

13

**STANDING COMMITTEE ON WATER RESOURCES
(2021-22)**

SEVENTEENTH LOK SABHA

**MINISTRY OF JAL SHAKTI – DEPARTMENT OF WATER RESOURCES, RIVER
DEVELOPMENT AND GANGA REJUVENATION**

DEMANDS FOR GRANTS (2021-22)

**[Action Taken by the Government on the Observations / Recommendations
contained in the Tenth Report (Seventeenth Lok Sabha) of the Standing
Committee on Water Resources]**

THIRTEENTH REPORT



LOK SABHA SECRETARIAT

NEW DELHI

December, 2021 / Agrahayana, 1943 (Saka)

**THIRTEENTH REPORT
STANDING COMMITTEE ON WATER RESOURCES
(2021-22)**

(SEVENTEENTH LOK SABHA)

**MINISTRY OF JAL SHAKTI – DEPARTMENT OF WATER RESOURCES, RIVER
DEVELOPMENT AND GANGA REJUVENATION**

DEMANDS FOR GRANTS (2021-22)

**(Action Taken by the Government on the Observations / Recommendations
contained in the Tenth Report on ‘Demands for Grants (2021-22) of the Ministry
of Jal Shakti - Department of Water Resource, River Development and Ganga
Rejuvenation)**

Presented to Lok Sabha on 07.12.2021

Laid on the Table of Rajya Sabha on 07.12.2021



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2021 / Agrahayana, 1943 (Saka)

W. R. C. No. 68

Price : Rs.

© 2021 By Lok Sabha Secretariat

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha
(Sixteenth Edition) and Printed by

CONTENTS

Composition of the Committee	Page (iii)
INTRODUCTION	(v)
CHAPTER - I Report.....	
CHAPTER – II Observations/Recommendations which have been accepted by the Government.....	
CHAPTER - III Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies.....	
CHAPTER - IV Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee.....	
CHAPTER - V Observations/Recommendations in respect of which final replies of the Government are still awaited.....	

ANNEXURES

I Minutes of the First Sitting of the Committee held on 21.10.2021	
II Analysis of Action Taken by the Government on the Observations/Recommendations contained in the Tenth Report (Seventeenth Lok Sabha) of the Committee.....	

COMPOSITION OF THE STANDING COMMITTEE ON WATER RESOURCES

(2021-22)

Dr. Sanjay Jaiswal - Chairperson

LOK SABHA

2. Shri Vijay Baghel
3. Shri Bhagirath Chaudhary
4. Shri Chandra Prakash Choudhary
5. Shri Guman Singh Damor
6. Dr. Heena Vijaykumar Gavit
7. Dr. K. Jayakumar
8. Shri Dhanush M. Kumar
9. Shri Sunil Kumar
10. Shri Mohammad Akbar Lone
11. Shri Kuruva Gorantla Madhav
12. Shri Nihalchand
13. Shri Hasmukhbhai Somabhai Patel
14. Shri Sanjay Kaka Patil
15. Shri P. Ravindhranath
16. Ms. Nusrat Jahan Ruhi
17. Smt. Agatha K. Sangma
18. Shri Pratap Chandra Sarangi
19. Shri Chandan Singh
20. Shri D. K. Suresh
21. Shri Shivkumar C. Udasi

RAJYA SABHA

22. Sardar Balwinder Singh Bhunder
23. Shri Harshvardhan Singh Dungarpur
24. Dr. Kirodi Lal Meena
25. Smt. Mausam Noor
26. Shri Arun Singh
27. Shri Subhash Chandra Singh
28. Shri Rewati Raman Singh
29. Shri Pradeep Tamta
30. Vacant
31. Vacant

SECRETARIAT

1. Shri M.K. Madhusudhan - Joint Secretary
2. Shri R. C. Sharma - Additional Director
3. Shri Gaurav Jain - Assistant Committee Officer

INTRODUCTION

I, the Chairperson, Standing Committee on Water Resources (2021-22) having been authorized by the Committee to submit the Report on their behalf, present the Thirteenth - Report on the Action Taken by the Government on the Observations/Recommendations contained in their Tenth Report (Seventeenth Lok Sabha) on Demands for Grants (2021-22) of the Ministry of Jal Shakti -Department of Water Resources, River Development & Ganga Rejuvenation.

2. The Tenth Report of the Committee was presented to Lok Sabha and laid on the Table of Rajya Sabha on 8 March 2021. The Action Taken replies of the Government to all the recommendations contained in the Report were received in this Secretariat on 02 August, 2021.

3. The replies of the Government were examined and the Report was considered and adopted by the Committee at their sitting held on 21.10.2021.

4. An analysis of the Action Taken by the Government on the Observations/Recommendations contained in the Tenth Report (Seventeenth Lok Sabha) of the Committee is given in Annexure-II.

New Delhi
02 December, 2021
11 Agrahayana, 1943 (Saka)

Dr. SANJAY JAISWAL
Chairperson
Standing Committee on Water Resources

CHAPTER I

REPORT

This Report of the Standing Committee on Water Resources (2021-22) deals with the Action Taken by the Government on the Observations / Recommendations contained in their Tenth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Jal Shakti – Department of Water Resources, River Development & Ganga Rejuvenation for the year 2021-22. The Tenth Report was presented to Lok Sabha on 08.03.2021 and was laid on the Table of Rajya Sabha on the same date. The Report contained 24 Observations/Recommendations. Action Taken Notes in respect of all the Observations/Recommendations contained in the Report have been received from the Government. These have been examined and categorized as follows:

- (i) Observations/Recommendations which have been accepted by the Government (Chapter II):
- Para Nos. 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22-2.23 and 2.25
(Total –22)
- (ii) Observations / Recommendations which the Committee do not desire to pursue in view of the Government's replies (Chapter III):
- Para Nos. NIL
(Total – NIL)
- (iii) Observations / Recommendations in respect of which replies of the Government have not been accepted by the Committee (Chapter IV):
- Para Nos. 2.7 and 2.24
(Total – 2)
- (iv) Observations / Recommendations in respect of which final replies of the Government are still awaited (Chapter V):
- Para Nos. NIL
(Total – NIL)

2. The Committee will now deal with the action taken by the Government on some of the observations / recommendations in the succeeding paragraphs.

A. Increasing Committed Liability

Recommendation No. 4 (Para No. 2.4)

3. The Committee observed that out of total budgetary allocation of Rs. 9022.57 crore for FY 2021-22 in respect of the Department, as much as Rs. 3600 crore which was almost 40 % of the total allocation had been kept for repayment of loans and other liabilities under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) leaving a net budgetary allocation of only Rs. 5422.57 crore for the various schemes /activities of the Department. Besides the Department had been permitted to borrow an amount of Rs. 5130 crore from the NABARD in BE 2021-22 for bridging the resource gap. The Committee were of the view that as the increase in committed liability of the Department on account of huge borrowing and servicing of loans, which was a large proportion of the budgetary allocation had greatly impaired the leverage of the Department in financing its ambitious and important projects. The Committee urged the Department to approach the Ministry of Finance for one time waiving off its committed liability so as to enable the Department to allocate more funds to the various important programmes which were facing resource crunch. The Committee would like to be apprised of the steps taken by the Department in this regard.

4. The Department in its action taken note has replied as follows:

“During 2016-17, ninety-nine (99) on-going Major/Medium irrigation projects under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) were prioritized in consultation with States, for completion in phases along with their Command Area Development & Water Management (CADWM) works. Funding mechanism through NABARD has been approved by the Government for both Central and State share, as many of the projects were held up due to financial constraints at that time. The main reason was the lack of matching availability of funds for the scheme at central level and State level through budgetary resources. Many a time, resources for central share were available but the States concerned could not provide their matching share and vice versa. The LTIF loan from NABARD provided for has indeed been serving its purpose by providing assured central assistance whenever required, and also State share, wherever the States have availed this option. However, keeping in view the large proportion of budgetary allocation required for servicing of loan, as recommended by the Hon'ble Committee, the issue of one time waiver for the committed liabilities under LTIF loan from NABARD would be taken up by the Department with Ministry of Finance”.

5. The Committee note with satisfaction that in pursuance of their recommendation, the Department have stated that the issue of one time waiver of its committed liability under Long Term Irrigation Fund (LTIF), LTIF loan from National Bank for Agriculture and Rural Development (NABARD) would be taken up by them with Ministry of Finance. The Committee urge upon the Department to vigorously pursue the matter with the Ministry of Finance so that one time waiver of committed liability under LTIF loan is acceded to by the Ministry of Finance at the earliest and is suitably reflected in the Budget Estimates 2022-23 of the Department of Water Resources, River Development and Ganga Rejuvenation. The Committee would like to be apprised of the progress made in this regard within 3 months of presentation of this Report to Parliament.

