemes. Some of the initiatives taken by Government of India in this regard, are given below:

1. Creation of new water reservoirs is being undertaken in some of the projects covered under PMKSY-AIBP.

2. Under Surface Minor Irrigation scheme of PMKSY-HarKhetKoPani, central assistance is being provided by the Government of India for surface minor irrigation projects, some of which involve creation of reservoirs.

In the direction of prudent and sustainable ground water management, Ministry of Jal Shakti (MoJS) has launched Atal BhujalYojana, a community led scheme for participatory ground water management focusing on demand side management of ground water. The scheme has been launched with an outlay of Rs.6000 cr in 8213 water stressed Gram Panchayats of 7 states, viz. Haryana, Rajasthan, Gujarat, Maharashtra, Karnataka, Madhya Pradesh and Uttar Pradesh. Under this scheme, inter alia, states are incentivized for adopting water efficient agricultural practices like switching over to drips/sprinklers, crop diversification to less water incentive crops, mulching etc.

MoJS is also promoting conjunctive use of surface water and groundwater and to reduce over-dependence on groundwater, surface water based Major and Medium irrigation projects have been taken up in the country under PMKSY-AIBP scheme in collaboration with States/UTs.

Department of Agriculture & Farmers Welfare is implementing Per Drop More Crop (PDMC) component of Pradhan MantriKrishiSinchayeeYojana (PMKSY) which is operational from

2015-16 in the Country. The PMKSY-PDMC mainly focuses on water use efficiency at farm level through precision/micro irrigation.

Excessive Groundwater extraction is ultimately reflected in the decline of groundwater levels. Hence, regular and timely groundwater level monitoring becomes important for effective management and control of extraction. CGWB has its groundwater level monitoring stations all over the country, which are manually monitored four times in the year. For real-time monitoring of water level in the aquifers, this Ministry is in the process of automating water level monitoring by installing Digital Water Level Recorders (DWLRs) with telemetry systems at several monitoring stations and around 10,000 DWLRs are already in place. Further, around 28,000 additional DWLRs are expected to be installed in the coming years under various schemes of the Ministry like National Hydrology Project(NHP), Atal BhujalYojana and PIB project of CGWB etc. which are being actively pursued. Once in place, this comprehensive network of automated monitoring systems is expected ensure real-time availability of ground water level data which can be shared with all concerned as and when required.

Ministry of Jal Shakti has issued groundwater relegation and management guidelines on 24.09.2020 for regulation and control of ground water extraction by industrial, infrastructure and mining projects. Installation of Digital Flow meter is a mandatory in the NOC conditions for the groundwater extraction. The flow meter data has to be submitted to the CGWA in regular intervals.

Under the Atal BhujalYojana, flow meter installation on the irrigation structures is being done to monitor the crop water requirement and sensitize the farmer community about the groundwater depletion and importance of its conservation. Further, MoJS has issued advisories to States/Uts to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and may work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater.

Additionally, Ministry of Power, under Revamped Distribution Sector Scheme (RDSS), is laying special emphasis on smart metering of Feeders and Distribution Transformers for accurate energy accounting and auditing. Metering of agricultural feeders shall facilitate monitoring of electricity consumption for agricultural purposes.Under the scheme there is also provision for providing financial assistance for segregation of feeders having agricultural load of more than 30% and is one of the priority area of works.Further, in the scheme, there is also provision for providing financial assistance for installation of pre-paid smart meters for consumers (excluding agricultural consumers). Till date, about 19.8 Crores smart consumer meters have been sanctioned. Metering of agricultural consumers may be decided by respective States/ DISCOMs.

Vetting comments of Audit

Ministry replied that till date, about 19.8 crores smart consumer meters have been sanctioned, in addition to this details of steps taken and its status regarding regulating borewell and its metering may also be provided to the PAC. Besides, the tangible impact of

scheme/initiatives aimed at enhancing ground water level may also be intimated to the PAC.

Final Reply of Ministry

All the bore wells meant for industry, mining or infrastructure projects are mandatorily to be fitted with water flow meters as per NOC condition of CGWA. However, agriculture/irrigation being State subjects, only the state governments are empowered to take necessary action in this regard. Efforts made by the Union government including issuance of advisories, taking up metering of bore wells through schemes like Atal BhujalYojana, efforts for switching to micro-irrigation etc. have already been covered in the reply. Further, as a result of all these measures substantial improvement has taken place in the ground water scenario of the country. Recent assessment (2023) of dynamic ground water resources by CGWB and State agencies shows that overall stage of ground water extraction has decreased from 63.33% in 2017 to 59.26% in 2023. Further, the proportion of “safe” assessment units have increased from 62.6% in 2017 to 73.1% in 2023 while the number of over-exploited assessment units have decreased from 17% to 11% during the same period.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 3

Periodicity of Assessment of Ground Water

The Committee note that as per the approved Expenditure Finance Committee (EFC) memorandum for 2012-17, the assessment of ground water resources in terms of ground water quantity, utilisation pattern, stage of extraction of ground water, categorisation of units, etc. was to be done every two years by Central Ground Water Board (CGWB). Based on this data, Dynamic Ground Water Assessment Report was to be compiled, to enable further planning and management of ground water by CGWB. Audit however noticed that during the audit period 2013-2018, CGWB conducted such assessments for 2013 and 2017 and published the Reports in June 2017 and July 2019 respectively. CGWB did not carry out this assessment for 2015 resulting in a gap of four years in assessment between 2013 and 2017. The Committee have been informed that a cloud-based system for assessment "INDIA-Groundwater Resource Estimation System (IN-GRES)" has been put in place. Besides, a Resolution dated 08 Feb 2022 has been notified in the Gazette of India for constitution of a Central Level Expert Group (CLEG) for overall supervision of the assessment process. The Committee have further been informed that post 2022 assessment of groundwater resources has to be done on an annual basis. The Committee recommend the Ministry to ensure that the assessment process is conducted invariably, on annual basis, with prompt publication of the assessment reports for effective planning and management of Groundwater. The Committee also desire that the parameters used in these assessments be periodically reviewed to improve the accuracy and reliability of the data.

Action Taken by Ministry

The assessment of ground water resources on an annual basis has been started from the year 2022 and for achieving this Committees have been constituted at National and State Levels. For prompt and accurate assessment the online platform INGRES has been developed and it is being regularly monitored. Ministry of Jal Shakti is happy to inform the Hon'ble Committee that because of concerted efforts of CGWB and the respective State Governments, assessments for the years 2022 and 2023 have been completed in time. Further, the schedule of annual ground water resource assessment exercise has been so devised to sync with the water year, i.e June (of previous year) to May (of present year), which will help in producing more accurate and useful results. The National Compilation for 2022 was issued in November 2022 which can be seen at https://cgwb.gov.in/cgwbpnm/public/uploads/documents/16862159959508359 34file.pdf and the National Compilation for 2023 has been issued in December 2023 which can be seen at https://cgwb.gov.in/cgwbpnm/public/uploads/documents/17056512151889452705file.pdf

For improving the accuracy and reliability of the data in groundwater resource assessment, Ministry of Jal Shakti, constituted a committee of experts on 03.11.2022, headed by Chairman, CGWB to review and revise the Ground Water Resource Estimation Methodology 2015 (GEC-15). The report has been finalized and under review.

Further, it has been decided that the groundwater level information with analytical report at District, State and National levels will be released and shared with the stakeholders after each round of monitoring i.e. four times in a water year (June to May). This step will ensure the reliable and timely information regarding groundwater level scenario to the stakeholders and decision makers.

Vetting comments of Audit

In view of reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 4

Ground Water Monitoring

The Committee are constrained to note that as against the target of monitoring of 50000 wells by March 2017, CGWB as on March 2021, had a monitored network of only 22,835 wells. Even for undertaking Real Time Ground Water monitoring, CGWB has not made much headway even after lapse of 5 years, as various projects of CGWB are still in the planning stage. The Committee while noting that the Ministry is yet to achieve the targets of monitoring wells planned for 2012-17, feel that despite the approved schemes and substantial funds allocated for these purposes, the actual implementation has been

sluggish, leading to a significant shortfall in the number of wells monitored. The Committee while observing that monitoring is a key tool to secure that contaminated water is not used for consumption or irrigation and to keep track and control if water resources are exploited sustainably, desire the Ministry to identify the reasons for the delays and take time-bound action to expedite the implementation of the schemes and apprise the Committee thereof.

Action Taken by Ministry

Monitoring of groundwater levels and quality are the key tools for sustainable resource management and the Ministry is focused on the strengthening of monitoring mechanism in the country. Under the monitoring network of Central Ground Water Board (CGWB), there are nearly 17,000 quality monitoring stations. These are largely open dug-wells existing in the villages/towns including privately owned open wells. Additionally, this Ministry is in the process of automating water level monitoring by installing Digital Water Level Recorders (DWLRs) with telemetry systems for real-time monitoring of water level in the aquifers, and around 10,000 DWLRs are already in place. Further, around 28,000 additional DWLRs are expected to be installed in the coming years under various schemes of the Ministry like National Hydrology Project(NHP), Atal BhujalYojana and PIB project of CGWB etc. which are being actively pursued. Once in place, this comprehensive network of automated monitoring systems is expected ensure real-time availability of ground water level data which can be shared with all concerned as and when required.

State Governments are being guided and supported to come up with their real-time monitoring systems by constructing Piezometers fitted with DWLRs. Efforts are being made to integrate the data generated from all such state monitored wells into one single network which is expected to provide comprehensive data on ground water parameters on real time basis.

CGWB, monitors groundwater quality form nearly 17,000 stations spread across the country. In this regard, a SOP has been formulated detailing and standardizing the whole process from sample collection to reporting in a time bound manner.

Further, Central Pollution Control Board (CPCB) under National Water Quality Monitoring Programme (NWMP) apart from monitoring of rivers, lakes, tanks, ponds, also monitors ground water quality at 1233 locations in the country. Water quality monitoring at ground water locations under NWMP is carried out with the objective of assessment of impact of industrial effluent/ sewage/ waste management facilities etc. To accomplish this objective monitoring locations are selected with defined criteria –

- Drinking water sources located in sanitary conditions and prone to sewage contamination, preferably in shallow aquifer in the vicinity of septic tanks, sewage treatment plant, oxidation pond, cess pools, garbage dump site etc.
- Tube-wells, hand pumps or dug-wells located in industrial areas and prone to contamination and are in use.
- Ground water sources in residential areas.

Vetting comments of Audit

Specific reply regarding the action taken by Ministry to identify the reasons for the delays and take time bound action to expedite the implementation of the schemes may be furnished to the PAC.

Final Reply of Ministry

Reasons for delay have been already identified as well as addressed. As per the latest information, more than 22 thousand DWLRS have already installed under NHP and Atal BhujalYojana. Additionally, construction and installation of additional 7000 Piezometers and DWLRs under PIB approved project is also underway. Restrictions placed during pandemic period was one of the main causes of delay. Further, logistics and manpower constraints in CGWB, lack of expertise in handling large scale tenders etc. have all been analysed and addressed in detail so as to ensure that the set targets are caught up with.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 5

Assessment of water levels and factors affecting Ground Water Quantity

The Committee are deeply concerned about the declining water levels in the majority of monitored wells, both at the national and state levels. The Committee further note that in 14 States factors affecting ground water quantity were reported to be available which inter-alia include power subsidies for agriculture, water-intensive crop cultivation, rainfall deficit, urbanization, and excessive water use in irrigation and industries. The Committee note that factors affecting quantity of ground water could not be identified for the States/UTs in which assessment was not conducted. It is astonishing that these states are managing their water requirements without a comprehensive understanding of the factors influencing ground water availability. In the absence of pan-India data on factors affecting ground water quantity, the Committee are of the opinion that it will be difficult to devise effective strategies to address the issue of declining water levels. The Committee therefore feel that there is a need to ensure that factors affecting ground water quantity be ascertained and made available for framing national level policy. The Committee desire that regular and thorough assessments of the factors affecting ground water quantity in all the states be conducted to ensure efficient utilization of this precious resource.

Action Taken by Ministry

Dynamic ground water resource assessment of the country is being carried out by CGWB on an annual basis since 2022. This exercise, mainly having Blocks/tehsils taluks as assessment units, covers the entire country and the assessment report gives a blockwise picture of dynamic ground water scenario of the whole country along with Stage of Extraction(SOE). This report contains the information about the sector wise groundwater consumption. Summary for each state/UT is prepared in the form of ‘factsheets’ which are made available in public domain.