B. Ground Water Management and Regulation

Recommendation No. 6 (Para No. 2.6)

6 The Committee noted that the Ground Water Management and Regulation Scheme had been launched with an objective for overall development, management and regulation of ground water in the country. However, the Committee observed that actual expenditure under this head had been lower vis-a-vis allocated funds especially against BE allocation. In FY 2016-17, the actual expenditure was only Rs. 112.25 crore as against BE of Rs. 303.39 crore. Similarly only 254.44 crore was spent against BE allocation of Rs. 500 crore in 2017-18 and in FY 2018-19, only Rs. 260.20 crore was incurred against BE allocation of Rs. 450 crore. The Committee also found that barring the financial year 2015-16, the budgetary allocations had been constantly reduced at RE level leaving lesser resources for carrying out the programme. Given the fact that the ground water levels in many parts of the country are rapidly depleting coupled with deteriorating water quality to a large extent, the Committee urged the Department to make concerted efforts for full utilization of allocated budgetary resources under such an important Scheme. Further, the Committee recommended that the accountability should be fixed on the persons and implementing agencies for under-utilization of funds under the scheme as it had very implications for health of groundwater resources in the country. The Committee also found wide variation between BE and RE allocations under this scheme every year. For the year 2016-17, the BE allocation was Rs. 303.39 crore which was reduced to Rs. 115 crore at RE stage. Similarly, for 2017-18 and 2018-19, BE was pegged at Rs. 500 crore and 450 crore, whereas at RE stage it was reduced to Rs. 275 crore and Rs. 260 crore respectively. This indicated lack of proper financial planning and foresightedness on the part of the Department in estimating the actual requirements at the beginning of Financial year resulting in huge alteration in budgetary allocations at RE stage. Besides, frequent adjustment of the funds at RE stage undermined the budget credibility. The Committee therefore recommended the Department to take steps to streamline its budgetary estimation system so as to avoid huge variation in BE and RE allocations. The Committee recommended that with a view to increasing the efficacy in the implementation of the Scheme, the Ground Water Coordination Committees should also be constituted at District level as well.

7. The Department in its action taken note has replied as follows:

“To ensure better utilization of the budgetary allocations, a Project Management Consultant (PMC) has been engaged in CGWB for streamlining various procurements. This has resulted in improved

utilization of funds in 2019-20 and there was no significant variation in BE and RE during this period. It is further submitted that since 2017-18, barring the year 2020-21 (impacted due to COVID-19 pandemic), an expenditure of around Rs.250 crore to Rs.275 crore is being incurred under the GWM&R scheme and all out efforts are being made to ensure full utilisation of the allocated budget.

State Ground Water Coordination Committees have been constituted for effective sharing of outputs of NAQUIM programme with the State Governments. The point of constitution of Groundwater Co-ordination Committee at district level is noted for appropriate action”.

8. The Committee are happy to note from the Action Taken Reply that engagement of a Project Management Consultant (PMC) in Central Ground Water Board (CGWB) has resulted in improved utilization of funds in 2019-20 and that there was no significant variation in the Budget Estimate (BE) and Revised Estimate (RE) during this period. The Committee expect that CGWB would continue its efforts for strict monitoring so that the funds allocated are fully utilized and that there is no let up in this regard. As regards, constitution of Ground Water Coordination Committees at district level, the Department in its Reply has merely stated that they have noted for appropriate action. The Committee trust that the Department would take concrete steps in this regard so that district level Water Coordination Committees are set up in a time bound manner in all the States.

C. Need for a study to assess the water use efficiency

Recommendation No. 7 (Para No. 2.7)

9. The Committee noted that though a 'Sahi Fasal' campaign had been launched by National Water Mission to encourage farmers in the water stressed areas to grow crops which were not water intensive and use water very efficiently, no specific study with regard to measuring water use efficiency in respect of any crop had been undertaken by the National Water Mission (NWM) / Central Water Commission (CWC). The Committee were also perturbed to learn that the data regarding water use efficiency in respect of major cereal and commercial crops in India vis-a-vis international standards was also not available at present. The Committee noted from the submission of the Department that the water use in the irrigation sector was the biggest component of total water demand in the country which was appx. 78.50% of the total water demand in the 2010, and was projected to be around 72.50% and 68.40% in the year 2025 and 2050 respectively. The Committee were of the considered view that in the present scenario of fast depletion of the water resources both surface and ground water improving the water usage efficiency was the need of the hour and therefore recommended the Department to commission a study to assess the water use efficiency regarding the major cereal and commercial crops in India vis-a-vis international standards in order to ensure prudent and economic use of water by agricultural sector.

10. The Department in its action taken note has replied as follows:

“Details regarding water use efficiency in respect of major cereal and commercial crops in the irrigation sector in India vis-a-vis international standards are not available. However, water use efficiency of completed irrigation projects is assessed for optimum utilization of water resources. In this regard, ‘Guidelines for improving Water Use Efficiency in Irrigation, Domestic & Industrial Sectors’ has been published by the Central Water Commission (CWC). In order to make a realistic assessment of water use efficiency of completed major/medium irrigation projects; during 10th & 11th Five year Plans, CWC conducted 35 water use efficiency studies for completed major/medium irrigation projects in 7 (seven) States. The overall project efficiency of the studied projects ranged from 13 to 62 % with the group weighted average (on culturable command area basis) of the projects studied at around 36 %. The studies, in general, revealed inadequate maintenance, dilapidated condition of canals due to silting, cracks in lining, weed growth, inefficient operation, low water rates, poor participatory irrigation management etc. Corrective project specific structural or non-structural interventions were detailed in the study reports to improve the water use efficiency of the projects. The findings were conveyed to the respective States for follow-up for enhancing water use efficiency of the irrigation projects in their States aiding in better water management.

Baseline studies have been undertaken by National Water Mission for improving water use efficiency in irrigation and studies have been awarded to North Eastern Regional Institute for Water and Land

Management (NERIWALM- Tezpur), Water and Land Management Training Institute (WALMTARI-Hyderabad), Water and Land Management Institute (WALMI – Aurangabad) and Centre for Water Resources Development and Management (CWRDM - Kerala)”.

11. The Committee having noted during the examination of DFG (2021-22) that the data regarding water use efficiency in respect of major cereal and commercial crops in India vis-a-vis international standards is not available in the Department, have categorically recommended that a study be commissioned to assess the water use efficiency regarding major cereal and commercial crops in India vis-a-vis international standards in order to ensure prudent and economic use of water by agricultural sector. The Department in its Action Taken Reply has again reiterated their position that data/details in the matter are not available with them. What is more perplexing to the Committee the ineptitude and is lackadaisical approach of the Department in the matter, wherein they have not bothered to mention whether any constraints/difficulties are being faced by them in commissioning the study. While expressing their serious displeasure, the Committee reiterate their recommendation that the Department should explore all possible ways and means in cooperation and coordination with other Departments/Ministries to commission a study to assess the water use efficiency in respect of major cereal and commercial crops in the country without any further delay.

D. Accelerated Irrigation Benefit Programme (AIBP)

Recommendation No. 9 (Para No. 2.9)

12. The Committee noted that 99 projects in 7 phases had been prioritized for completion by December 2019 under the AIBP. However, as on as on 31.12.2020, only 44 Projects could be completed under the scheme despite taking a huge loan of Rs. 37,061.77 crore (including central assistance and state share loan through NABARD) between the years 2016-17 till 2020-21 from NABARD for financing these Projects. The Committee were apprehensive that going by the pace at which these projects were being constructed, it would take decades to complete the envisaged projects. Since the financing of these Projects were done through LTIF by way of loan, the Committee recommended that Department should take steps to streamline and strengthen its monitoring mechanism and use latest technologies and to plug the loopholes and the deficiencies observed in the implementation of the projects, so that all the pending projects were completed within the revised schedule and that there were not further cost and time over-runs.

13. The Department in its action taken note has replied as follows:

“The Department is seized of the above issue highlighted by the Hon’ble Committee. In this regard, the following steps have been taken to seek time bound implementation of the projects, within the prescribed cost:

- A.** *Assured funding is being done through Long Term Irrigation Fund (LTIF), by loan from NABARD, not only for Central Share, but also for State Share, Both central assistance and State share for these projects are being provided from NABARD under LTIF. State share is being provided at an interest rate of 6% and rest of the interest cost is borne by the Central Government.*
- B.** *Further, the procedure for approval of revised cost for providing central assistance for these prioritized projects has been simplified as below:*
 - i. No separate clearance/Advisory Committee clearance/Investment Clearance is required for funding of the projects, which have cost escalation of upto 20% on approved cost (AIBP component) as on 01.04.2012 and no separate investment clearance form DoWR, RD&GR is required.*
 - ii. Fast track proforma clearance from Central Water Commission (CWC) is sufficient for projects where revised cost may be more than the 20% over and above approved cost as on 01.04.2012 and no separate investment clearance from DoWR, RD & GR is required.*
 - iii. Further, cost escalation over and above 20% on approved cost as on 01.04.2012 shall be borne by the concerned State Government for which it can avail loan from NABARD under Long Term Irrigation Fund (LTIF). While one time 20% increase in the estimated cost of the 99 projects (and 7 phases) has been inbuilt in the scheme at the time of its formulation, in*

case cost enhancement is required afterwards, a simplified Fast Track Proforma Clearance mechanism has been prescribed, though the central assistance amount does not change.

- C. Each of the 99 prioritised projects, right till its completion, is reviewed at various levels. During reviews, the bottlenecks are identified and measures to overcome them, are deliberated upon.*
- D. The Department has also made efforts to resolve the issues pertaining to other agencies of Government of India, such as Railways, National Highway, Environment & Forests, etc. which are causing delay in completion of the 99 prioritised projects.*
- E. The delay in completion of irrigation projects occurs due to various reasons such as paucity of funds, inter-State issues, delay in land acquisition and environment and forest clearance, rehabilitation & resettlement issues, contractual & local disputes etc.*
- F. To avoid land acquisition, the Department has propagated large scale adoption of underground piped network for distribution system. In order to guide the concerned State Departments, guidelines for the same have also been published by Central Water Commission and circulated to the States.*
- G. An online MIS has been developed for updating the progress and facilitate review of the projects.*
- H. Remote sensing based monitoring is being done through Bhaskaracharya Institute of Space Applications and Geoinformatics”.*

14. The Committee express their satisfaction that the issue of slow progress in implementation of Accelerated Irrigation Benefit Programme (AIBP) as highlighted by the Committee in their recommendation has been noted by the Department and a number of steps have been taken by it to accelerate the completion of the AIBP Projects. The Committee express the hope that these measures would help in faster implementation of the AIBP projects as these projects are financed by borrowing from Long Term Irrigation Fund (LTIF) under NABARD, which had imposed a committed liability on the Department.