Further, CGWB conducts ground water level monitoring as a pan India exercise, four times a year, through its network of monitoring wells, which currently number around 26,000. It has been recently decided by this ministry to issue brief ground water level bulletins after every round of such exercise which will provide a bird's eye view of the state-wise rising/falling trends of ground water levels by comparing with previous years. Similar bulletins will be issued at state levels also for capturing district level trends. All these measures are expected to generate, summarize and provide sufficient data/information to policy makers for chalking out suitable schemes keeping in mind the degree of ground water deficit/sufficiency of any given area.

Furthermore, under NAQUIM studies which has covered nearly 25.6 million sq km, block level management plans have been prepared citing the reasons for water level and quality decline. Respective management plans are also provided for the suitable interventions to address the challenge for water level decline.

Also, for comprehensive studies on factors affecting groundwater levels, groundwater quantity and groundwater quality, detailed area specific studies are being carried out by CGWB in identified priority areas, in addition to the estimation of overall groundwater resource available.

Vetting comments of Audit

In view of reply, no further comments.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 6

Assessment of Ground Water Quality

The Committee note that the factors affecting ground water quality were available in respect of 11 States/UTs only. Most of the States/UTs that conducted assessment of change in quality of ground water reported excessive use of fertilizers and pesticides, disposal of industrial and municipal waste and sea water intrusion as factors for deterioration of ground water quality. The Committee note with concern that a significant number of locations, especially in West Bengal and Punjab, have been identified with high levels of arsenic, fluoride, and salinity, surpassing permissible limits. Further, the Committee note that monitoring of ground water quality was done every year and the data shared through the India Water Resource Information System (WRIS) portal by department of River Development and Ganga Rejuvenation (RD&GR) with States. However, the Water Resource Information System (WRIS) portal contained data as of 2015-16 only. In the considered view of the Committee, non-availability of reliable and authentic data not only results in lack of comprehensive understanding of the threats posed by ground water

contamination but also prevents evolving effective measures to deal with them. In view of the foregoing, the Committee recommend that (i) findings of the Central Ground Water Board (CGWB) and the States be integrated to obtain reliable indicators of the ground water quality nationwide; and (ii) Water Resource Information System (WRIS) data may be updated on real time basis to facilitate informed decision-making and the implementation of appropriate ground water management strategies.

Action Taken by Ministry

As pointed out by the Hon'ble Committee, for comprehensive understanding of ground water contamination, CGWB has taken multiple steps like strengthening of chemical laboratories, NABL accreditation of the laboratories etc. In addition to above, CGWB has also finalized a new SoP for Ground Water Quality Monitoring. As per the new SOP, the ground water quality monitoring will be done with varying sampling frequency including higher frequency and higher density in hotspot/vulnerable areas. Further, it has been decided to publish the groundwater quality bulletins on half yearly basis, following the groundwater quality monitoring timelines as per SOP. These bulletins will contain quality related information like present status of various contaminants, their trend etc.

It is also envisaged to create a unified online database for integration of groundwater quality data from various Central and State Government Agencies. Development of an online platform named Water and Allied Resources Information and Management System (WARIMS), which is a revamped and upgraded version of WRIS, has already been initiated by Ministry of Jal Shakti through NWIC. WARIMS is expected to enable dissemination of accurate and real time data once fully operational.

Data on India WRIS platform is updated periodically after the completion of analysis and validation of data at CGWB laboratories. Ground water quality data for the year 2021-22 are already updated on India WRIS portal and that for the year 2022-23 are in the process of validation. Ground Water Quality data generated by CGWB is also placed on CGWB website and the latest set of ground water quality data (2021-22) is available on CGWB website.

For informed decision making, from 2023 onwards, it has been decided to bring out separate groundwater quality yearbooks for dissemination of findings of groundwater quality studies carried out by CGWB. The year book for 2023 has already been published and placed in public domain.

Further, CPCB annually posts the water quality data including ground water of aquatic resources monitored under NWMP in public domain.

Also, based on the assessment of ground water quality, CPCB periodically communicates to respective States/ UTs through SPCBs/ PCCs wherever concentration of Fluoride, Arsenic and other Heavy Metals were found exceeding BIS Drinking Water Standards IS 10500:2012.

Vetting comments of Audit

In view of reply, no further comments.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 7

Audit observed that 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). The number of cases of fluorosis was significant in Andhra Pradesh, West Bengal and Madhya Pradesh. In the absence of any such assessment by the remaining States/UTs, the threats due to contamination of ground water could not be ascertained in these States/UTS. Regarding the action taken to assess the factors affecting ground water quality in the States/UTs where no such assessment has been done, the Ministry stated that Central Ground Water Board generates ground water quality data on a regional scale during various scientific studies and ground water quality monitoring throughout the country. These studies indicate the occurrence of contaminants such as Fluoride, Arsenic, Nitrate, Iron and Heavy Metals beyond permissible limits (as per BIS) for human consumption in isolated pockets in various States UTS. The Committee note that the Department of Drinking Water and Sanitation (DODW&S) had launched a National Water Quality Sub-Mission (NWQSM) on 22nd March, 2017 as a part of National Rural Drinking Water Programme (NRDWP), which has now been subsumed under Jal Jeevan Mission, to provide safe drinking water to 27,544 arsenic/fluoride affected rural habitations in the country. It has also been informed that Government of India launched Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0) on 01 October, 2021 for the period of 05 years (FY 2021-22 to 2025-26) which focuses on making cities' water secure through recycle/reuse of treated sewage, rejuvenation of water bodies and water conservation. The Committee note from the Ministry's reply that under NAQUIM, CGWB constructs arsenic safe exploratory wells in arsenic affected parts of some States including West Bengal and the arsenic safe deeper aquifer zones have been identified and wells have been constructed tapping the arsenic safe deeper aquifers using innovative cement sealing technique. As per the information made available to the Committee, 513 exploratory wells tapping arsenic safe aquifers have been constructed under NAQUIM programme including 40 in Bihar, 188 in West Bengal and 285 in Uttar Pradesh. Further, the innovative cement sealing technique of CGWB has been shared with the State agencies to utilize the technique to construct arsenic free wells. In light of the above, the Committee recommend that (i) all out effort to enhance the number of wells tapping arsenic safe aquifers, may be made. As regards the cement sealing technology, the Committee desire that a study may be conducted to ascertain the efficacy of the efforts made to ensure quality water availability to the inhabitants of the affected States (ii) The Ministry may take steps towards the assessment of water quality by all the States/UTs to ensure that the threats due to

contamination of ground water are ascertained in all States/UTs across the country and (iii) covered under AMRUT 2.0 and Jal Jeevan Mission.

Action Taken by Ministry

The Ministry is ensuring the monitoring of Arsenic contamination in groundwater on regular basis in a coordinated approach and exploration of arsenic safe aquifers. The information about the contamination and safe aquifers is consolidated from various agencies and disseminated through various means like reports, bulletins and online portals. The arsenic safe deeper aquifer zones have been identified and wells have been constructed tapping the arsenic safe deeper aquifers using innovative cement sealing technique. This technique has been shared with the State agencies to construct arsenic free wells. During the year 2022-23 also CGWB has continued to construct such wells in the arsenic affected areas of the country.

As recommended by the Hon'ble Committee, CGWB is instituting a specific study for the efficacy of cement sealing technology. Further, CGWB has finalized a new SoP for Ground Water quality studies. As per the new SoP the ground water quality monitoring will be done with varying sampling frequency including higher frequency in hotspot/vulnerable areas. Further, all parts of the country will be covered for sampling and analysis. Moreover, from 2023 onwards, it has been decided to bring out separate groundwater quality yearbooks for dissemination of findings of groundwater quality studies carried out by CGWB. The year book for 2023 has already been published and placed in public domain. The year book has also been specifically shared with the Department of Drinking Water and Sanitation and Ministry of Housing and Urban Affairs with request to share the information with the functionaries at relevant level for taking necessary action. Further, CGWB, CBCB, D/o DWS, State agencies and NWIC are working in close association along with Survey of India, for geo-tagging all drinking water sources of the country and carrying out periodic quality testing and analysis of such sources to ensure non-consumption of quality affected water by any habitat/population. D/o DWS is also conducting trainings for state PHED/GW department officials on sustainability of ground water sources which is also expected to help improving the ground water quality.

Vetting comments of Audit

The **outcome of the remedial measures/initiatives taken by the** Ministry based on Committee recommendations and on audit points in terms of data may be furnished to the PAC.

Final Reply of Ministry

Action on remedial measures and outcome monitoring are to be done by the State governments. However, it is noteworthy that under the Jal Jeevan Mission of the Ministry for providing safe, sufficient and affordable piped water supply to every household in rural India, more than 12 crore households have been covered so far. Further, more than 2160 labs have been set up in the country for testing water samples and around 25 lakh women have been trained to test water quality using field test kits in villages. As a result of cumulative efforts, it is reported that from August 2019 to November 2024 the number of

Arsenic and Fluoride affected habitations in the country have declined from 14,020 to 314 and from 7,996 to 255 respectively. These remaining habitations have also been provided clean,& safe drinking water through Community Water Purifier Plants (CWPPs).

(Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 8

Model Bill on Ground Water and Legislative framework in States/UTs

The Committee note that to enable the States to enact Ground Water Legislation, DoWR, RD&GR circulated in 2005, a Model Bill to all the States/UTS for regulation and development of ground water. However, the Model Bill was under review till December 2019. As of December 2019, 19 States/UTs had enacted legislation for management of ground water. In this regard, Ministry of Jal Shakti apprised the Committee that the revised Model bill on Ground Water has been finalized by the Department which is being clubbed with other Model Bills (of the Department) to have a holistic comprehensive Model Bill on water management (encompassing all matters of water falling in the domain of States/UTS) in the country. Further, Ministry of Jal Shakti has issued new guidelines on 24.09.2020 for regulation and control of ground water extraction by industrial, infrastructure and mining projects. These guidelines have pan-India applicability. The Ministry also added that 13 States/ UTs (10 States and 3 UTs) have taken Initiatives for enactment of legislation on the basis of the Model Bill. The Committee are optimistic that new guidelines issued on 24.09.2020 for regulation and control of ground water extraction by industrial, infrastructure and mining projects with pan-India applicability, have played a key role in addressing other related issues of the States/UTS thereby paving the way for enactment of legislation based on the Model Bill by the remaining States/ UTS. The Committee also desire that the Ministry may expedite the efforts to convince remaining. States to take suitable steps in this direction.

Action Taken by Ministry

This is to apprise the Hon'ble Committee that the Ministry of Jal Shakti is actively pursuing the States for enactment of legislation. Further, Secretary, DoWR, RD & GR chaired a meeting of all the States on 05.04.2023, wherein enactment of Ground Water Act in states was also deliberated upon. The States had provided the status for enactment of legislation, which is summarized in **Annexure-I**. Presently, as many as 17 states/UTs are regulating the ground water extraction on their own by creating state ground water regulatory authorities. Out of the remaining 19 states/UTs, Process of enactment of Ground Water Act/ constitution of State GW Authority is in advanced stages or has been completed in the States of Assam, Bihar, Chhattisgarh, Gujarat, Maharashtra, Nagaland and Odisha.

As Hon'ble Committee has pointed out, appreciating the key role of groundwater regulatory guidelines issued by this Ministry on 24.09.2020 for regulation and control of groundwater extraction, many States (as detailed above and in (**Annexure-I)** have come out with their own regulatory mechanism, including groundwater regulatory legislations. Further, this Ministry is following up with some of the states to make their ground water regulations in sync with the pan India guidelines issued by CGWA.

Department of Water Resources (DoWR) has also sent multiple DO letters to all such States on 04.01.2020, 06.02.2023 and on 17.08.2023 **(Annexure-II)** with the request to strengthen the institutional mechanism to ensure sustainable management and lawful regulation of ground water resources by initiating necessary steps to constitute a State Ground Water Authority in their respective State/UT.

Vetting comments of Audit

Since the process of sending DO letters to various states is ongoing, as such the outcome on strengthening institutional mechanism to ensure sustainable management and lawful regulation of ground water by constituting State level ground water authority in many states is awaited.

Final Reply of Ministry

As per the latest information available, the Model Bill has been adopted by 21 States/UTs and this Ministry has been following up with the others relentlessly. In addition to issuing DO letters to the States, fora like National Inter-departmental Steering Committee for ground water related issues (**NISC**) are being used to pursue the agenda further. During the NISC meeting held on 03.07.2024, theSecretary, DoWR specifically urged participating states to constitute SGWA in their respective states. Now States are being followed up for ATRs. Further, CGWA has also formulated SOP for handing over/ taking over of groundwater regulation consequent upon constitution of State GW Authority. The SOP includes, *inter alia*, comparison of provisions in State Act/ Rules/ Guidelines with those in MoJS guidelines so as to bring in uniformity in groundwater regulation.

Moreover, this Ministry has also been urging the state governments to create their own dedicated, independent and well-equipped ground water Board/Departments for effective management of ground water resources in their jurisdiction and as an outcome 17 States/UTs have followed the suit.

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Observation/ Recommendation No. 9

<u>Human Resource constraints faced by Central agencies managing Ground Water</u>

The Committee note that there was shortage of human resources in scientific and engineering categories in Central Ground Water Board (CGWB) and its regional and divisional offices. To take care of the deficiency in staff, the Ministry informed that various steps have been/are being taken by CGWB and the Department which inter-alia include initiation of the proposal for filling up 840 posts through Direct Recruitment / Deputation / Promotion in consultation with UPSC SSC and engagement of young professionals and consultants on a contractual basis. Noting that as a part of Human Resource Development

measures, the Ministry have also resorted to hiring of consultants/professionals in addition to other initiatives, the Committee would like to point out that ad-hoc arrangement of engaging young professionals and consultants on a contractual basis may be a short term measure to cater to the immediate requirement of CGWB. For efficient working of the organization, the Central agencies and its departments should look for long term solution by engaging permanent staff/experts. In light of the above the Committee desire that action to fill up direct recruitment / promotional vacancies be expedited and proposal for filling up 840 posts in scientific and engineering categories in CGWB be finalized with due promptitude. The Committee desire to be apprised of the outcome of the action initiated by Ministry in this regard.

Action Taken by Ministry

This is to apprise the Hon'ble Committee that out of 840 vacant posts in Central Ground Water Board (CGWB) as on 01.05.2022, 128 vacancies were pertaining to Promotion Quota (PQ) and 712 vacancies were pertaining to Direct Quota DR).

Out of 128 Promotion Quota (PQ) vacancies, 74 vacancies have already been filled up. Remaining 54 vacancies are yet to be filled on account of non availability of eligible candidates in feeder grade, amendment of RRs and other administrative grounds.

Further, out of 712 Direct Quota (DQ) vacancies, 250 vacancies have already been filled up. 69 dossiers for various posts have been received from UPSC/SSC and pre-appointment formalities are under process. 74 requisitions are pending with recruiting agencies. Remaining posts may not get filled due to Cadre Review of CGWB.

Since inception of Central Ground Water Board (CGWB), in last 54 years, no cadre review has been done, as such, cadre review proposal in respect of CGWB has been initiated by the need of re-orientation of the activities of the board in view of the emerging challenges in the ground water sector as well as by the increase in the volume of work of CGWB. In this Context, 146 Group A posts have been proposed to be created under CGWB. The same is getting finalized by DoPT/DoE along with other category of posts.

Similarly Recruitment Rules (RRs) of various posts of CGWB are under consideration for amendment to assure proper career progression. The amendment of consolidated RRs for the posts of Engineering Cadre of CGWB is also under process.

Vetting comments of Audit

The Ministry had taken various remedial action to fill up the vacancies. However, filling up of the complete vacancies as raised by audit is awaited.

Final Reply of Ministry

In this context, it is apt to mention that with a vision to shape CGWB into a premier scientific organization, a comprehensive cadre re-structuring has been taken up for the first time

since the establishment of the organization. In the re-structuring, it has been proposed to strengthen the scientific cadre considering the future work requirements and surrender a sizable number of lower grade drilling operations related posts, which may be no longer required.

The recruitment for remaining cadres is being taken up in mission mode. In this regard, proposals have already been sent to UPSC/SSC who will take necessary action as per their standard recruitment cycle.

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Observation/ Recommendation No. 10

GROUND WATER REGULATION

Projects granted Consent to Operate by State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) and Projects granted license by Bureau of Indian Standards.

Audit scrutiny revealed that 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. Audit had also pointed out that in 15 States for which data was made available to Audit, 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. The Committee are of the view that projects, which operate without NOCS reflect on the poor control exercised by CGWA. The Committee emphasize that there is an urgent need to further enhance the inspection and compliance mechanism of CGWB. They recommend the Ministry to establish a robust monitoring mechanism which may also be utilized by the general public/NGOs/other stakeholders to report/ send photos/videos of illegal extraction of ground water and violation of other NOC conditions by project proponents.

Action Taken by Ministry

The Ministry is fully aware of the dangers posed by illegal extraction of ground water in the country and is making all out efforts for curbing such unscrupulous acts wherever noticed. The complaints regarding alleged illegal groundwater extraction from general public are received regularly by CGWA through different means (via Grievance Portal/ e-mail/ Hard Copy) and the complaints are forwarded to respective Regions/ SGWA/ District Collectors who have been empowered by the Environment Protection Act 1986, for taking prompt action like imposition of fines to sealing of wells wherever illegal extraction of Ground Water is established.

Further, as per the recommendation of the Hon'ble Committee, CGWA is developing an online portal e-NIVARAN for all the regulatory processes and compliances. It is also exploring the possibility of development of an online system for reporting of issues

pertaining to illegal extraction of ground water.Also, as suggested by the Committee, CGWA has also taken up correspondence with BIS authorities for obtaining the list of firms who have been issued with licenses for operating PDW units so as to initiate suitable actions against those firms functioning without NOC.

Also, a proposal for strengthening and restructuring of CGWA, which will provide a separate cadre of officers to the Authority, distinct from the scientific cadre of CGWB, has been initiated in the Ministry of Jal Shakti which will provide additional manpower to enhance inspection and compliance mechanism of CGWA.

Vetting comments of Audit

Specific reply in respect of the audit points raised along with enumeration of specific details of actions being taken to curb illegal extraction may be furnished to the PAC.

Final Reply of Ministry

CGWA has taken up the issue with CPCB to direct all SPCBs to follow uniform practice as regard to issuance of CTE/ CTO/ CCA vis-à-vis groundwater NOC. CPCB has directed all the SPCBs accordingly vide its letter dated 25.04.2024. CGWA has also directed all SPCBs to include condition in the CTO, asking the Project Proponent to obtain NOC from CGWA in case of groundwater extraction. Additionally, the Member Secretaries of CGWA and CPCB had a meeting on 29.10.2024 to discuss the above issues and to have better coordination between State SPCBs and CGWA.

The Chairman, CGWA held meetings on 25.06.2024 and 08.08.2024 with the States/ UTs where groundwater is being regulated by respective State/ UT, wherein it was stressed to control illegal extraction of groundwater. Further, a state of the art The Bhu-Neer Portal has been developed and deployed for NOC processing and monitoring. The Bhu-Neer Portal integrates all stages of groundwater compliance, on one platform. It facilitates smooth interactions for project proponents while ensuring compliance with water conservation norms.

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Observation/ Recommendation No. 11

Delay in processing of applications by CGWA for grant/renewal of NOC in non-notified areas

Audit pointed out that during 2013-19, Central Ground Water Authority (CGWA) accorded 3,517 fresh NOCs and renewed 320 NOCs for Ground Water withdrawal to various industry, mining and infrastructure projects. As on 31 March 2019, 10,758 applications for grant of NOC and 144 applications for renewal were pending. Citing reasons for pendency in processing applications, the Ministry explained that the pendency as on 31.03.2019 was owing to certain concerns/observations raised by National Green

Tribunal in respect of over- exploited, critical and semi-critical areas and after notification of new guidelines w.e.f. 24.09.2020, all pendency had been cleared. The Ministry informed that to expeditiously process the applications, CGWA has inter-alia fixed timelines for processing of NOC application at each stage, the NOC portal (NOCAP portal) has been revamped for submission of NOC applications by the project proponents and issue of all NOCs by the CGWA through online mode, the powers of issue of NOCs have been decentralized among field functionaries and a booklet on Standard Operating Procedure (SOP) has been issued by the CGWA to standardize the process of NOC issuance and to cut the discretionary powers of officers. While acknowledging the initiatives taken for expeditiously processing/ issuing NOCs within 45 days through NOC portal, the Committee are of the opinion that merely revamping the NOC portal and decentralizing powers among field functionaries may not be enough to address the systemic inefficiencies and discretionary practices. The Committee desire thorough and recorded field inspections to ensure transparent implementation of the guidelines issued w.e.f. 24.09.2020 and the SOP meant for field functionaries. The Committee desire to be apprised of the impact of the measures taken on the average time taken by the CGWA for issuing NOCs.

Action Taken by Ministry

This is to apprise the Hon'ble Committee that all applications seeking permission for ground water withdrawal up to 100 thousand liters per day (100 KLD), where scrutiny and approval of Impact Assessment Report (IAR) are not required, are being disposed off in a timely manner, except for the cases where the applications are incomplete. The committee may appreciate that prior to implementation of Guidelines dated 24.09.2020, there was no fixed time period for issuance of NOCs. However, working consistently towards clearing the pendency of applications, the CGWA in consultation with the Ministry has steadily brought down the processing time, which now stands at 2 weeks for for up to 10 KLD category and 4 weeks for up to 100 KLD category. In order to further facilitate the timely disposal of NOC applications, with effect from 01.11.2023, the authority for processing and approval of application up to 500 KLD has been delegated to CGWB Regions from CGWA HQ, New Delhi. This is expected to further reduce the duration of application cycle in respect of a substantial portion of applicants and only a few and major industries having ground water requirement of more than 500 KLD will be subjected to detailed examination at CGWA, HQ, New Delhi.

In order to further enhance user experience and bring in more transparency, upgraded version of NOCAP, tentatively titled e-NIVARAN with all state of the art features is under development by NIC, and is expected to be ready by the end of June 2024. The upgraded version will also have provision for counting of net number of days taken for issuance of NOC after excluding number of days taken by Project Proponent for submission of documents and for replying to queries raised. This will help in carrying out a comprehensive dwell time analysis wherein time taken at each stage of application processing can be readily identified and delays can thus be eliminated.

Further, to ensure the transparent implementation of the guidelines issued w.e.f. 24.09.2020 a SOP meant for field functionaries has been formulated mandating all the observations are recorded in writing with suitable on-site photographs highlighting any violation of the NOC conditions.

Vetting comments of Audit

In view of reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 12

Non-receipt of applications for renewal on expiry of NOC

The Committee note from Audit findings that in 474 cases, renewal of NOC was due during 2013-18 but the project proponents did not apply for renewal. CGWA did not take any action under section 15 of the Environment (Protection) Act, 1986 against these project proponents. Thus, even after expiry of the NOC, existing industries/projects continued to draw Ground Water without any regulation. While enumerating the reasons, the Ministry stated that prior to April, 2015, there was no online system for NOC application processing and all the NOCs were being issued off-line. Record of such NOCs, therefore, was not available and it was difficult to manually keep track of all the NOCS getting expired though all efforts were made by the CGWA in this direction. Further, the inspection power of visiting industries/project proponents were vested with handful staffs/officers of CGWA which has now been widened by allowing this power to be delegated to other CGWB officers, DMs/DCs etc which has resulted in better implementation of regulation measures. The Ministry stated that CGWA has issued 3200 notices to various project proponents for not complying with ground water regulatory conditions and penalty/environmental compensation to the tune of Rs 15.77 crore has already been imposed against 1,341 proponents who were found extracting groundwater illegally/violated NOC conditions since issue of new guidelines dated 24 Sep. 2020. The Ministry's submission that it was difficult to manually keep track of all the NOCs getting expired prior to 2015 is unacceptable. The Committee desire to be apprised of the action taken against the remaining project proponents for not complying with ground water regulatory conditions. The Committee expect the online system for NOC application processing to facilitate tracking of NOCs' expiry and proactive action for timely renewal and would like to be apprised of the resultant impact in application and renewal of NOCs. The Committee also insist on the timely finalization and implementation of the proposal to strengthen the CGWA.

Action Taken by Ministry

This is to apprise the Hon'ble Committee that the entire process of issuance of NOC is now online and the list of renewals getting due is updated on NOCAP Portal on daily basis.