E. Himalayan Glacier System

Recommendation No. 23 (Para No. 2.24)

15 Keeping in view the fact that the glaciers in the Himalayan region are constantly retreating and melting due to climate change and global warming, the Committee recommended the Department to commission a comprehensive study to assess the behaviour of Himalayan glaciers as well as the impact of the Hydro Electric Projects (HEP) if any, located in the region in causing Glacial Lake Outburst Flood. The Committee would categorically like to be apprised of the steps taken by the Ministry in this regard, within six months from the presentation of this Report to the Parliament.

16. The Department in its action taken note has replied as follows:

“The studies being carried out under Department of Science and Technology sponsored NMSHE project has been completed by National Institute of Hydrology and the expected to be submitted soon. As soon as the report is available a copy of the same will be made available to the Committee.

A proposal has been framed by Central Water Commission (CWC) to install the advance warning system in the upper reaches of river system in the Himalayan region to the extent possible for monitoring of Glacial Lake Outburst Floods (GLOFs) with an estimated cost of Rs 95.80 crore and the same has been included in the draft EFC Memo of DWRIS for the period 2021-26. The salient features of the proposal are:

Phase-1 (0-2 years)

In the phase-1, the sensors/equipment's including siren system will be installed in upper reaches of river system as far as possible near to identified lakes and downstream up to the existing network of CWC. This will provide gauge to gauge warning to the local inhabitants for few hours so that precious life can be saved due to disaster of glacial lake outburst. The work of preparation of inventories of glacial lakes of 0.25 ha and above will also be carried out during this phase. All glacial lakes having size greater than 10 ha will be monitored on monthly basis during monsoon season in this phase.

Phase-2(2-5 years)

In the Phase-2, vulnerability index of lakes will be find out based on satellite input and ground verification as far as possible. In addition to this, the frequency of glacial lake monitoring of vulnerable lakes will be increased from currently monthly to weekly basis. Also, glacial lake outburst modelling of selected vulnerable lakes will be carried out periodically and based on the result affected area in the downstream will be identified. On the basis of this input, if required additional sensors/equipment's will be installed.

A team of experts was constituted by National Disaster Management Authority (NDMA), New Delhi for joint study to understand the causes of the flash floods in river Rishiganga and Dhauliganga and suggest mitigation/preparedness measures to prevent such flood events. The major scope of the joint study are hazard assessment, monitoring, forecasting and Early Warning Systems, suggestions for reducing risks etc.

The team carried out a field visit in March 2021 in which all the sites were visited by the team members. The report, being prepared by NDMA, is under progress and in final stage. The steps suggested / undertaken after the joint study will be made available to the Committee. Also, necessary action will be taken on the report of the study”.

17. From the Action Taken Reply furnished, the Committee note with concern that no specific reply has been furnished by the Department on the recommendation of the Committee for commissioning a comprehensive study to assess the behaviour of Himalayan glaciers as well as the impact of the Hydro Electric Projects (HEP) if any, located in the region in causing Glacial Lake Outburst Floods. Keeping in view the ever increasing instances of mountain hazards/disasters, the Committee reiterate their recommendation that a comprehensive study be carried out for assessing the behaviour of Himalayan regions and the impact of the Hydro Electric Projects (HEP) in causing Glacial Lake Outburst Flood. The Committee would like to be apprised of the steps taken by the Ministry in this regard within 3 months of presentation of this Report.

CHAPTER - II

OBSERVATIONS / RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation 1 (Para 2.1)

Analysis of Demands for Grants

The Committee noted that a total budgetary allocation of Rs. 9022.57 crore comprising of expenditure of Rs. 8700.80 crore under Revenue Section and Rs. 321.77 crore under Capital Section, had been made for the Ministry of Jal Shakti - Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD &GR) for the financial year 2021-22 to implement various schemes/projects which were under the administrative control of the DoWR, RD & GR. The Committee noted with concern that against the Department's projected BE of Rs.13380.86 crore including Rs.12392.35 crore for schemes, due to resource constraints, allocation to the Department had been pegged at Rs. 9022.57 crore. The Committee further noted that during 2020-21, the budgetary allocation of Rs. 8960.39 crore made at BE stage was later revised to Rs. 7262.09 crore at RE stage. The overall budgetary allocation for Financial Year (FY) 2021-22 had shown less than 1 % increase i.e. a meagre increase of 0.69% as compared to the FY 2020-21 Budgetary Estimates (BE) which seemed to be grossly inadequate to meet the targets assigned to the Department. The Committee expressed their concern over the current financial state of the Department and its inability in convincing Ministry of Finance to make adequate BE allocations, notwithstanding the fact that the Secretary, DoWR, RD & GR time and again flagged the issue of inadequate budget before the Committee. The Committee recommended the Ministry to take up the matter with Ministry of Finance so that the budgetary allocations is enhanced suitably to achieve the physical targets set during the year 2021-22.

Reply of the Government

Despite the fact that the Department was able to successfully meet the expenditure ceilings given by the Ministry of Finance for every month and quarter in the last fiscal year, the BE allocations of Rs. 8,960.39 crore were reduced to Rs. 7,262.09 crore at RE stage due to constraints faced by Indian economy in the wake of pandemic COVID-19. The BE allocation of Rs. 9,022.57 crore for FY 2021-22 is significantly less than the projected requirement of Rs. 13,380.86 crore. In deference to the recommendation of Hon'ble Committee, the Department will take up the matter with Ministry of Finance to enhance the budgetary allocations to an adequate level at RE stage.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation 2 (Para 2.2)

The Committee were constrained to note that most of the major Schemes under the Department had undergone a substantial cut of at least 25% in their budgetary allocations vis-a-vis 2020-21 (BE allocations) barring two schemes namely Development of Water Resources Information System and Atal Bhujal Yojana, which had witnessed substantial increase in budgetary allocations (25% and 65%. respectively) vis-a-vis 2020-21 (BE allocations). The Committee had been apprised by the Department that due to truncated budget for 2020-21 at the RE stage, they could release only 10% of the advance payment against 40% to the States in some schemes, which was certainly a committed liability that would be carried forward to next fiscal year. The Committee were of the view that this would hurt the already strained finances of the State Governments. The Committee were of the view that cut in projected allocation by Rs. 4358.29 crore would compel the Department to scale down execution of schemes and might prevent the Department from launching any new programme/scheme in the Fiscal year 2021-22. The Committee therefore recommended that the Department should take up the matter with the Ministry of Finance to suitably raise allocation at the Revised Estimates (RE) stage so that the priorities and timelines set for implementation of programmes / schemes of the Department in the FY 2021-22 were not adversely affected.

Reply of the Government

Keeping in view the requirement of funds during FY 2021-22, which is significantly more than the BE allocation for 2021-22, the Department will take up the matter of enhancement of budgetary allocation with Ministry of Finance at RE stage as recommended by the Hon'ble Committee.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation 3 (Para 2.3)

Under-Utilization of Budgetary Resources

The Committee noted that over the years the Budgetary Support / allocation to the Department had been gradually decreasing at RE stage barring the fiscal year 2017-18. The Committee were of the opinion that continuous decrease in budgetary allocation at RE level was not only symptomatic of the poor financial planning by the Department but also render the original budgetary allocations losing their sanctity. It also indicated the inability of the Department to cash the cheques the Centre wrote. The Committee, therefore, recommended that the Department should focus on streamlining and strengthening the monitoring mechanisms and plug loop holes in the implementation of various schemes / programmes in order to ensure that the outlays earmarked for them were fully utilized and there might not be any scope for decrease at RE stage. Further, the Department should diligently carry out pre-budget exercise and also applied best available methodology in making more pragmatic and prudent budgetary estimates in order to avoid major deviations at RE level.

Reply of the Government

Though the budgetary allocations to the Department may appear to be gradually decreasing at RE stage in absolute numbers, the reduction rate at RE stage has been gradually improving over the years. For FY 2020-21, realistic projections of estimates for budgetary allocations were made but due to the constraints faced by the whole nation resulting from the unprecedented COVID-19 pandemic, BE level allocation of Rs. 8,960.39 crore for FY 2020-21 was reduced to Rs. 7,262.09 crore at RE stage despite the fact that the Department was able to fully meet the expenditure ceilings given by Ministry of Finance for every month and quarter. The Department was able to incur an expenditure of Rs. 7,244.08 crore (i.e. 99.75% of RE allocations) in FY 2020-21, despite lock-downs and expenditure curbs in the first half of FY 2020-21.

With regard to the efforts for efficient utilization of budgetary allocation, the expenditure position is being monitored regularly at various levels to ensure optimum utilization of funds. The Department has also initiated an expenditure dashboard for regular monitoring and intervention of the senior management and heads of organizations.

Programme Divisions are regularly coordinating with the State Governments at various levels through monitoring and field visits. Review meetings are also held with field offices/states/stakeholders to expedite the progress.

Project Management Units (PMUs) have been set up under the schemes of National Hydrology Project (NHP), Atal Bhujal Yojana, Pradhan Mantri Krishi Sinchai Yojana (PMKSY) etc. to ensure effective implementation and timely completion of projects with prudent utilization of funds.

MEP/ QEP ceilings has also been fixed in consultation with the Programme Division for timely utilization of funds from the beginning of the financial year itself, so that, the expenditure is met as per need.