As on 30.04.2024, there are 2698 cases where NOC has expired but Project Proponent (PP) has not applied for renewal. Out of these 1015 cases are less than 10 KLD, which had obtained NOC prior to 24.09.2020. Most of these 1015 are supposed to be Micro and Small

Enterprises, which came under exempted category and therefore did not apply for renewal. Regarding remaining projects, email reminders are being sent by CGWA for filing renewal applications. Further, the PPs applying late for renewal are being imposed penalty and Environmental Compensation as per guidelines. Also, show-cause notice(s) are issued to the defaulting units that do not apply for renewal, with copy of show-cause endorsed to respective DM/DC, which are appointed as Authorized Officers. Regional Directors have also been directed to issue Demand Notice, imposing Environmental Compensation till the date of issuance of notice, to the projects that have not applied for renewal in time. Till 30.04.2024, show-cause notices/ letter to DMs have been issued in respect of 712 projects.

Further, based on several representations received from trade and industry, in order to promote ease of doing business, CGWA has issued O.M. dated 12.03.2024 giving relaxation in amount of EC for one year to MSMEs extracting groundwater up to 100 KLD and this step is expected to encourage many units to apply for renewal, in addition to bring in existing industries under the ground water regulation regime which were hitherto outside its ambit.

Regarding strengthening of CGWA, a proposal for strengthening of CGWA has already been initiated and the availability of additional manpower is expected to enhance the compliance mechanism of CGWA.

Vetting comments of Audit

Ministry has taken action on strengthening the process of issuance of NOC online and the list of renewals is being updated on NOCAP Portal on daily basis. However, the outcome of the email reminders sent for remaining projects for filing renewal application may also be furnished to the PAC.

Final reply of the Ministry

A state of the art The Bhu-Neer Portal has been developed and deployed for NOC processing and monitoring. BhuNeer represents a paradigm shift in how India manages its groundwater resources, addressing regulatory challenges while supporting ease of business and sustainability. The portal offers a simplified, fully digital process for applying and tracking groundwater withdrawal permits. This PAN-based single ID system, coupled with QR-coded NOCs, eliminates delays and ensures transparency in compliance and regulation.

The Bhu-Neer Portal integrates all stages of groundwater compliance, on one platform. It facilitates smooth interactions for project proponents while ensuring compliance with water conservation norms.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

[Comments of the Committee, see Para No. 10 of Chapter I]

Observation/ Recommendation No. 13

Post NOC monitoring by CGWA and Authorized officers

The Committee express deep concern over the lack of enforcement of conditions stipulated in NOCs by Central Ground Water Authority (CGWA). The Committee note that joint field visits exposed widespread non-compliance with NOC conditions, however despite widespread violations, CGWA issued show cause notices to a paltry number of 99 project proponents during 2013-2018. The Ministry have informed that apart from issuing of notices and levying of penalty since the new guidelines came into effect, a Mobile App has also been developed to enable project proponents to submit self-compliance with the facility for field verification by CGWB officers. The Ministry must demonstrate unwavering commitment to ensuring compliance with NOC conditions. The Committee insist on rigorous adherence to guidelines and desire that a detailed report on the extent of penalties, offences registered, and inquiries initiated in last five years be furnished to them.

Action Taken by Ministry

The Ministry is committed to ensure the compliance of the projects with NOC conditions for groundwater extraction. This is to apprise the Hon'ble Committee that the provision for penalties against non-compliance of NOC conditions has come into force with notification of guidelines on 24.09.2020 only.

Since the issuance of guidelines till 31.03.2024, penalty of more than Rs. 36.75 Cr has been received from various project proponents for non-compliance of NOC conditions at the time of renewal of NOC. All the penalties have been imposed after due enquiries and establishing violation/non-compliance by PPs. However, there is no provision to register offence cases against PPs in the guidelines dated 24.09.2020.

Further, a proposal for strengthening and restructuring of CGWA has already been initiated. Availability of additional manpower is expected to enhance enforcement mechanism of CGWA.

Vetting comments of Audit

Specific reply detailing cases of last five years where PPs being penalised, penalty amount levied thereupon and enquiries initiated there-against, if any, be provided to the PAC.

Final Reply of Ministry

As per updated figures, from the date of implementation of Guidelines from 29-09-2020 to 28-11-2024, penalties have been imposed and recovered from 5568 cases and Environmental compensation has been imposed and recovered from 1150 cases. Total amounts of penalty and EC recovered are Rs 45.50 Crore and Rs 41.74 respectively. Also,

more than 20,000 show-cause notices have been issued to Industries and various users for various contraventions.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 14

IMPLEMENTATION OF SCHEMES ON GROUND WATER MANAGEMENT AND REGULATION (GWMR)

Financial performance of GWMRS

The Committee note that the approved outlay for the Scheme 'Ground Water Management and Regulation (GWMR)" was Rs. 4,050.66 crore during 2012- 19 against which budget allocations were Rs. 2,349.48 crore. Against the budget allocation of Rs. 2,349.48 crore, the actual expenditure under the Scheme was Rs. 1,109.73 crore during 2012-19. As regards the measures taken up to ensure full utilisation of funds released to it, the Ministry during the course of examination informed that CGWB is closely monitoring the tendering and procurement activities and has also engaged a Project Management Consultant (PMC) for tendering & execution activities which has resulted in improved utilization of funds. The Ministry further stated that these measures have resulted in improved average annual expenditure from Rs. 116 crore during 2012-17, to Rs. 220 crore during 2017-21. In view of the activities envisaged under the scheme having a direct impact on livelihoods and survival of millions of citizens of the country, the Committee recommend that the Ministry may ensure optimum fund utilization, within prescribed timelines. The Committee desire to be apprised of the specific steps taken in this regard.

Action Taken by Ministry

Some of the major activities that CGWB envisages to carry out in the coming years up to 2026 under GWMR scheme include groundwater level monitoring, ground water quality monitoring, dynamic groundwater resource assessment of the country, regulation of groundwater withdrawal, strengthening of groundwater monitoring by installation of piezometers, automation of monitoring by installation of DWLRs, high resolution aquifer mapping using Heli-borne surveys, outreach activities etc. All activities have been meticulously planned including the budgetary part and are stringently monitored at the highest level of administration. CGWB has initiated the practice of preparing monthly and quarterly expenditure plans and these are regularly reviewed as important performance indicators of the organization.

In order to ensure proper implementation and utilization of funds, the activities that are of continuous nature are being implemented mostly through in-house resources (GWMR scheme) and the specific activities that are to be implemented in a time-bound manner are being implemented mostly through outsourcing under a separate project under Public Investment Board (PIB). The activities that are taken up under the PIB project with a total outlay of Rs. 805 cr., include construction of exploratory wells, construction of piezometers, installation of DWLRs and Heli-borne survey. The works are expected to commence shortly

and once underway, these projects will provide a major impetus to creation of groundwater monitoring infrastructure in addition to substantially boosting the expenditure under the GWMR scheme.

Further, a complete modernization of software infrastructure, purchasing fleet of new field vehicles for field activities, high level training for officers for upgrading their technical skills etc. are being implemented.

Vetting comments of Audit

The Action taken by Ministry to develop a mechanism to ensure timely utilisation of given funds as raised by Audit may be furnished to the PAC.

Final Reply of Ministry

As already mentioned in the reply, CGWB has initiated following practices for timely and efficient utilization of funds viz.Setting monthly & quarterly expenditure plan/ targets and reviewing them regularly at the highest level; hiring PMC agencies for speedy implementation of projects; outsourcing large scale projects to specialized vendors; investing in infrastructure strengthening and capacity building which will result in timely completion of projects and utilization of funds etc.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/Recommendation No. 15

Targets of aquifer mapping and achievements and incomplete aquifer mapping reports

The Committee note from Audit revelation that an area of 24.8 lakh sq. km was identified for Aquifer Mapping in the country, Central Ground Water Board (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 finalized. It has been informed that as on 31st March 2022, 21 lakh sq km had already been covered and the targets set for coverage had been achieved. It has also been informed and that the entire area identified for NAQUIM studies is targeted to be covered by 31st March 2023. As regards reports of NAQUIM studies, against an area of 16.33 lakh sq km covered till 31st March 2021, reports in respect of 14 lakh sq km had been issued as on date. The Ministry have cited lack of adequate manpower and deployment of concerned officers in additional activities like sharing of outputs with District Authorities, Public Interaction Programmes etc. as the reason for the delay in compilation of the reports. It has also been reported that during the year 2021-22 an additional area of 4.8 lakh sq km had been covered, reports for which were to be issued during the year 2022. The Ministry assured that earnest attempts were being made to issue reports in respect of the entire area covered as on 31st March 2022, by September, 2022. The Committee note that the Ministry have taken steps like temporary deployment of officers along with hiring of young professionals to assist in NAQUIM studies. The

Committee would like to be apprised whether targets of aquifer mapping have been achieved by 31st March 2023 and whether the reports for the same have also been issued. The Committee desire that the findings of NAQUIM studies so conducted and the action envisaged thereon be shared with them within three months of presentation of this report to the Parliament.

Action Taken by Ministry

As per the target, the entire 25.15 lakh.sq.km area identified for aquifer mapping (mappable area) in the country under NAQUIM at 1:50,000 scale, has been covered and all the reports in this regard have been issued.

The reports include the findings of the aquifer mapping include information about extent of aquifers (depth of occurrence and horizontal extent) and their physio-chemical properties. It also provides block level aquifer management plans focusing on the specific issues concerning the groundwater and suitable actions including artificial recharge interventions and demand management interventions have been recommended considering local factors.

Findings of NAQUIM studies and the actions envisaged at block levels thereon are compiled in form of district wise reports, have been shared with respective State government functionaries and for wider circulation they are placed on a searchable database in CGWB website (https://cgwb.gov.in/cgwbpnm/search?type=2&cat_id=7&state_id=&district_id=&year_of_issue=&name_of_author=&keywords=&search=search).

Vetting comments of Audit

In view of the reply, no further comment.

The status as of March 2023 may be furnished to PAC as per Committee instructions.

Final Reply of Ministry

The status remains the same as project has been completed.

It is reiterated that as per the target, the entire 25.15 lakh.sq.km area identified for aquifer mapping (mappable area) in the country under NAQUIM at 1:50,000 scale, has been covered by 31.03.2023 and all the study reports/management plans in this regard have been prepared and shared with the concerned State and District authorities for taking up further interventions.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

[Comments of the Committee, see Para No. 15 of Chapter I]

Observation/ Recommendation No. 16

Non preparation of Ground Water Models

The Committee note that Ground water models provide a tool to estimate ground water availability for various water use strategies and to determine the cumulative effects of increased water use and drought conditions. A ground water model is a numerical representation of the aquifer system capable of simulating historical and predicting future aquifer conditions. The purpose of the NAQUIM programme was to provide an Aquifer Response Model that can be used to develop reliable and timely information on ground water availability for the region to ensure adequate supplies or recognize inadequate supplies over a 15 year planning period. The Committee note that although CGWB has conducted aquifer mapping in a significant area, the completion of ground water modeling is limited to only 4.5 lakh sq. km. The Ministry's progress in groundwater modeling is visibly slow, and the Committee desire that urgent action may be taken to prioritize and expedite this crucial project within a specific timeframe.

Action Taken by Ministry

Aquifer conceptual models have been developed for all NAQUIM covered areas. Numerical modelling was taken up by CGWB in identified priority areas. Ground Water Modelling for nearly 2 lakh sq. km was carried out through IIT, Kanpur and IISC Bengaluru and nearly 2.5 lakh sq. km was carried out using in house resources. Ground Water Modelling reports are also being submitted by project proponents for issuance of NOCs for ground water abstraction in relevant cases.

Taking the learnings from all these studies, CGWB is preparing a detailed action plan for development of regional groundwater models. Further, the Centre of Excellence for groundwater modelling is also being strengthened.

Capacity building and creation of state of the art technical infrastructure are the key requirements for taking up ground water modelling on a large scale. The ministry has done detailed deliberations for identifying the challenges in this area and to chalk out a roadmap for augmenting the proficiency of CGWB. To strengthen its capabilities in groundwater modelling, CGWB is in the process of procuring required hardware, software, collaborating with esteemed scientific organizations having necessary expertise in the field and is also providing trainings to officers. All these efforts are expected to provide a significant impetus to improve the quality and quantity of ground water modelling studies being taken up by CGWB.

Vetting comments of Audit

The Outcome of the action taken by Ministry towards increasing ground water modelling may be furnished to the PAC.
As the PAC wants urgent actions, the timeline of various targets may be provided.

Final Reply of Ministry

As informed earlier, ground water flow models have been prepared for an area of around 4.5 lakh sq km. till 2023.

During 2023-24, a total of 15 officers of CGWB were imparted specialised training on groundwater flow modelling and these officers developed groundwater flow models covering 25,000 sq km taking the total coverage to 4.75 lakh sq km.

An additional 1 lakhsq km is targeted to be covered by 2026 covering parts of three basins, viz. Cauvery, Tapi and Ramganga. The studies are in process.

Further, to promote groundwater modelling based decision making, Central Ground Water Authority has made groundwater modelling mandatory in impact assessment reports for specific cases.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 17

Dissemination of NAQUIM outputs

Designing of web-based systems

Audit pointed out that though CGWB had published aquifer mapping reports, a web-based system for easy dissemination of the information on the aquifer mapping was not designed, as envisaged. In this regard the Ministry have informed that NAQUIM reports are being disseminated through CGWB website. Further, a separate web-portal Aquifer Information and Management System (AIMS) has been developed for easy dissemination of information on aquifer mapping. The AIMS portal is being further upgraded by CGWB to have easier dissemination of aquifer related information to the public at block levels. In addition to this, groundwater levels, water quality information can also be accessed through India-WRIS (Water Resource Information System) portal maintained by National Water Informatics Centre. While noting the steps taken regarding setting up of a web-based system for easy dissemination of information on aquifer mapping, the Committee desire that the Ministry ensure that information available on the portal is regularly updated and establish a feedback mechanism on the system so designed to ensure that the system meets the envisaged criteria and useful information is disseminated to various stakeholders to enable upgrading the system on a continuous basis.

Action Taken by Ministry

Groundwater related data are being regularly updated on India WRIS portal. Ground Water Level data up to the year 2023 has already been placed on India WRIS portal and ground water quality data for the year 2022-23 is in the process of validation and will be updated on the portal. Apart from the India-WRIS portal, all these data are also available on the CGWB website.

Further, the results of annual dynamic ground water resource assessment of the country are summarized into state-wise fact sheets for ease of understanding and dissemination and are placed in public domain. Moreover, the ministry has recently decided to come out

with brief bulletins after completion of every round of ground water level monitoring (conducted 4 times a year) which will flag the major trends of the exercise providing the regions/states with major rise/fall in ground water level. Similarly, brief bulletins after completion of every round groundwater quality monitoring (conducted 2 times in a year) will be released and have the status of groundwater contamination and its trend.

Parallelly, development of an integrated data dissemination platform is under process by National Water Informatics Centre (NWIC) which is tentatively titled as Water and Allied Resources Information and Management System (WARIMS). This platform envisages integration and real time dissemination of surface as well as ground water data from various agencies and software applications. CGWB is working with NWIC for development of the modules related to ground water. As desired by the Committee, CGWB is taking up the matter with NWIC for inclusion of a feedback mechanism.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 18

Action by State Governments on Aquifer mapping reports

Audit had observed that of the 201 reports included in the programme, Aquifer mapping reports of only 168 districts were shared with the District Administration concerned till November 2019. The Committee further note from the reply of the Ministry that NAQUIM studies are complete in parts of 538 districts and outputs in respect of 385 districts had been shared and earnest efforts were being made to share the NAQUIM outputs in respect of all the covered districts with the district authorities during the year 2022-23 The Committee have also been informed that the NAQUIM outputs shared with the State Governments include information about aquifers in the States, ground water level, ground water quality, ground water resource availability etc along with a management plan. States of Andhra Pradesh, Delhi, Haryana, Kerala, Madhya Pradesh, Rajasthan, Tamil Nadu, Tripura and Uttar Pradesh are using the information for ground water management planning and implementation. NAQUIM outputs are also being used in the seven States (Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh) where Atal BhujalYojana is being implemented. The Committee note from the audit findings that many State Governments have not acted on the aquifer mapping reports due to various constraints such as map scale being too small to locate the areas, non-receipt of funds from CGWB or Central Government to implement the reports in the field, etc. Given the fact that the information contained in the report has potential for use by many agencies engaged in managing water resources, agriculture, irrigation etc., the Committee recommend that along with sharing of information with the District Authorities a web-based interface may be

utilized to ensure timely resolution of issues such as scale being too small and to enhance coordination between various agencies at central and state levels for implementation of the recommendations made in the National Aquifer Mapping project reports. The Committee further desire the Ministry to expedite the transfer of funds to the state governments to enable them to implement the recommendations contained in NAQUIM reports.

Action Taken by Ministry

The NAQUIM outputs are shared at State Level with the concerned State Ground Water Coordination Committees (SGWC) and at district level, the NAQUIM outputs are shared with the concerned district authorities. Nearly 650 reports have been prepared and all have been shared with the concerned district authorities.

NAQUIM reports are being disseminated through CGWB website. Further, a separate web-portal Aquifer Information and Management System (AIMS) has been developed and groundwater levels, water quality information can also be accessed through India-WRIS portal maintained by National Water Informatics Centre. For more effective dissemination of information, development of an online platform named Water and Allied Resources Information and Management System (WARIMS) has already been initiated by Ministry of Jal Shakti through NWIC. Dedicated modules related to ground water management are part of this platform.

NAQUIM studies are being carried out as a part of the ground water management and regulation scheme, which is a central sector scheme and as of now, there is no provision in the scheme to transfer funds to the States but the interventions for ground water management by the States are proposed to be implemented by the States through convergence with schemes like MGNREGS, WDC component of PMKSY-HKKP etc.

Whereas, under the Atal BhujalYojana, States are being provided with the funds to implement water saving and resource augmentation measures.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 19

Participatory Ground Water Management

Audit had pointed out that although an outlay of Rs. 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. The component was dropped from the subsequent EFC memo of 2017-20 and is now being taken up as a separate scheme on participatory ground water management through the Atal BhujalYojana (ABHY), a Rs. 6,000 crore scheme with World Bank funding which was launched in 2019. The scheme lays emphasis on community participation and demand side interventions for sustainable ground water management in identified water stressed areas in seven States of the country. The Committee note that ABHY is being implemented in 7 states only and is being taken up in 8,562 water stressed Gram Panchayats of 224 administrative blocks/ Talukas in 80 districts of seven States, viz. Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. It is being implemented from 01.04.2020 for a period of 5 years with mid-term review scheduled in 2022. Based upon the evaluation/feedback, decision on extension of the Scheme to other areas was to be taken. Since the mid-term review of ABHY was scheduled in 2022, the Committee would like to be apprised of the results of the same with the details of expenditure incurred .The Committee while noting that the participatory ground water management is envisaged to make a significant step in ground water management at grass root level to enable the community and stake holders to monitor and manage the ground water as common pool resources themselves desire that based on the positive results of the Scheme, the scope of the Scheme be augmented to other areas for gradually covering the entire country.The Committee also recommend that best practices of participatory Ground Water management being followed in states may be documented at the Central level and the same may be replicated in the other States as well. The Committee further desire that special awareness campaigns may be organised especially in rural areas for including students of the schools as brand ambassadors of water conservation initiatives. Suitable stops may be initiated in consultation with the Ministry of Education to include workshops on 'Water Conservation' in the school syllabi to spread awareness for water conservation amongst the future citizens of the country. The Ministry may also take steps to organize 'Jal Pakhwada' for 15 days in a year, in schools, educational institutions, and government institutions across the country for spreading awareness about Ground Water conservation and recharge. During the 'Jal Pakhwada' events like quiz competitions, debates, essay writing competitions, showcasing of best practices on groundwater recharge and conservation etc. may be held to encourage participatory Ground water management.

Action Taken by Ministry

Regarding review of Atal BhujalYojana, the mid- term review was conducted by World Bank wherein they gave “Moderately Satisfactory” rating to Atal BhujalYojana. The proposal to expand the Scheme to 4-6 more states fulfilling the criteria of having large water stressed areas and readiness for implementation is under consideration of GoI. Further, total Expenditure incurred as a part of the Atal BhujalYojana as on 31.03.2024 is Rs. 2,221 Crore.

As regards best practices, Ministry of Jal Shakti has been compiling and popularizing best practices in water management. A dedicated section on best practices is available on the Ministry’s website that documents notable initiatives of Government Departments, NGOs, Private/Corporate Initiatives. Ministry of Jal shakti has also compiled a compendium on international best practices in water management, which highlights the best practices in the G20 countries. The compilation is available on the website of the Ministry.

Under Atal BhujalYojana, awareness campaigns on water conservation have been organized in all participating states, featuring activities such as PrabhatPheri, Jagrukta Rally, Wall Painting, RatriChaupal, and the display of Atal Jal documentaries. Additionally, the airing of local/folk songs on Atal Jal and water conservation stood out as prominent activities. Special drives were conducted in Primary and Middle schools at the Gram Panchayat (GP) level to raise awareness about water conservation methods / activities. These included Painting, Debate, Rangoli Competitions, Jal Marathon, student and teacher rallies, groundwater conservation pledge etc. Certificates of participation were awarded to students. As a part of Atal BhujalYojana's IEC campaign, a two-week campaign "Atal BhujalPakhwada," was organized in February 2023, covering all 80 Atal Jal districts across seven states. The first week focused on awareness through various activities such as NukkadNatak, Atal Jal Rath/publicity van, PaaniChaupal, pamphlet distribution, Calendars, Stickers, press conferences, Akashwani radio spots, exhibitions, school competitions, Expert Talks, Plantation drives, and distribution of Vegetable Seed/Millet seed Kits. The second week focused on theme-based activities related to water conservation and efficient agricultural water use, featuring on-site demonstrations of groundwater measuring equipment, rain gauges, and water quality testing. The campaign's activities were widely publicized through social and print media, with state and local newspapers publishing articles highlighting the objectives of the Atal BhujalYojana.

As recommended by the Hon'ble Committee, the Government of India has already decided to organize 'Jal Pakhwada' from 16th to 30th April, every year in all schools, educational institutions of all states/UTs in an appropriate manner with active involvement of students and teachers. A D/O letter dated 01.02.2024 **(Annexure –III)** has already been sent from Secretary, M/o Education to all concerned state authorities to organize Jal Pakhwada and to include 'workshops on water conservation' in school syllabi. Action Taken Report on these directions has also been sought from states.

Further, in the direction of fulfilling the Government's vision of a 'Jal Samridh Bharat' or 'Water Prosperous India', the National Water Awards have been instituted by this Ministry from 2018. The National Water Awards focus on encouraging the good work and efforts made by various individuals and organizations and seek to create awareness among people about the importance of water and motivate them to adopt best water use practices. The event provides an opportunity to all people and organizations to forge a strong partnership and further strengthen public participation in water resource conservation and management activities. Currently, the awards are being given away in 10 categories to choose the Best among the States, Districts, Village Panchayats, Urban Local Bodies, School/Colleges, Industries, Individuals etc.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of the Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 20

Capacity Building

Audit observed that no action was taken on four out of 12 recommendations made by an Expert Group constituted for benchmarking of various activities of CGWB with international best practices, on capacity building in CGWB. These four recommendations included attending of international conferences and presentation of important findings by selected CGWB officers/staff; development of a mentorship programme between CGWB and international experts to provide one on-one training for specialized hydro- geologic techniques and application; attendance at scientific conferences; and providing of references by CGWB on its website for self-training in the field of hydrogeology. Thus, in spite of these recommendations being of considerable importance for CGWB with respect to its future infrastructure and human resource requirements, CGWB failed to take action on these recommendations. The Department accepted that recommendations were not implemented completely. The Committee are of the considered opinion that state of the art infrastructure and world class technological knowhow in the field of Ground water management are crucial for preserving one of the most crucial natural resources available for the citizens of the country. The Committee therefore recommend that Central Ground Water Board may take expeditious action to ensure that recommendations of the report of the Expert Group for augmenting its infrastructure, technological upgradation and for capacity building are implemented without further delay. The Committee are of the opinion that out of these four recommendations the Ministry should initially strive to develop the mentorship programme between CGWB and international experts as well as providing references for self training in the field of hydrogeology. The Committee also recommend that the department may initiate suitable steps to bring best practices being followed across the world in the field of ground water management to the country. The Ministry may also consider technology exchange with friendly countries which are following the latest technologies in the field of Ground Water Management.