Due to constant monitoring, the pace of expenditure has been healthy in the first quarter of current financial year and an amount of Rs 160.18 crore over and above the QEP limit of Rs 1,830.14 crore could be spent with the approval of Ministry of Finance.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation 4 (Para 2.4)

Increasing Committed Liability

The Committee observed that out of total budgetary allocation of Rs. 9022.57 crore for FY 2021-22 in respect of the Department, as much as Rs. 3600 crore which was almost 40 % of the total allocation had been kept for repayment of loans and other liabilities under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) leaving a net budgetary allocation of only Rs. 5422.57 crore for the various schemes /activities of the Department. Besides the Department had been permitted to borrow an amount of Rs. 5130 crore from the NABARD in BE 2021-22 for bridging the resource gap. The Committee were of the view that as the increase in committed liability of the Department on account of huge borrowing and servicing of loans, which was a large proportion of the budgetary allocation had greatly impaired the leverage of the Department in financing its ambitious and important projects. The Committee urged the Department to approach the Ministry of Finance for one time waiving off its committed liability so as to enable the Department to allocate more funds to the various important programmes which were facing resource crunch. The Committee would like to be apprised of the steps taken by the Department in this regard.

Reply of the Government

During 2016-17, ninety-nine (99) on-going Major/Medium irrigation projects under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) were prioritized in consultation with States, for completion in phases along with their Command Area Development & Water Management (CADWM) works. Funding mechanism through NABARD has been approved by the Government for both Central and State share, as many of the projects were held up due to financial constraints at that time. The main reason was the lack of matching availability of funds for the scheme at central level and State level through budgetary resources. Many a time, resources for central share were available but the States concerned could not provide their matching share and vice versa. The LTIF loan from NABARD provided for has indeed been serving its purpose by providing assured central assistance whenever required, and also State share, wherever the States have availed this option. However, keeping in view the large proportion of budgetary allocation required for servicing of loan, as recommended by the Hon'ble Committee, the issue of one time waiver for the committed liabilities under LTIF loan from NABARD would be taken up by the Department with Ministry of Finance.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Comment of the Committee

(Please see Para No. 5 of Chapter – I of the Report)

Recommendation 5 (Para 2.5)

Atal Bhujal Yojana

The Committee noted that a new scheme namely Atal Bhujal Yojana (ATAL JAL) as approved by the Cabinet in December, 2019 had been launched in FY 2020-21 with an outlay of Rs. 6,000 crore, to be implemented over a period of 5 years (2020-21 to 2024-25). Out of the total outlay of Rs. 6,000 crore, 50% would be in the form of loan from the World Bank and the balance 50% would be in the form of matching contribution from the Government of India. The objective of the Scheme was to improve the management of groundwater resources in the water stressed areas through community participation in identified priority areas in 7 States, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh, by way of promoting community led ground water management and behavioral changes with primary focus on demand side management. The Committee noted that for FY 2020-21, the BE was kept at Rs. 200 crore which was reduced at RE stage to Rs. 125 crore i.e. by 37.5 %. During evidence the Department stated that a token supplementary demand was proposed to be made in the ongoing Budget Session of Parliament and it was expected that the RE allocations would be fully utilized once enabling supplementary grant was made available, as many proposals are in readiness and awaiting approval. However, given the fact that upto the third quarter of FY 2020-21 ending on 31.12.2020, only 29% of revised allocation could be utilized by the Department, the Committee were not much confident that the entire RE allocation would be utilized by the

end of Financial Year 2020-21 i.e. till 31.3.2021. The Committee further observed that though the scheme was being implemented in 80 districts of 7 States, at present all the over-exploited Blocks / Mandals / Taluks in 80 water stressed districts were not covered under the Scheme. The Committee did not agree with the Department's contention that the blocks and gram panchayats, in the identified districts, had been selected by the respective State Governments considering the prevailing hydrogeological conditions and criticality of ground water situation, since it was a pilot project, Central Ground Water Board (CGWB) should work more closely with State Governments to impress upon them to cover all the over-exploited blocks in the identified 80 water stressed districts. The Committee also noted that a number of States like Punjab, Tamil Nadu and Delhi having large number of districts where more than 50 % of Assessment Units (Blocks, Firqas, Mandals, Taluks) which have been categorized as 'Over-exploited' as per Dynamic Ground Water Resources of India, 2017 had not been covered under the scheme. The Committee recommended that the scheme should be broad based and implemented at Pan India level so as to cover all the water scarce regions and districts of the country particularly in those states having large number of over-exploited blocks. The Committee would like to apprise of the action taken by the Department in this regard within 3 months of presentation of this report.

Reply of the Government

Being a unique scheme with emphasis on community participation and demand side management being implemented for the first time in the country, plans to upscale Atal Bhujal Yojana to water-stressed districts in other parts of the country need to be considered based on the lessons learnt from the implementation of the present Scheme and its efficacy in improving the sustainability of ground water resources. For this reason, expanding the scheme to other water stressed areas of the country is proposed to be discussed in the mid-term review meeting, tentatively scheduled in 2022.

It is also worth mentioning here that Uttar Pradesh has decided to implement Atal Bhujal Yojana in the entire State using their own funds.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 6 (Para No. 2.6)

Ground Water Management and Regulation

The Committee noted that the Ground Water Management and Regulation Scheme had been launched with an objective for overall development, management and regulation of ground water in the country. However, the Committee observed that actual expenditure under this head had been lower vis-a-vis allocated funds especially against BE allocation. In FY 2016-17, the actual expenditure was only Rs. 112.25 crore as against BE of Rs. 303.39 crore. Similarly only 254.44 crore was spent against BE allocation of Rs. 500 crore in 2017-18 and in FY 2018-19, only Rs. 260.20 crore was incurred against BE allocation of Rs. 450 crore. The Committee also found that barring the financial year 2015-16, the budgetary allocations had been constantly reduced at RE level leaving lesser resources for carrying out the programme. Given the fact that the ground water levels in many parts of the country are rapidly depleting coupled with deteriorating water quality to a large extent, the Committee urged the Department to make concerted efforts for full utilization of allocated budgetary resources under such an important Scheme. Further, the Committee recommended that the accountability should be fixed on the persons and implementing agencies for under-utilization of funds under the scheme as it had very implications for health of groundwater resources in the country. The Committee also found wide variation between BE and RE allocations under this scheme every year. For the year 2016-17, the BE allocation was Rs. 303.39 crore which was reduced to Rs. 115 crore at RE stage. Similarly, for 2017-18 and 2018-19, BE was pegged at Rs. 500 crore and 450 crore, whereas at RE stage it was reduced to Rs. 275 crore and Rs. 260 crore respectively. This indicated lack of proper financial planning and foresightedness on the part of the Department in estimating the actual requirements at the beginning of Financial year resulting in huge alteration in budgetary allocations at RE stage. Besides, frequent adjustment of the funds at RE stage undermined the budget credibility. The Committee therefore recommended the Department to take steps to streamline its budgetary estimation system so as to avoid huge variation in BE and RE allocations. The Committee recommended that with a view to increasing the efficacy in the

implementation of the Scheme, the Ground Water Coordination Committees should also be constituted at District level as well.

Reply of the Government

To ensure better utilization of the budgetary allocations, a Project Management Consultant (PMC) has been engaged in CGWB for streamlining various procurements. This has resulted in improved utilization of funds in 2019-20 and there was no significant variation in BE and RE during this period. It is further submitted that since 2017-18, barring the year 2020-21 (impacted due to COVID-19 pandemic), an expenditure of around Rs.250 crore to Rs.275 crore is being incurred under the GWM&R scheme and all out efforts are being made to ensure full utilisation of the allocated budget. State Ground Water Coordination Committees have been constituted for effective sharing of outputs of NAQUIM programme with the State Governments. The point of constitution of Groundwater Co-ordination Committee at district level is noted for appropriate action.

Comment of the Committee

(Please see Para No. 8 of Chapter – I of the Report)

Recommendation No. 8 (Para No. 2.8)

Water Audit

The Committee were pleased to note that the Ministry of Jal Shakti had notified the guidelines for regulation and control of ground water abstraction in India on 24.09.2020. These guidelines included mandatory provision for conducting annual water audit by industries using more than 100 Kilo Litres Per Day(KLD) of ground water which were required to reduce their fresh water consumption by 20% over a period of three years. However, the Committee found that Water audit by the industries was to be carried out using their own funds. The Committee recommended that steps should be taken by the Department to ensure that bulk water consuming industries are complying with these guidelines.

Reply of the Government

Water audit has been made mandatory for all the industries withdrawing ground water more than 100 Kilo Litres Per Day (KLD). Such industries are required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports to the Central Ground Water Authority (CGWA) for renewal of NOC. The annual audit report will be examined by the Expert Appraisal Committee.

While the implementation and effectiveness of “General Guidelines for Water Audit and Water Conservation” rest with the concerned State Governments, CWC facilitates State Governments to formulate their own region-specific, project-specific, system-specific or service-specific guidelines. All the State Governments have been asked to ensure compliance in implementation of guidelines for ground water use.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 9 (Para No. 2.9)

Accelerated Irrigation Benefit Programme (AIBP)

The Committee noted that 99 projects in 7 phases had been prioritized for completion by December 2019 under the AIBP. However, as on as on 31.12.2020, only 44 Projects could be completed under the scheme despite taking a huge loan of Rs. 37,061.77 crore (including central assistance and state share loan through NABARD) between the years 2016-17 till 2020-21 from NABARD for financing these Projects. The Committee were apprehensive that going by the pace at which these projects were being constructed, it would take decades to complete the envisaged projects. Since the financing of these Projects were done through LTIF by way of loan, the Committee recommended that Department should take steps to streamline and strengthen its monitoring mechanism and use latest technologies and to plug the loopholes and the

deficiencies observed in the implementation of the projects, so that all the pending projects were completed within the revised schedule and that there were not further cost and time over-runs.

Reply of the Government

The Department is seized of the above issue highlighted by the Hon'ble Committee. In this regard, the following steps have been taken to seek time bound implementation of the projects, within the prescribed cost:

- I. Assured funding is being done through Long Term Irrigation Fund (LTIF), by loan from NABARD, not only for Central Share, but also for State Share, Both central assistance and State share for these projects are being provided from NABARD under LTIF. State share is being provided at an interest rate of 6% and rest of the interest cost is borne by the Central Government.
- J. Further, the procedure for approval of revised cost for providing central assistance for these prioritized projects has been simplified as below:
 - iv. No separate clearance/Advisory Committee clearance/Investment Clearance is required for funding of the projects, which have cost escalation of upto 20% on approved cost (AIBP component) as on 01.04.2012 and no separate investment clearance from DoWR, RD & GR is required.
 - v. Fast track proforma clearance from Central Water Commission (CWC) is sufficient for projects where revised cost may be more than the 20% over and above approved cost as on 01.04.2012 and no separate investment clearance from DoWR, RD & GR is required.
 - vi. Further, cost escalation over and above 20% on approved cost as on 01.04.2012 shall be borne by the concerned State Government for which it can avail loan from NABARD under Long Term Irrigation Fund (LTIF). While one time 20% increase in the estimated cost of the 99 projects (and 7 phases) has been inbuilt in the scheme at the time of its formulation, in case cost enhancement is required afterwards, a simplified Fast Track Proforma Clearance mechanism has been prescribed, though the central assistance amount does not change.
- K. Each of the 99 prioritised projects, right till its completion, is reviewed at various levels. During reviews, the bottlenecks are identified and measures to overcome them, are deliberated upon.
- L. The Department has also made efforts to resolve the issues pertaining to other agencies of Government of India, such as Railways, National Highway, Environment & Forests, etc. which are causing delay in completion of the 99 prioritised projects.
- M. The delay in completion of irrigation projects occurs due to various reasons such as paucity of funds, inter-State issues, delay in land acquisition and environment and forest clearance, rehabilitation & resettlement issues, contractual & local disputes etc.
- N. To avoid land acquisition, the Department has propagated large scale adoption of underground piped network for distribution system. In order to guide the concerned State Departments, guidelines for the same have also been published by Central Water Commission and circulated to the States.
- O. An online MIS has been developed for updating the progress and facilitate review of the projects.
- P. Remote sensing based monitoring is being done through Bhaskaracharya Institute of Space Applications and Geoinformatics”.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Comment of the Committee
(Please see Para No. 14 of Chapter – I of the Report)

Recommendation No. 10 (Para No. 2.10)

Repair, Renovation and Restoration (RRR) of Water Bodies

The Committee noted that RRR was a part of Pradhan Mantri Krishi Sinchai Yojana (PMKSY) - Har Khet Ko Pani (HKKP) Programme, the objective of which was revival of irrigation potential by improvement and restoration of water bodies along with other multiple objectives such as enhancing the tank storage capacity, ground water recharge, increased availability of drinking water, improvement of catchment of tank commands etc. It covered rural water bodies having minimum water spread area of 5.0 hectare and urban water bodies having water spread area from 2.0 hectare to 10.0 hectare. The Committee noted that at present the funding pattern under RRR scheme is 90 (central): 10 (State) for seven North Eastern States including Sikkim & three Hilly states (Himachal Pradesh, Jammu and Kashmir and Uttarakhand), while for General Category States/UTs excluding the special areas it is 25 (central): 75 (State). For project benefiting special areas, it is 60 (central): 40 (State). Considering the precarious financial situation of the States which was accentuated by COVID-19 pandemic, the Committee urged upon the Department to take up the matter with the Ministry of Finance for exploring the feasibility of changing the funding pattern to 90 (central): 10 (State) under the scheme. The Committee were concerned to note that under RRR scheme, against the release of Central Assistance (CA) of Rs. 79.65 crore during FY 2017-18, 30.601 thousand Ha of Irrigation Potential (IP) was created. However in the year 2019-20, as against CA of Rs. 64.79 crore made available, IP of only 5.274 thousand Ha could be created which was grossly inadequate. The Committee would, therefore, like to be apprised of reasons such a huge reduction in IP creation in 2019-20 vis-a-vis that of the year 2017-18.

Reply of the Government

In the continuation of the scheme during the period of 15th Finance Commission, i.e., 2021-2026, key revisions are proposed to make the scheme more attractive to the State Governments, and also to make it more inclusive, so that many States who have not shown much initiative in this regard, may also come forward.

Regarding reduction in IP creation during 2019-2020 vis-à-vis 2017-18, the reasons are as follows:

- a. Development cost for Repair, Restoration and Renovation of water bodies (RRR) is estimated to be about Rs. 1 to 1.25 lakh per hectare. With this yardstick, the creation of IP of 5,274 hectares against central assistance (CA) released of Rs. 64.79 crore appears to be reasonable.
- b. Further, the funding mechanism is such that initially a major part of CA is released as advance, which is then utilized by the States. If the mechanism spills over the financial year barrier, then there could be mismatch in year-wise IP creation, versus CA released.
- c. IP for 2019-20 may further increase subsequently, as in some cases, the reporting gets delayed.
- d. Further, for many schemes, the funding pattern is 25(C): 75(S). Thus, it being not attractive in many cases, the States complete the scheme from their own resources also, due to which the correlation between CA released and IP creation, gets distorted.

The funding mechanism of the scheme is such that advance payment is given to the State Government. The recommendations of the Committee for 90 (central):10 (State) share has been noted.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 11 (Para No. 2.11)

In so far as encroachment of water bodies and their unabated pollution, the Committee did not agree with the contention of the Department that the works related to protection and conservation and abatement of pollution in Water Bodies, came under the purview of State Government concerned. Considering the fact that central assistance was being provided to the States for taking repair, renovation and restoration of water bodies, the Department could not escape from its obligation by shifting the onus to the States on the plea that it belonged to States. The Committee, therefore, called upon the Department to take proactive measures in consultation with the respective States to prevent encroachments of water bodies and to abate pollution in water bodies.

Reply of the Government

The issue lies primarily in the domain of the State Government concerned. However, in order to nudge and facilitate the State Governments in this regard, the scheme of Repair, Renovation and Restoration of Water Bodies is being implemented by this Department, whereby financial support is provided. All the water bodies included under the RRR of Water Bodies scheme for the release of Central Assistance (CA) are encroachment free. Under Jal Shakti Abhiyan launched on 22.03.2021, the State Governments have been asked to undertake mapping of water bodies and take steps for removal of their encroachment.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 12 (Para No. 2.12)

MICRO IRRIGATION

The Committee noted that under CADWM scheme the Department of Water Resources, River Development & Ganga Rejuvenation provided financial assistance to the States for creation of Micro irrigation infrastructure in the canal irrigated commands. It was provisioned in the CADWM scheme that micro-irrigation shall cover at least 10% of the targeted CCA of the Project. Central Assistance @ 50% were being provided with a cost norm of Rs.50,000 per hectare for development of micro irrigation infrastructure covering construction of sump, installation of water pump, and laying of piped conveyance system up to the field head. The Committee were concerned to note that out of total CCA of 610000 hectares targeted to be developed with micro-irrigation infrastructure only 2.5% of Culturable command area (CCA) i.e. 15000 Ha had been developed till December, 2020. The Department had also informed that besides CADWM, under the extant scheme of PMKSY- Per Drop More Crop (PDMC) operated by Ministry of Agriculture and Farmer Welfare, the farmers could also avail financial assistance for installing devices – such as sprinkler/ rain gun/ drip sets etc. However, unwillingness of farmers to adopt micro-irrigation owing to high initial cost of micro-irrigation infrastructure was cited as the major constraint. The Committee were of the view that owing to the fact that agriculture sector was the biggest water consuming sector in India and that adverse impact of irrigation through conventional methods had manifested in the form of fast depletion of groundwater, water logging and declining soil health, micro-irrigation was the only way forward to achieve sustainability in agriculture sector. Therefore, the Committee recommended that the Ministry in consultation with Ministry of Agriculture and Farmers Welfare should find ways and means to propagate the micro irrigation by encouraging and incentivizing the farmers to adopt micro irrigation by hiking/enhancing the capital subsidies, and if necessary, review and revamp the CADWM scheme. Further the Department should make concerted efforts for convergence of the scheme with other schemes to reduce the high capital cost of micro irrigation equipment.