Action Taken by Ministry

In line with the recommendations of the Expert Group, Central Ground Water Board has taken several steps for technological upgradation. A separate component “Strengthening of Infrastructure for Technological upgradation” has been included in the EFC memo of GWMR scheme with separate fund provisions. Modern geophysical equipment like imaging systems, Ground TEM and chemical equipment like ion chromatographs, ICPMS, TOC analyzer etc. have been procured. The chemical labs have been upgraded and 11 out of 16 labs are now NABL accredited.

Provisions have also been included in the GWMR scheme for international training. International Trainings for professionals of CGWB and State governments were organized under NHP as well as under GWMR scheme. CGWB officers were also made part of official delegations to countries which are following the latest technologies in the field of Ground Water Management.

To incorporate the best international practices and adopt latest technologies available across the World in the field of ground water management, CGWB is actively participating in collaborative studies as a part of International MoUs of Jal shakti with other countries like European Union, Hungary, Denmark, Australia, Netherlands, Israel etc. Ministry of Jal shakti has also compiled a compendium on international best practices in water management, which highlights the best practices in the G20 countries. The compilation is available on the website of the Ministry.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 21

Schemes/Initiatives of States/UTs for management of Ground Water

The Committee note that to tackle the problems affecting quality and quantity of ground water, States/UTs implemented various schemes for water supply, irrigation, ground water recharge, effluent treatment, etc. It has been highlighted by audit that while some of the schemes implemented in the States were effective in improving the condition of ground water levels in the States, there were schemes in which the envisaged targets were not achieved and therefore, needed better control and implementation to ensure the desired results. Audit observed deficiencies in schemes of some states. These included lack of analysis of ground water level data before recommending proposals for construction of tube wells (Bihar); delay in finalization of project on Ground Water Recharge action plan (Delhi); shortfall in the activities of State Ground Water Conservation Mission, lag in achievement of targets for implementing the use of sprinkle irrigation (Uttar Pradesh), etc. The Committee are of the considered opinion that apart from necessary handholding of States, the Ministry may augment efforts towards turning Ground Water Management into a National Mission for all stakeholders and impress upon the State Governments to review the performance of their schemes related to ground water and take measures to ensure that the envisaged results are achieved by adopting an integrated approach for recharge/augmentation of ground water.

Action Taken by Ministry

The Government of India, upholding the spirit of cooperative federalism, has taken up several initiatives, covering both urban and rural areas of the country, in the form of Jal Shakti Abhiyan-Catch the rain campaign which is focused on mass mobilization and sensitization for water conservation, protection and judicious use. Implementation of Atal BhujalYojana in select water stressed areas of the country is a participatory groundwater

management scheme aimed at providing support to the State governments and grassroot stakeholders so that they can manage their groundwater resources sustainably. Ministry has prepared and shared the master plan for groundwater recharge for the whole country with the State governments; it contains the types, numbers of the artificial recharge structures which are feasible as per the local hydro geological conditions to augment groundwater resources. Implementation of groundwater regulation guidelines dated 24.09.2020, preparation and circulation of the GW model bill for adoption by states so that States can regulate and manage their groundwater resources on their own. The Government of India has formalized National Water policy prioritizing the water usage and its protection & conservation. The Ministry is sharing best practices on water conservation, has instituted National Water Awards to promote water conservation efforts in the country, is issuing advisories forwaterconservation and rejuvenation and to support Jal Jeevan Mission by way of devising methodologies for source sustainability, has prepared of SOP on groundwater quality, implementing National Hydrology Project (NHP), International trainings etc. These initiatives involving stake-holders like state governments, district administrations, private sector, NGOs and local communities are being pursued in mission mode. The aim is to set sustainable groundwater management agenda on the top of priority. Necessary support and handholding to the departments/officials of the state governments is being provided by way of imparting trainings by Rajiv Gandhi National training and ground Water Research Institute (RGNGWTRI), joint field visits to the sites of ongoing schemes and projects, technical support in the planning of the new schemes/projects, sensitization for source sustainability etc.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 22

SUSTAINABLE DEVELOPMENT GOALS AND GROUND WATER

Sustainable development is a crucial goal that requires collective efforts to ensure a prosperous and resilient future for people and the planet. The United Nations adopted the 2030 Agenda for Sustainable Development, consisting of 17 goals and 169 targets. Goal 6 specifically focuses on ensuring the availability and sustainable management of water and sanitation for all. While the responsibility for managing water resources lies with the state governments, the Central Government has taken steps to achieve SDG 6 through initiatives like the Jal Jeevan Mission and Atal BhujalYojana. While taking note of the steps taken by

the Government towards achieving SDG No. 6, the Committee urge the Government to expedite the efforts to ensure that clean water and sanitation for the citizens of the country is available within a time bound manner.

Action Taken by Ministry

The Government of India initiated Jal Jeevan Mission (JJM)–HarGhar Jal in August, 2019 with the aim to provide sufficient, clean water at affordable cost to every rural household. and providing potable drinking water to quality-affected habitations is one of the priorities under Jal Jeevan Mission.
At the time of announcement of Jal Jeevan Mission, only 3.23 Crore households were reported to have tap water connections. Since then, as reported by States/ UTs as on 30.01.2024, more than 10.98 Crore additional rural households have been provided with tap water connections under JJM. Thus, as on 30.01.2024, out of 19.27 Crore rural households in the country, more than 14.21 Crore (73.76%) households are reported to have tap water supply in their homes. To achieve the goal of JJM in the whole country with speed and scale, number of steps have been taken which inter alia include joint discussion and finalization of annual action plans (AAP) of States/ UTs, regular review of implementation, capacity building and knowledge sharing through workshops/ conferences/ webinars and field visits by a multi-disciplinary team to provide technical support, etc. The Operational guidelines for the implementation of Jal Jeevan Mission – HarGhar Jal were firmed up in consultation with State Governments and other stakeholders working in water sector and the same was shared with States. Further, the department also coordinated and followed-up with other agencies/ authorities for various clearances like forest/ environment, highway, railways, etc. with respect to drinking water project/ schemes.

Moreover, Under Jal Jeevan Mission 10% weightage is given to the habitations affected with water contaminations. All Arsenic (600 habitations) and Fluoride (428 habitations) affected habitations are covered with community water purification plants.

States/UTs have been advised to plan and implement piped water supply schemes of bulk water transfer based on safe water sources such as surface water sources or alternative safe ground water sources for the villages with water quality issues.

Also, a ‘Handbook on Drinking Water Treatment Technologies’ has been released for guidance of officials of States/UTs presenting therein consolidated details about various technologies available in market for treating different type of contaminations to provide safe drinking water to rural households.

Further, under AMRUT 2.0, Pey Jal Survekshan (PJS) has been undertaken in 485 AMRUT cities which will instill healthy competition among cities and act as a monitoring tool for water quality and mission accelerator. Toolkit was launched on 9.09.2022 and workshops were conducted to train all ULBs for assessment. The web portal for PJS was launched on 01.10.2022 and on-ground assessments started from December 2022. More than 5 lakh citizen responses were captured, direct observation and assessments were carried out in 1,047 sewage treatment facilities, 830 water treatment facilities, 1023 water bodies and 786 parks with RWH provision.Overall, under PJS, more than 25,000 water samples were

collected and the results/outcomes of PJS 2021-22 are currently under evaluation by MoHUA.

Further, the Government of India in February 2020, approved Phase-II of the Swachh Bharat Mission-Grameen (SBM-G) with a total outlay of Rs. 1,40,881 crores to focus on the sustainability of the ODF status and to cover the villages with Solid and Liquid Waste Management (SLWM) that would transform villages from ODF to ODF Plus by 2024-25.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 23

<u>Targets relating to Ground Water</u>

Target 6.4-Annual ground water withdrawal against net annual availability

The Committee note that the NITI Aayog is responsible for coordinating the SDGs in India. For Goal 6, the targets identified include increasing water-use efficiency, protecting water-related ecosystems, and supporting local community participation in water management. Regarding annual ground water withdrawal against net annual availability (Target 6.4), the audit revealed that the annual groundwater withdrawal had increased, with several districts exceeding the target of 70% withdrawal against net annual availability. While the Ministry reported some improvement in the overall stage of Ground Water extraction level in the country, the Committee emphasize the need for concerted efforts to achieve the SDG targets and reduce groundwater extraction to the desired extent.

Action Taken by Ministry

Concerted efforts are being made by the Central Government, State Governments, and other agencies to achieve the SDG targets. Recent assessment (2023) of dynamic ground water resources by CGWB and State agencies shows that overall stage of ground water extraction has decreased from 63.33% in 2017 to 59.26% in 2023. Further, the proportion of “safe” assessment units have increased from 62.6% in 2017 to 73.1% in 2023 while the number of over-exploited assessment units have decreased from 17% to 11% during the same period. Successive assessment of ground water resources during 2017,2020, 2022 and 2023 have shown consistent improvement in ground water scenario. Post monsoon water levels for the year 2022 when compared with average post monsoon water level of

last ten years (2012-21) show that about 61% of the wells monitored have registered rise in ground water levels.

In order to reduce the over- dependence on groundwater and to ensure better and sustainable management National Water Policy (2012) has been formulated by Department of Water Resources, RD & GR, which envisages evolving an agricultural system which economizes on water use and maximizes value from water, and bringing in maximum efficiency in use of water and avoiding wastages. The Policy has been forwarded to all States/UTs concerned Ministries/Departments of Central Government for adoption. Further, Government of India is implementing Jal Shakti Abhiyan (JSA) in the country in which special emphasis is being given for rainwater harvesting / groundwater recharge. First JSA was launched in 2019 in water stressed blocks of 256 districts which continued during the years 2021, 2022 &2023 (across entire country both rural and urban areas) with the primary aim to effectively harvest the monsoon rainfall through creation of artificial recharge structures, watershed management, recharge and reuse structures, intensive afforestation and awareness generation etc. JSA for the year 2024 has been launched by Hon'ble Minister of Jal Shakti on 9th March 2024 with the theme “Nari Shakti se Jal Shakti”.

Hon’ble Prime Minister has launched AmritSarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of AzadikaAmritMahotsav.
Ground Water regulation guidelines dated 24th September, 2020, apart from regulating the abstraction of ground water by industries through NOC mechanism, advise States/UTs for crop rotation/diversification, review of free/subsidised electricity policy, to bring suitable water pricing policy in Agriculture etc.

Atal BhujalYojana was launched in 2019 is targeted at sustainable ground water management through convergence among ongoing schemes through active participation of local communities and stakeholders. The scheme is being implemented in water stressed areas in 7 States and currently the ministry is working on a proposal for its expansion to more number of states. The scheme incentivizes demand side management by promoting micro irrigation practices like drip/sprinkler system, crop diversification from high water consuming to low water consuming crops, pipe distribution networks etc. and also focuses on creating mass awareness to drive in behavioral change at individual level.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

(Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 24

Target 6.6-By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Regarding Target 6.6, the Committee have been informed that CGWB is preparing the aquifer mapping and management plan (for groundwater) for the entire country which is likely to be completed by 31 Mar 2023. It has also been communicated that for facilitating States to take appropriate measures for sustainable groundwater management, the management plans including those in the agriculture sector (like plans for crop diversification, sprinkler system, drip irrigation etc.) are being shared with the respective State Governments. In this regard, the Committee note that the target 6.6 was to be achieved by 2020. Hence there is already a delay in meeting a global commitment within timelines with regard to Target 6.6. The Committee, therefore, urge the Ministry to ensure that coordinated efforts, both at the Centre and State level are taken to finish aquifer mapping and management plan in a time bound manner. Further, the Committee desire that sustainable ground water management plans like crop diversification, sprinkler system and drip irrigation may be given large scale publicity especially in rural areas to promote judicious use of water and to arrest indiscriminate wastage of ground water in the country.

Action Taken by Ministry

Aquifer mapping and management plans have been completed for the entire targeted area of 25.15 lakh sq.km. The ground water management plans include both supply side interventions and demand side interventions. The demand side interventions are designed to decrease water consumption by recommending Micro irrigation like sprinkler system, drip irrigation at suitable locations and crop diversification as per the area suitability. These plans have been prepared at block level and compiled in the district reports.