Reply of the Government

The recommendations of the Committee has been noted and efforts would be made in the matter in consultation with Ministry of Agriculture and Farmers Welfare.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 13 (Para No. 2.13)

Namami Gange

The Committee noted that the Government of India had launched the Namami Gange Programme to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of the National River Ganga and its tributaries with a total budgetary outlay of Rs.20,000 crore for the period from FY 2014 -15 till 31.12.2020. However, out of the earmarked amount of Rs.20,000 crore under the scheme, a total of Rs.9,781.38 crore had been spent under the various components till 31st December 2020. The Committee further noted that under the Namami Gange Programme, as on 31.1.2021, a total of 335 Projects had been sanctioned at an estimated cost of Rs. 29,578.05 crore, out of which expenditure of Rs. 10016.91 had been spent. Further, the Committee noted that since 2011, towards cleaning of Ganga, 156 Sewerage infrastructure projects (118 on main stem of Ganga and 38 on tributaries of Ganga) had been taken up with a sanctioned cost of Rs. 23521.27 crore for creation of new sewage treatment capacity of 3,785.46 Million Litres per Day (MLD), rehabilitation of 1081.89 MLD capacity and laying of around 5066.02 KM sewerage

network. However, as on December 2020, only 56 of these projects had been completed resulting in creation of 789.9 MLD of Sewerage Treatment Plant (STP) capacity (just around 21% of envisaged target) and laying of 3347.23 KM sewage network implying around 66% of the target. The Committee while appreciating the progress made under Namami Gange Programme, however, were constrained to observe that the implementation of this Programme had not been able to keep pace with the envisaged timelines. Taking cognizance of the slow pace of implementation of the projects and consequent lower expenditure incurred, the Committee urged upon the Department to make all out efforts so that Projects may now be completed in a time bound manner without any further delay and cost overruns. The Committee recommended that a Study be commissioned to analyse and assess the conditions of river beds on the basis of which, efforts may be made to maintain an optimum level of river bed.

Reply of the Government

The NMCG is continuously striving to complete projects/schemes taken up under Namami Gange Program within the schedule time period and within approved costs. As a result, most of the projects which have been sanctioned are being completed within the sanctioned timelines and mostly within the sanctioned amounts. The programme has gained momentum and utilization of funds has substantially picked up since FY 2017-18. The projects and schemes will be continued to be completed to the best possible extent within the laid down timeline and approved cost. So far as the recommendation to analyse and assess the condition of river beds through study is concerned, it is informed that:

1. The Himalayan rivers are characterized by exceptionally high sediment flux from the tectonically active hinterland. Apart from high sediment production, monsoon rainfall in the Himalayan hinterland further brings these sediments down into the alluvial reaches of the rivers where lower slopes and wider channels encourage natural deposition of sediments. As a result, many rivers have been aggrading through time in their alluvial reaches, thereby raising the river bed level. This often results into severe disasters such as frequent avulsion (rapid shifting of rivers) and extensive flooding. The human interventions such as dams and barrages have further aggravated the problem.

2. High sediment flux in these rivers is the primary cause for the rise in river bed indicating that sediment management should be an important component of river management strategies for the Himalayan rivers. Identification of aggradational stretches (rising river bed) must be done through historical analysis of satellite images and available maps, and focus should be on the long-term trend rather than one-time mapping. In addition to mapping the hotspots of aggradation, the associated processes such as channel dynamics and bank erosion should also be investigated and the causal factors (natural vs anthropogenic) should be established. Sediment management, based on strong understanding of sediment dynamics, should become an essential part of river management strategies. It is important to understand the root cause of exceptionally high sediment flux from the rivers which leads to rise in the river bed. Since several Himalayan rivers are trans boundary rivers, an integrated assessment of land cover changes, erosion and sedimentation at the trans-boundary level must be initiated. Strategic silt removal may be required in many reaches marked as 'hotspots' to maintain the sediment regime of the river, particularly the river level, to an acceptable level and to prevent any serious disaster. All ecological hotspots along the river should be monitored closely. The first level zoning of all such habitats needs to be carried out before planning any desilting activities and these areas should be excluded from the plans.

3. It is also informed that morphological studies play an important role in knowing the nature of rivers which helps in planning, designing and maintaining of flood protection/river training works and water resources projects. The morphological studies help in finding the vulnerable spots for bank erosion/deposition. The study of river morphology and implementation of suitable river training works have become imperative as large areas of the country are affected by floods every year causing severe damage to life and property in spite of existing flood control measure taken both by Central and State Governments. Problems are aggregating mainly due to large quantity of silt/sediment being carried and deposited in its downstream reaches of river. The special behavior of the river needs to be thoroughly understood for evolving effective strategies to overcome the problem posed by it.

This Department, through various organisations, carry out studies on rivers from time to time. The studies carried out in the recent past are as under:

Central Water Commission initiated morphological study of various rivers starting from Xth Plan using remote sensing technique through consultancy services from various institutions. Morphological studies of following sixteen rivers have been completed so far and study of two rivers are going on:

Sl. No.	Name of River	Name of Institution	Status
1	Gandak	CWPRS, Pune	Completed
2	Ghagara	NIH, Roorkee	Completed
3	Satluj		Completed
4	Tapi	SVNIT, Surat	Completed
5	Ganga	IIT, Roorkee	Completed
6	Sharda		Completed
7	Rapti		Completed
8	Mahanadi	IIT, Kharagpur	Completed
9	Mahananda		Completed
10	Hooghly		Completed
11	Brahmaputra	IIT, Guwahati	Completed
12	Subansiri		Completed
13	Pagladia		Completed
14	Krishna	IIT, Madras	Completed
15	Tungabhadra		Completed
16	Yamuna	IIT, Delhi	Study of Yamuna completed and that of Kosi and Bagmati is going on.
17	Kosi		
18	Bagmati		

Central Water Commission is also taking cross sections of 14 rivers (namely Ganga, Kosi, Gandak, Bagmati, Sharda, Mahananda, Ghaghara, Krishna, Tungabhadra, Mahanadi, Brahmaputra, Subansiri, Tapi and Yamuna) at selective locations every year and variations in river bed level are monitored. These morphological studies remain basis for various interventions and works undertaken in river reaches including those related to bank protection and river bed restoration activities through controlled dredging for maintaining river connectivity and navigation.

4. Geoligical Safeguarding: Geoligical Safeguarding is important for Ganga river basin management. Erosion and siltation are natural phenomenon. Erosion is removal of soil, sediment and rock fragments from the earth surface. Siltation is settling of suspended silt particles in river due to reduction in flow velocity either due to lower gradient or widening of the channel. Erosion and siltation are related to the gradient of the terrain from extremely steep mountainous torrents (upper reach) to steep rivers at foothill (middle reach) and rivers in plains (lower reach). Upper, middle and lower reach correspond to erosion, regime and aggradations states respectively.

Attempts towards understanding of aggradation and degradation process in river beds have been done in the past by the Ministry. Various committees have been constituted and seminars held in this respect. Brief summary of some of them are as under:-

- i. Committee to Study Problems of Siltation in Rivers (Mittal Committee): D/o Water Resources, River Development & Ganga Rejuvenation, set up a multi-disciplinary Committee (Mittal Committee) in year 2002 under the Chairmanship of Dr. B.K. Mittal, former Chairman, Central Water Commission, to identify cause and extent of siltation in rivers, suggest measures to minimize siltation, examine as to whether desilting is a technically feasible measure to minimize magnitude of floods in rivers, suggest appropriate technology/ methods of desilting of rivers if found technically feasible, find economic viability of desilting of rivers, propose a realistic operational programme in a time bound manner and other related aspects. The Committee concluded that:
 - Dredging in general has been found to be inadequate and should not be resorted to, particularly in major rivers;
 - There are of course some locations such as tidal rivers, confluence points and the likes, which can be tackled by desilting after thorough examination;
 - Selective dredging is suggested depending upon local condition; and
 - Desilting of river can marginally minimize the magnitude of flood and be effective only for a short period.
- ii. A Task Force under the chairmanship of Chairman, CWC to look into the problem of recurring floods in Assam and neighboring States as well as Bihar, West Bengal and eastern Uttar Pradesh was set up in the year 2004. The Task Force, considering various aspects and the cost involved in desilting of rivers by earth moving equipment or the dredgers, recommended that desilting operations may be carried out for improvement of carrying capacity of drainage channels downstream of the sluices at their outfall into the rivers and in upstream reaches selectively, if absolutely essential. Desilting at the mouth of the tributaries out falling into the main rivers, at the mouths of the rivers out falling into the sea and at other critical locations may also be taken up selectively after detailed studies.
- iii. D/o Water Resources, River Development & Ganga Rejuvenation had also constituted a Committee to prepare guidelines for desiltation of river Ganga from Bhimgauda (Uttarakhand) to Farakka (West Bengal) under the chairmanship of ShriMadhavChitale (Expert Member, NGRBA) in July, 2016. The other members of the committee were: Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Secretary, Ministry of Environment, Forests & Climate Change and Dr.MukeshSinha, Director, Central Water and Power Research Station, Pune. The committee was asked to establish difference between desilting and sand mining and also to establish need for desilting for ecology and e-flow of river Ganga. The committee submitted its report "*Guidelines for desiltation works in Ganga from Bhimgauda to Farraka*" in February, 2017 which has been shared with the States.
- iv. Further, D/o Water Resources, River Development & Ganga Rejuvenation, organised a one day conference on 'Sediment Management in Indian Rivers' on March 17, 2017 at Central Soil & Materials Research Station (CSMRS), HauzKhas, New Delhi, with the objective to comprehensively deliberate issues related to sedimentation of Indian rivers with all the stake-holders and develop an appropriate policy. Subsequently, a *Policy on Sediment Management*, July-2017, has been prepared by Department of Water Resources, River development & Ganga Rejuvenation and published on the website of D/o Water Resources, River Development & Ganga Rejuvenation.

5.0 Studies in Ganga Basin under NamamiGangeProgramme: Department of Earth Sciences, IIT Kanpur undertook a pilot study on "*Rapid Assessment of Sand Mining and its Impact on The Ganga River using Drone Technology*" in Raiwala to Bhogpur stretch of river Ganga in Haridwar, Uttarakhand under Namami Gange programme. This pilot project provided basis for evolving a policy for sand mining in this reach. This pilot project has utilized historical remote sensing data as well as drone technology which have provided important insights about the geomorphic processes operating in the region (Raiwala to Bhogpurstretch of Haridwar, Uttarakhand). The pilot study offers scope for additional guidelines related to sand mining based on reference state i.e. a minimum acceptable morphological and ecological state of the

river, identification of aggradational stretch for mining, depth of mining based on sand budget at particular location, river bed mining in selected patches to maintain riffle-pool structure longitudinally etc.

Indian Institute of Technology, Kanpur is also carrying out studies titled '*Geomorphic and Ecological Impacts of Sand Mining in Large Rivers as revealed from high resolution historical remote sensing data and drone surveys: Assessment, Analysis and Mitigation*'. Major objective of the study are assessment of geomorphic and ecological impacts of sand mining on rivers using satellite images and historical data sets supplemented with drone surveys, assessment of associated hazards such as flash floods and bank erosion caused by indiscriminate sand mining superimposed by hydrological changes, integration of data for identification of hotspots of degradation in river catchments and suggestions for mitigation measures and formulation of region-specific policy guidelines for sand mining based on scientific understanding.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 14 (Para No. 2.14)

Clean Ganga Fund (CGF)

The Committee observed that Clean Ganga Fund was constituted with the approval of Union Cabinet with the aim of raising contributions from the public, residents, Non Resident Indians (NRIs), Persons of Indian Origin (PIO) and others for financing various activities related to Ganga Rejuvenation. In January 2015, a Trust had been created under the Chairmanship of the Union Finance Minister for operationalisation of CGF. As per the trust deed of the CGF, the Board of the Trust should ordinarily meet once in three months or as often as might be necessary for the satisfactory conduct of the affairs of the Trust. However, the Committee were constrained to note that the trust had met only thrice since its constitution in the year 2015. Further the Committee found that there was an expenditure of just 0.29 crore against corpus of Rs. 57.70 crore in the year 2017-18, Rs. 54.66 crore of expenditure against total fund of Rs. 114.88 crore in the year 2018-19 and 35.85 crore expenditure against the corpus of Rs. 67.49 crore in the year 2019-20 which went to show poor utilization of funds. The Committee desired that Board of Trust should meet more often and at periodic intervals so as to monitor the progress of the fund activities and step up utilization of funds covered under the CGF.

Reply of the Government

The progress made in activities taken up under Clean Ganga Fund is regularly reviewed. The recommendation of the Hon'ble Committee is noted and the Board of Trustees meeting would be convened more frequently.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 15 (Para No. 2.15)

National Water Mission

The Committee found that under the scheme 'Research and Development and Implementation of National Water Mission', there was gross under- utilization of budgetary allocations during last 5 years. While during FY 2015-16, the actual utilization was only 33.7% against the BE allocation of Rs. 20 crore, it drastically fell to 7.8% of budgetary allocation of Rs. 15 crore in FY 2017-18 and in FY 2018-19, it was 29.80% of the budgetary provision of Rs. 20.10 crore. It was only during the FY 2019-20 that there was substantial utilization of funds to the extent of 86.8% of budgetary provision of Rs. 5 Crore. However, on the other hand, the Committee found that simultaneously, the budgetary provision for NWM which was Rs. 20 crore in the year 2015-16 had been curtailed drastically to Rs. only 5 crore in FY 2019-20. For fiscal year 2021-22, an amount of Rs. 8 crore had been allocated for the Scheme. The Committee found it difficult to comprehend such a huge reduction in budget allocation to such an important scheme when compared to the BE allocation of Rs. 20 crore given in the year 2015-16. The Mission Director, NWM during the oral evidence on the subject "Groundwater: A Valuable But Diminishing Resource" held on 18.1.2021 appealed to the Committee

for augmentation of budgetary resources and bestowing more functional autonomy for effectively carrying out the mandate of the Scheme. The Secretary of the Department during the evidence held on 23.2.2021 in connection with the examination of the DFG (2021-22) had also admitted that the programme 'Jal Shakti Abhiyan' to be launched under NWM next year would need more funds and the ways and means were being explored to fund it. The Committee were constrained to observe that though the National Water Mission had been established by the Government of India as one of the eight National Missions under the National Action Plan on Climate Change (NAPCC), nevertheless it had not been able to achieve the desired outcomes. The Mission had also been plagued by lower budgetary support. The Committee recommended that with a view to accomplish the objectives of the National Water Mission i.e. conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management in a time-bound manner, adequate funding should be provided and more functional and financial autonomy should be bestowed upon NWM in order to enable the Mission to discharge its functions effectively and achieve the goals set under the Mission.

Reply of the Government

In the previous years, due to limitations of administrative and financial powers, shortage of regular officers/staff and reduction in budget, NWM had not been able to realize its full potential. However, the National Water Mission (NWM) has been strengthened over the period of time. Presently, it is headed by an officer of the Additional Secretary level. Regular officers of the level of JAG, STS etc. have also been posted to strengthen the functioning of NWM to achieve its objectives. In addition, domain experts/ consultants/ young professionals (YPs) have also been hired through outsourcing. A proposal regarding administrative and functional autonomy of NWM will be considered in view of the Committee's recommendation. Allocations under the scheme would be enhanced depending on the pace of expenditure and components under the approved scheme.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 16 (Para No. 2.16)

National Bureau of Water Use Efficiency (NBWUE)

The Committee noted that the "National Bureau of Water Use Efficiency (NBWUE)" was proposed to be set up through a notification under Article 3(3) of the Environment (Protection) Act, 1986. The proposed Bureau would have the overall responsibility of improving water use efficiency across various sectors namely irrigation, drinking water supply, power generation, industries, cities etc. in the whole country. From the written submission made by the Department in connection with the examination of DFG (2021-22) the Committee found that a note regarding the setting up of NBWUE had been prepared and circulated for inter-ministerial consultation. It had been further stated that it was a time consuming process as it involved consultation with stakeholders concerned and that since the proposal was at a nascent stage, no financial allocation could be made in FY 2021-22. The Committee in this regard would like to recapitulate the chronology of events regarding efforts for setting up NBWUE. In the year 2013, an allocation of Rs. 50 crore had been made for the purpose of setting up NBWUE after approval from EFC in XII Plan itself. Further, a draft cabinet note was approved by the Hon'ble Minister (W,RD&GR) which was circulated for inter-ministerial consultations to concerned Ministries vide O.M. No. 11/8/2012-NWM dated 12.05.2015 and the responses were also received. However, it was then stated by the Department that clarifications as sought by NITI Ayog, MoEF & CC and PMO were under consideration of the Ministry. The Committee found that in its latest written submission to the Committee, the Department was silent as to what progress had been made regarding those clarifications sought by NITI Ayog, MoEF&CC and PMO. Taking cognizance of the aforesaid chronology of events, the Committee couldnot but conclude that the Department had displayed callous and lackadaisical attitude in establishment of proposed National Bureau of Water use efficiency. The Committee, considering the importance and role of increased water use efficiency in framing a critical response to growing water scarcity in the country including the need to maintain sustainability of water resources including water bodies and sustain water ecosystems and in meeting the growing demands of cities and industries, reiterated its recommendation to make all out efforts to set up NBWUE with statutory powers at

the earliest without any further delay as it would play a significant role in improving water use efficiency and also making users accountable for wastage of water.

Reply of the Government

A proposal for setting up of National Bureau of Water Use Efficiency (NBWUE) was referred Ministry of Finance, as it involves creation of additional posts, which has sought additional input/clarification. The observations and recommendation of Hon'ble Committee have been noted and the Department will make renewed efforts for setting up of NNBUE.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 17 (Para No. 2.17)

National Hydrology Project (NHP)

The Committee noted that NHP is a Central Sector Scheme, with 100% grant to the States with World Bank Assistance to the tune of 50% of the project cost for establishment of National Water Informatics Centre (NWIC) as a repository of nation-wide water resources data. It has pan India coverage with 50 Implementing Agencies (IAs) (including 11 from Central Government and 39 from States). The Committee were disheartened to observe that there was a persistently under-utilization of budgetary allocations under the scheme during the last few years. In the year 2016-17, actual expenditure was only Rs. 51.77 crore as against budgetary allocation of Rs. 165 crore. Similarly, there was an expenditure of mere Rs. 177.89 crore and Rs. 79.22 crore vis-a-vis BE allocation of Rs. 300 crore and Rs. 250 crore during FY 2017-18 and 2018-19 respectively. It was only in the FY 2019-20, there was substantial utilization of funds i.e. Rs. 144.71 crore against BE provision of Rs. 150 crore. The Department had attributed reasons for poor utilisation to the preparatory work in initial years of formation of NHP such as building capacity of Implementing Agencies (IAs), establishment of State Project Monitoring Units (SPMUs) and delay in procurement process in later years for under-utilization of funds. It had been stated that preparatory work of initial years had began to show positive results from FY 2019-20 resulting in accelerating the pace of expenditure. The Committee also found wide disparity between BE and RE in respect of the National Hydrology Project except for the year 2019-20 when BE and RE allocation had remained the same i.e. Rs. 150 crore. The Committee recommended that the Department should maintain budgetary discipline, and undertook proper pre-Budget planning and exercises and also made necessary changes in its procedure for budgetary estimations so that prudent budgetary allocations were projected / made at BE stage and strive for full utilization of budgetary allocations made.