Further, to disseminate these recommendations, all the reports have been shared with concerned district officials and implementing agencies. All the reports are uploaded on the CGWB website with easy access. For publicity at grassroot level, Public Interaction Programs (PIP) are being organized at for the benefit of the stakeholders including farmers. So far CGWB has organized 1394 public interaction programmes in which nearly 1,21,000 persons have participated and Six regional workshops (Guwahati, Bengaluru, Chandigarh, Jodhpur, Patna and Nagpur) were conducted by CGWB to disseminate the State/UT wise NAQUIM outputs.

In the direction of better management of ground water resources and reducing the dependence on it, Department of Agriculture & Farmers Welfare is implementing Per Drop More Crop (PDMC) component of Pradhan MantriKrishiSinchayeeYojana (PMKSY) which is operational from 2015-16 in the Country. The PMKSY-PDMC mainly focuses on water use efficiency at farm level through precision/micro irrigation. Besides promoting precision irrigation (Drip and Sprinkler Irrigation System) & better on-farm water management practices (to optimize the use of available water resources), this component also supports micro level water storage or, water conservation/management activities to supplement Micro Irrigation. Further, Under the Atal BhujalYojana of this ministry, states are incentivized for adopting water efficient agricultural practices like switching over to drips/sprinklers, crop

diversification to less water incentive crops, mulching etc. Creating mass awareness for community participation and bring in behavioral change in the population is also a major component of the Yojana.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 25

Target 6 b- Local communities' participation in water management

Regarding Target 6-b, the Committee note that the National Water Policy (2012) envisages that declining ground water levels in over-exploited areas need to be arrested by introducing improved technologies of water use, incentivizing efficient water use and encouraging community based management of aquifers. The Committee highlight the lack of action taken on promoting local community participation in groundwater management, which was initially proposed under the Ground Water Management and Regulation Scheme. Although the Atal BhujalYojanahas been launched in seven states, the Committee urge the Ministry to expand its scope to cover the entire country and provide updates on the outcomes achieved through the scheme. As the participatory management was envisaged to enable the community and stake holders to monitor and manage the ground water as common pool resources themselves, a coordinated effort involving Government departments, research institutes, Panchayati Raj Institutions, civil society organizations and stakeholders at village level is a pre- requisite. The Committee urge the Ministry to involve local communities in coordination with Members of Legislative Assemblies, Panchayati Raj Institutions and State government functionaries at the village level in cleaning, desilting and restoring water bodies which can act as natural recharge points. The local administration may be instructed to monitor water levels in reservoirs/ponds/ wells/baolis etc. through use of technologies like Geo Tagging and Remote Sensing.

Action Taken by Ministry

Government of India launched Jal Shakti Abhiyan (JSA) in 2019, a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. JSA is being continued since then and the 5th edition of JSA for 2024-25 with theme 'Nari Shakti se Jal Shakti' has been launched by the ministry in March 2024.

Hon'ble Prime Minister has launched AmritSarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country by involving local communities through convergence.

The objective of Atal BhujalYojana is sustainable ground water management through community participation in selected water stressed areas in the participating states of the country.

To achieve these objectives, concerted efforts are being made by all stake holders including Government departments, civil society organizations and local stake holders.

NGOs are engaged by the participating States as District Implementation Partners (DIPs) which facilitate handholding of the Gram Panchayats (GP) in various aspects of the scheme, including development of water budgets and Water Security Plans (WSPs) and community mobilization. Further, trainings & capacity building at Gram Panchayat level is done for Village Water & Sanitation Committees (VWSCs).Various State Government departments are involved for implementation of the interventions under WSPs.

Multidisciplinary experts having requisite experience in executing/supporting the scheme with focus of water management through community participation have been engaged by NPMU, SPMU and DPMU for effective implementation of the scheme.

As part of the institutional arrangement for implementation of Atal BhujalYojana and for overall administration management and coordination of the scheme, a National Inter-Departmental Steering Committee has been constituted as apex body with the Secretary (DoWR, RD & GR) as Chairman and representatives of M/o Agriculture & Farmers Welfare, D/o Land Resources, D/o Rural Development, D/o Panchayati Raj, D/o Drinking Water & Sanitation, M/o New & Renewable Energy, Ministry of Power, NITI Aayog and Secretaries of Nodal Departments of participating States as members.

The proposal for expansion of Atal BhujalYojana is under consideration. Further, Repair, Renovation & Restoration (RRR) of Water Bodies (WBs) is a, component of Pradhan MantriKrishiSinchayeeYojana (PMKSY) – HarKhetKoPani (HKKP) a Centrally sponsored scheme which is being implemented by Ministry of Jal Shakti. Under the scheme, financial assistance is being provided to the State Governments for renovation, repair and restoration of identified water bodies.

Government has recently completed the first Census of Water bodies in convergence with the Sixth round of Minor Irrigation Census (reference year 2017-18), under the centrally sponsored scheme- "Irrigation Census". The objective of the scheme is to develop a national database of all water bodies in the country.

In the India-WRIS portal, both rural and urban water bodies are being mapped, with each water body having been assigned a unique identification number.

Vetting comments of Audit

Steps being taken to expand the scope to cover entire country and updates on its outcomes achieved, may be intimated to the PAC.

Final Reply of Ministry

The proposal for the expansion of Atal Bhujalyojana to cover additional water stressed states is under consideration. Department of Expenditure, Government of India (**DoE**) vide its Office Memorandum dated 05.08.2024 has accorded 'in-principle' approval for expansion of Atal BhujalYojana with an outlay of Rs. 8,200 crore in five States with the condition that the scheme may be restructured as a Centrally Sponsored Scheme. Therefore, all 5 states have been requested to provide their consent to the scheme being converted from Central Sector Scheme to a Centrally Sponsored Scheme.

Further, understanding the need to promote participatory ground water management through diverse means, a new campaign titled 'Jal Sanchay Jan Bhagidari'- A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat with a vision to make rain water harvesting a mass movement in the country. Under JSJB, community led construction of rain water harvesting & artificial recharge structures across the country has been taken up in mission mode with a vision to install more than a million such structures in various public and private buildings in towns and villages, by bringing all stakeholders together.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 26

OTHER ISSUES

<u>High Yielding Variety Seeds Consuming Less Water</u>

The Committee note that Indian Council of Agricultural Research (ICAR). Ministry of Agriculture & Farmers Welfare has identified/developed high yielding short duration varieties of wheat and paddy seeds that consume less water and can provide breeder seeds on submission of indent by the State Government. The Committee also note that Central government issues advisories to States/UTs from time to time to promote crop rotation, crop diversification and use of less water intensive crops to reduce excessive water use. The groundwater guidelines dated 24 Sep 2020 issued by the Department also advise States/UTs for promoting crop diversification/rotation/other initiatives to reduce over-dependence on groundwater. The Committee have also been informed by the Ministry that the Department is implementing the Atal BhujalYojana in certain water stressed Gram Panchayats (GPS)/Districts of seven States in the country to ensure judicious utilization of by all concerned. The Committee in this regard are of the considered opinion that keeping in view the fact that major component of Ground Water in the country is utilised for irrigation related activities in the agriculture sector, it is imperative that the farmers of the country are

encouraged to take up crops that are not water intensive. The Committee also note that the Government has decided to celebrate 2023 as the year of Millets. In this regard, the Committee recommend that the Ministry support this mission by aligning it with policy measures, including budgetary support and financial incentives for the farmers of the country.

Action Taken by Ministry

Ministry of Jal Shakti has been advocating shifting to water efficient crops as a measure for ground water conservation. The management plans prepared as a part of NAQUIM programme as well as the water security plans under Atal BhujalYojana contain recommendations for shifting to water efficient crops in suitable areas. National Water mission also promotes crop diversification and less water consuming crops.

Further, in the wake of the United Nation's General Assembly (UNGA) declaration of 2023 as International Year of Millets, Government of India has decided to celebrate IYOM-2023 to make it peoples' movement so that the Indian millets, recipes, value added products are accepted globally. In view of health benefits of the millets, the objectives are creating domestic & global demand of millets, focusing on strategies to enhance climate resilient Nutri-cereals production, consumption, export, branding etc.

In order to promote and increase the production and productivity of millets (jowar, bajra, ragi and small millets), the Department of Agriculture & Farmers Welfare has been implementing a Sub-Mission on Nutri Cereals (Millets) under National Food Security Mission (NFSM) since 2018-19. Currently, NFSM-Nutri Cereals (Millets) is being implemented in identified districts of 14 states of the country. North Eastern and Hilly States have been given flexibility to implement the programme as per their need in any district. Under the programme/scheme, the incentives are provided to the farmers, through the states/UTs, on crop production and protection technologies, cropping system based demonstrations, production & distribution of certified seeds of newly released varieties/hybrids, Integrated Nutrient and Pest Management techniques, improved farm implements/tools/ resource conservation machineries, water saving devices, capacity building of farmers through trainings during cropping season, organizing events/workshops, distribution of seed mini kits, publicity through print and electronic media etc. The allocation of fund under NFSM-Nutri Cereals (millets) during 2022-23 and 2023-24 is Rs. 308.67 core and 362.50 crore respectively.

In addition, Government of India also provides flexibility to the states for state specific needs/priorities under RashtiryaKrishiVikasYojana (RKVY). The states can promote Millets (Shree Anna) under RKVY with approval of State Level Sanctioning Committee (SLSC) headed by Chief Secretary of the State.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 27

National Water System- Desalination and sustainable exploitation of natural water resources

The Committee note that Department of Science & Technology (DST) has been identified as the nodal agency for Desalination Mission. Further DST has launched national calls for proposals to identify and assess the role of desalination for India's water security and evolve time-bound research, development, assessment and demonstration of the program for desalination technologies at various stages of Technology Readiness Levels. The Committee also note that a field demonstration project to mitigate water problems in the Ausa town of Marathwada region in Maharashtra had been supported by DST for the production of potable water by providing a desalination facility integrated with reject water management. While noting that the desalination facility in Ausa Town of Maharashtra has been successfully handed over to the local Administrative body for further operation and maintenance, the Committee desire that the Government must seriously consider replicating the same in areas having similar water situations across the country after assessing the outcome of project in Ausa Town. The Committee strongly recommend that technological interventions in the field of desalination for India's water security must be given top priority.

Action Taken by Ministry

As highlighted by the Hon'ble Committee, saline water available in the aquifers can also be gainfully utilized.

Accordingly, NAQUIM studies in Delhi have recommended potential use of saline ground water available in Delhi and a separate section named Use of saline water has been included in the NAQUIM report of NCT Delhi. As a part of the NAQUIM studies, volume of saline groundwater in various parts of Delhi has been estimated. The report recommends that this saline water can be used after blending for other than drinking purposes.

Also, CGWB officers have visited the desalination plant in Ausa Town and as suggested by the Committee, a study is proposed to be taken up to assess the outcome of the project and explore its applicability in other parts.

Further, the Water Technology Initiative (WTI) developed by Department of Science & Technology (DST- Water Technology Initiative (WTI)) is a solution-centric program that encourages developing indigenous, affordable, and robust research-based solutions for existing and emerging water challenges facing the country in terms of water quality, quantity, recycling and reuse, etc. The WTI efforts in the area of Desalination are as under:

- WTI under the directions of NITI Aayog, launched a call for enrolment of solution providers in the area of Desalination Technologies, compiled and published a compendium in the year 2019 to bring out the status of Global and National Desalination Technologies.

- WTI supported the test bed facility of Solar-powered Forward Osmosis (FO) plant at Ramanathapuram District, Tamil Nadu with a seawater intake and reject facility and successfully demonstrated in 2022.
- A National Call for Proposals in 2021 in the area of Desalination technologies for Applied Research, Technology Assessment, Convergent Solutions, and Centre of Excellence (CoE) streams has been initiated. Under the call, a dedicated CoE has been established and also supported varied application-led RD & D projects in the area of sustainable Desalination technologies.

DST-WTI has assured to take the necessary action for the development and further strengthen the desalination technologies in the future. Along with above CSIR has also developed certain technologies in the field of desalination.

Vetting comments of Audit

The Ministry stated the R&D in the field of desalination has been developed and also certain technologies have been developed by CSIR. In this connection, it may be stated to PAC that to what extent this R&D and developed technologies are being implemented in the desalination process.

Besides the steps taken to initiate desalination facility in other areas having similar water situations across the country may also be intimated to the PAC.

Final Reply of Ministry

Lakshadweep Administration approved setting-up of 6 desalination plants based on the Low Temperature Thermal Desalination (LTTD) technology with capacity of producing 1.5 lakh litre per day in the islands of Amini, Androth, Kadamat, Chetlat, Kalpeni and Kiltan of the Union Territory of Lakshadweep. The fresh water produced at the desalination plants of Kalpeni and Amini are being supplied locally since June, 2022 and January 2023 respectively on trial basis and the project activities are at different stages of completion at the remaining four Islands vizAndroth, Chetlat, Kadamat&Kiltan. Earlier, three desalination plants based on the LTTD technology have been developed and demonstrated at Kavaratti, Agati and Minicoy. The capacity of each of these LTTD plants is 1 Lakh litre of potable water per day.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 28

Rain Water Harvesting

Regarding initiatives on Rain Water Harvesting, the Committee have been informed about Jal Shakti-Abhiyan-Catch the Rain, Atal BhujalYojana, Guidelines issued to all states on 24th September 2020 etc. The Committee also note that Ministry of Housing & Urban Affairs (MOHUA) has formulated guidelines for the States to adopt measures suitable to

local conditions, such as Unified Building Bye Laws (UBBL) of Delhi, 2016, Model Building Bye Laws (MBBL), 2016 and Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines, 2014, wherein adequate focus has been given on requirement of rainwater harvesting and water conservation measures. As per MBBL, all buildings having a plot size of 100 sq.m. or, more shall mandatorily include the complete proposal of rainwater harvesting. 33 States/ UTS have adopted the features of these Bye Laws. While noting the efforts made towards ground water recharge and rainwater harvesting, the Committee strongly feel that the Government needs to do much more in this direction. The Committee desire that concerted efforts with renewed vigour may be taken to explore the feasibility of building rainwater harvesting structures and for taking up water conservation measures on the existing Government buildings both at the Centre and at the State level. The Committee also recommend that steps be initiated to persuade all state governments to ensure construction of rainwater harvesting structures in buildings that are to be constructed in future across the country, in harmony with Model Building Bye Laws and relevant guidelines, to facilitate rainwater harvesting for secure future of the country with regard to Ground Water. A status report may be furnished to the Committee.

Action Taken by Ministry

GW Model Bill-2005 was circulated to all states/UTs to regulate and control the development and management of GW, which, *inter alia,* provides details on Rainwater harvesting for GW recharge.

CGWB has prepared a Manual on Artificial Recharge of Groundwater in 2007, which contains information on various aspects of investigation techniques for selection of sites, planning and design of artificial recharge structures, their economic evaluation, monitoring and technical auditing of schemes and issues related to operation and maintenance of these structures. Roof top rain water harvesting, suitable especially for urban habitations is also dealt with in detail.

Further, the Jal Shakti Abhiyan- Catch the rain campaign is an initiative of Ministry of Jal Shakti for promoting rainwater harvesting, including rainwater harvesting in government and private buildings.

The campaign is aimed at nudging the states and all stakeholders to create Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata with people’s active participation. In 2021, 2022 & 2023, Jal Shakti Abhiyanwas implemented across all districts of the country. Under this more than 1.2 Cr water related works have been undertaken across the country. Further, 661 Jal Shakti Kendras have been set up and 527 districts have prepared District Water Conservation Plans.

Model Building Bye Laws (MBBL), 2016 circulated by the Ministry of Housing & Urban Affairs include provisions of Rainwater Harvesting in buildings including Government office/ buildings and most of the States have adopted it.

However, as recommended by the Hon'ble Committee the matter is being taken up with the State Governments and MoHUA for adoption of rooftop rainwater harvesting in buildings that are to be constructed in future across the country in accordance with Model Building Bye Laws and relevant guidelines.

Vetting comments of Audit

Specific details of steps taken for adoption of rooftop rainwater harvesting in buildingsthat are to be constructed in future across the country in accordance with Model Building Bye Laws and relevant guidelines be provided to the PAC.

Final Reply of Ministry

As per MBBL, “all buildings having a plot size of 100 sq.m. or more, while submitting the building plans for sanction, shall mandatorily include the complete proposal of rainwater harvesting”. It is also prescribed that in urban areas the concerned Authority shall constitute a Rainwater Harvesting Cell which will be responsible for enforcement and monitoring of the provisions of Rainwater Harvesting and completion certificates/NOCs to the buildings shall be issued only after inspection and confirmation of the structures having been installed. SO far, 35 States/UTs have adopted the Bye-Laws and incorporated their provisions into their own regulatory framework. Further, a new campaign titled ‘Jal Sanchay Jan Bhagidari’- A Community-Driven Path to Water Sustainability in India has been launched by the Hon’ble Prime Minister on September 6, 2024, in Surat, Gujarat with a vision to make rain water harvesting a mass movement in the country. Under JSJB, community led construction of rain water harvesting & artificial recharge structures across the country has been taken up in mission mode with a vision to install more than a million such structures in various public and private buildings in towns and villages, by bringing all stakeholders together.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

Observation/ Recommendation No. 29

Conclusion

Ground Water being a lifeline of the populace of the country and also the engine of growth for the nation's economy, its efficient management is of paramount importance and Ground Water Management and Regulation (GWMR)"scheme launched by the government during the XII Five Year Plan (2012-17) was a welcome step towards this end. During the implementation of the Scheme, it has been observed that to achieve the envisaged objectives of Ground Water Management, plethora of related schemes have been floated both at the Centre and the States such as 'Atal BhujalYojana", "Jal Shakti Abhiyan: Catch the Rain", Pradhan MantriKrishiSinchayeeYojana, 'Mukhyamantri Jal SwavlambanAbhiyan' in Rajasthan, 'JalyuktShibar' in Maharashtra, 'SujalamSufalamAbhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, NeeruChettu' in Andhra Pradesh, Jal JeevanHariyali in Bihar, 'Jal Hi Jeevan' in Haryana, 'PaniBachao, Paisa Kamao' in Punjab and Kudimaramath scheme in Tamil Nadu etc. As perused from the records, most of these Schemes have been brought in with designated objectives. The Committee while noting the well intentioned Schemes of Central as well as State Governments, are of the opinion that there is a need to synchronise these schemes to the larger objective of achieving sustainable Ground Water management. The Committee therefore recommend the Ministry to devise a robust coordinating mechanism at the Central level and impress upon the States to follow suit.

Action Taken by Ministry

The Government of India is committed to achieve the sustainable groundwater management objectives by upholding the constitutional spirit of federalism. Effective coordination, handholding, technical and financial support are being provided to the States in this regard so that they can plan and implement schemes/projects based on local hydrogeological and climatic conditions and achieve sustainability in groundwater management.

In order to bring focus on water management with active participation of concerned Central Ministries/Departments and State Governments, National Water Mission has organized the 1st ever All India Annual State Ministers' Conference on Water at Bhopal on 5-6th January, 2023. The primary objective of the workshop was to seek and strengthen the partnership with the States and stakeholder Ministries and to achieve a shared vision in order to manage water as a precious resource in an integrated manner with holistic and inter disciplinary approach to water related issues. A total of 300+ delegates from 33 States/UTs participated in the Conference and 22 key recommendations emerged out of the conference. A taskforce has been constituted under the chairpersonship of Special Secretary, DoWR, RD& GR for formulating an integrated and comprehensive strategy for implementation of the recommendations made during the above said conference. Taking it forward, Ministry of Jal Shakti has organized the "All India Secretaries' Conference'' on 23rd and 24th January, 2024 at Mahabalipuram, Tamil Nadu to ideate, share best practices & action taken on the recommendations suggested by the Centre and the States during "1st All India Annual State Ministers Conference on Water". It is to apprise the committee that various important schemes of the ministry like Jal Shakti Abhiyan, Atal BhujalYojana, National Hydrology Project, GWM &R etc. are being implemented in close association with state and district administrations. Outcomes in many of these schemes is to be achieved through convergence with various ongoing state projects and thorough coordination is ensured throughout by way of having national/state project monitoring units, steering and empowered committees and frequent field level visits by officials. Taking cue from the ground truthing experiences, state/national level deliberations and outcomes achieved so far, the ministry intends to further strengthen its coordination with states by improving the institutional framework and enhancing the inter-operability of personnel.

Vetting comments of Audit

In view of the reply, no further comment.

Final Reply of Ministry

No further action taken/required.

Department of Water Resources, River Development and Ganga Rejuvenation O.M. No. T-66013/1/2023-GW Section-MOWR dated 14.01.2025

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CHAPTER III

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE REPLIES RECEIVED FROM THE GOVERNMENT

NIL

CHAPTER IV

OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

NIL

CHAPTER V

OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES/NO REPLIES

NIL

NEW DELHI:
27 March, 2026
6 Chaitra, 1948 (*Saka*)

K.C. Venugopal
Chairperson,
Public Accounts Committee

APPENDIX-II

(Vide Paragraph 5 of Introduction)

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/RECOMMENDATIONS OF THE PUBLIC ACCOUNTS COMMITTEE CONTAINED IN THEIR SEVENTY FOURTH REPORT (SEVENTEENTH LOK SABHA)

(i)	**Total number of Observations/Recommendations**	**29**
(ii)	**Observations/Recommendations of the Committee which have been accepted by the Government:** **Para Nos. 1, 2, 3, 4, 5, 6,7,8,9,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24,25,26,27,28 and 29**	**Total: 29** **Percentage: 100**
(iii)	**Observations/Recommendations which the Committee do not desire to pursue in view of the reply of the Government:** **Para No. – NIL**	**Total: 0** **Percentage: 0**
(iv)	**Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and which require reiteration:** **Para No. – NIL**	**Total: 0** **Percentage: 0**
(v)	**Observations/Recommendations in respect of which the Government have furnished interim replies:** **Para No. – NIL**	**Total: 0** **Percentage: 0**

MINUTES OF THE TWENTY THIRD SITTING OF THE PUBLIC ACCOUNTS COMMITTEE (2025-26) HELD ON 27th MARCH, 2026.

The Public Accounts Committee (2025-26) sat on Friday, the 27th March, 2026 from 1500 hrs to 1610 hrs in Samanvay-3, Parliament House, New Delhi.

PRESENT

Shri K. C. Venugopal - Chairperson

MEMBERS

LOK SABHA

2. Shri Jagdambika Pal
3. Shri Jai Parkash
4. Dr. C M Ramesh
5. Smt. Aparajita Sarangi
6. Dr. Amar Singh
7. Shri Anurag Singh Thakur

RAJYA SABHA

8. Shri Shaktisinh Gohil
9. Dr. K Laxman
10. Shri Sukhendu Sekhar Ray
11. Dr. Sudhanshu Trivedi

LOK SABHA SECRETARIAT

1.	Smt. Mamta Kemwal	-	Joint Secretary
2.	Smt. Archna Pathania	-	Director
3.	Shri Alok Mani Tripathi	-	Deputy Secretary
4.	Shri Pankaj Kumar Sharma	-	Deputy Secretary
5.	Ms. Malvika Mehta	-	Deputy Secretary
6.	Dr. Faiz Ahmad	-	Deputy Secretary

OFFICERS OF THE OFFICE OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

1.	Shri Anand M. Bajaj	-	Dy. C&AG
2.	Shri Pravir Pandey	-	Addl. Dy. C&AG
3.	Shri Samar Kant Thakur	-	Addl. Dy. C&AG

4.	Shri Biren Parmar	-	Director General
5.	Ms. Reena Saha,	-	Director General
6.	Shri Mukul Jamloki	-	Dy. Director

PART A

XXXXX	XXXXX	XXXXX	XXXXX
XXXXX	XXXXX	XXXXX	XXXXX
XXXXX	XXXXX	XXXXX	XXXXX

PART B

1. Thereafter, for the second agenda of the Sitting – consideration and adoption of Draft Reports, the Hon'ble Chairperson invited suggestions of the Members on the following Draft Reports:-

(i) **********

(ii) **********

(iii) **Draft Report on Action taken by the Government on Observations/ Recommendations of the Public Accounts Committee contained in their 74th Report (17th LS) on "Ground Water Management and Regulation"**

(iv) **********

(v) **********

(vi) **********

3. After some deliberations, the Committee adopted the aforesaid Draft Report and authorised the Chairperson to finalise the Report in the light of factual verification done by the Audit.

The Committee then adjourned.

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