Reply of the Government

It is submitted that presently the project has picked up the pace which is noticed from the physical progress and the related commitment in respect of various activities by the implementing agencies. National Project Management Unit is working to provide support and enhance capacity building of the Implementing Agencies for effective utilization of funds. The reduction in RE is primarily due to the expenditure ceilings set by the Ministry of Finance in the first half of the FY 2020-21. Against Revised Estimate of Rs. 135 crore under NHP for the financial year 2020-21, total expenditure incurred was Rs. 134.44 crore. Considering the status of various activities under execution, NHP would be in a position to fully utilize the BE 2021-22 of Rs. 200 crore.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 18 (Para No. 2.18)

The Committee also noted that a number of Implementing Agencies (IAs) were facing constraints in carrying out their job on account of outsourcing under NHP and that National Project Monitoring Unit (NPMU) and Technical Assistance and Management Consultancy (TAMC) were making efforts to support such Implementing Agencies. The Committee could not but emphasise the pivotal role played by the NHP in

providing an enabling platform to the various Implementing agencies on pan-India basis for taking informed decisions related to scientific management of precious water resources in the country. However, limitations of under-utilization of budgetary allocations and shortage of adequate manpower in number of IAs were stated to be major bottlenecks in the implementation of the NHP. The Committee, therefore, recommended that the Department should take suitable measures for effective utilization of funds and addressed the problems arising out of lack of adequate staff in implementing the NHP programme, so that the NHP achieve its intended objectives, for which it had been set up.

Reply of the Government

Various measures have been undertaken under NHP to accelerate the progress and for effective utilization of funds. For addressing the problems arising out of lack of adequate staff with the Implementing Agencies, not only support from the Central level is being extended but also provision for hiring of incremental manpower specifically for executing NHP activities has been made. provided to all the Implementing Agencies and they are being sensitized to effectively utilize these provisions.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 19 (Para No. 2.19)

Corporate Social Responsibility (CSR)

From the written submission made by the Department, the Committee had come to learn that the details / data regarding the quantum of CSR funds both in absolute terms and percentage wise earmarked and spent on water conservation and ground water recharge schemes by the Water Intensive Industries were not maintained by the Department. The Committee recommended that Department should take up this issue very seriously and set up an exclusive cell in the Department to compile the data and also monitor and analyse the trends of amount spent by the industries both PSUs and Private companies on water conservation and ground water recharge schemes.

Reply of the Government

The recommendation regarding setting up of an exclusive cell to compile, monitor and analyze the amount spent by the water intensive industries both PSUs and private companies on water conservation and ground water recharge schemes has been noted for appropriate action.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 20 (Para No. 2.20)

The Committee observed that in the year 2017-18 an amount of Rs. 302.95 crore was spent by WAPCOS on CSR activities, of which around 8.27% (Rs. 25.08 crore) was spent on water conservation scheme. In the year 2019-20, though the total expenditure by the Company on CSR rose to 390.10 crore, however, the expenditure on water conservation schemes was reduced to Rs. 19.50 crore which was just 5% of the total expenditure. The Department had stated that the corporate social responsibility policy of the WAPCOS was governed by the guidelines issued by Department of Public Enterprises and Ministry of Corporate Affairs, from time to time. The Committee, while taking cognizance of the fact that the Union Minister for Jal Shakti himself had lamented over the fact that only 4 percent of CSR funds were spent on water, the Committee recommended that the Department should approach the Department of Public Enterprises and Ministry of Corporate Affairs and persuaded them to allow WAPCOS which is operating in water sector to spend more of its CSR funds on water conservation related schemes. Further, apart from providing the funds, the corporate sector should also share their expertise and technical knowledge in the field of water conservation with State agencies for carrying out their various water conservation programmes. The Committee also recommended that the Department should take appropriate steps for incentivizing the corporate sector to encourage them to liberally contribute in development of water sector. Further, the Ministry of Jal Shakti might also approach and hold consultation with the Ministry of Finance and the Ministry

of Corporate Affairs to frame a suitable policy for providing various concessions like tax relief, tax holiday etc. for corporate houses including the startups desirous of undertaking water conservation and other related moves in the field of water sector.

Reply of the Government

In reference to the amount of CSR funds spent by WAPCOS as mentioned in the recommendation, it would be appropriate to mention that the actual amount spent by WAPCOS on CSR is as under:-

2017-18:-

Total amount - Rs. 3.029 crore

Spent on water - Rs. 0.250 crore

Percentage (Spent on water of the total expenditure) – 8.27%

2018-19:-

Total amount - Rs. 3.980 crore

Spent on water - Rs. 0.128 crore

Percentage (Spent on water of the total expenditure) – 3.22%

2019-20:-

Total amount - Rs. 3.901 crore

Spent on water - Rs. 0.195 crore

Percentage (Spent on water of the total expenditure) - 5%

2020-21:-

Total amount - Rs. 1.648 crore (Provisional-Unaudited)

The total amount spent on CSR by WAPCOS in last 4 years is Rs. 12.56 crore. Out of this, Rs. 0.57 crore has been spent on water conservation schemes, which is approximately 4.5% of its total expenditure on CSR.

It would be appropriate to point out that the CSR expenditure of all CPSEs is governed by Section 135 of Companies Act (**Annexure-I**) and D/o Public Enterprises (DPE)'s guidelines for CSR dated 10.12.2018 (**Annexure II**).

A common theme for the CSR activities to be carried out each year by all CPSEs is decided by the DPE. CSR expenditure for the identified theme is around 60% of annual CSR expenditure of all CPSEs. The identified themes in recent years were:

2018-19: School Education & Healthcare

2019-20: School Education, Healthcare Nutrition

2020-21: Health & Nutrition

The recommendations of Hon'ble Committee would be conveyed to DPE with a request to identify Water Conservation & Ground Water Schemes as the common theme for CSR by all CPSEs.

WAPCOS has been requested to take the note of the recommendations of the Hon'ble Committee and modulate their CSR activities accordingly and take up the matter with appropriate authority in DPE as per DPE guidelines.

In respect of incentivizing the corporate sector and framing a suitable policy for providing various concessions, consultation would be done with Ministry of Finance and Ministry of Corporate Affairs.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 21 (Para No. 2.21)

The Committee noted that the WAPCOS Limited is a “MINI RATNA-I” Public Sector Enterprise under the aegis of the Ministry of Jal Shakti (MoJS), Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR). Incorporated on 26th June, 1969 under the Companies Act, 1956, WAPCOS is a technology driven Consultancy and Engineering, Procurement and Construction (EPC) organization with strong domestic as well as global presence in the field of Water, Power and Infrastructure sectors. The Committee had come to learn from the written submission of the Department that necessary action is being taken by the Department for listing the Company on the Stock Exchanges. The Committee welcomed this step of the Department as getting the Company listed on the Stock Exchanges brings about many advantages like providing an opportunity to raise capital to fund new projects, undertake expansions/diversifications and acquisitions etc. Further, as listed companies were also required to ensure timely disclosure of information to the Exchange as provided in the Listing Agreements, it improved company’s visibility and credibility among institutions and the investing public due to complying with various regulatory norms. The listing also offered an opportunity to the market to independently assess its true value. Keeping in view of all these factors, the Committee expressed the hope that the divestment of WAPCOS will take place in the FY 2021-22 itself.

Reply of the Government

The disinvestment of WAPCOS through IPO and listing of its shares in the stock market is being undertaken by DIPAM and the IPO is being expected by DIPAM to be launched in FY 2021-22.

The intermediaries for the disinvestment process have been appointed by DIPAM and all requisite approvals have already been provided to the proposal of WAPCOS.

The recommendation of the Hon’ble Committee has been conveyed to DIPAM.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 22 (Para No. 2.22-2.23)

Himalayan Glacier System

The Committee noted that the Department of Science and Technology had approved a project proposal entitled “Integrated Hydrological Studies for Upper Ganga Basin up to Rishikesh” under the National Mission for Sustainable Himalayan Ecosystem (NMSHE) in January, 2016 at a total cost of Rs.13.04 Crore, which envisaged to focus on issues of comprehensive integrated hydrological studies for upper Ganga basin up to Rishikesh. Under this project, two sub-projects, namely –(i) Glacial Lakes & Glacial Lake Outburst Flood (GLOF) in Western Himalayan region and (ii) Assessment of downstream impact of Gangotri glacier system at Dabrani and future runoff variations under climate change scenarios, had been taken up. The Committee urged upon the Department to expedite the studies on these projects and submit their report / findings arrived at to the Committee at the earliest.

The Committee observed that the recent tragedy of massive flash flood in the downstream of Rishi Ganga River due to a snow avalanche triggered by landslide at the terminus of the glacier in catchment of Rishi Ganga river underscored the imperative to closely monitor the glaciers system in the Himalayan region more closely. However, the Committee were surprised to learn that there was no forecasting system to predict the tragic accident as the monitoring station of the Department was located at Joshi Math. The representative of the Department had apprised the Committee that they were planning to have more monitoring systems in those areas. Further, the Committee had noted with concern that out of 2038 glacial lakes in India, only 477 lakes having size of more than 50 hectares were presently being monitored by the Department. Besides, a Joint Group after the disaster of 7 February had been constituted, comprising of several agencies and organizations having knowledge of that area to share the same. The Committee urged upon the Department to take pro-active measures in this regard and deploy resources both technical and financial in these eco-fragile regions as a number of large dams and Hydro Electric Projects were based there and if the kind of tragedy that occurred on 7 February recurred albeit on a large scale, it would bring lot of destruction and

would have a lasting adverse impact on the geo-climate conditions of the region. The Committee desired to be apprised of the various steps being taken or proposed to be taken by the Department to monitor the movement of glaciers and avalanches and set up an Early Warning System on a real time basis so as to forewarn the impending glacier-related disasters.

Reply of the Government

“The studies being carried out under Department of Science and Technology sponsored NMSHE project has been completed by National Institute of Hydrology and the expected to be submitted soon. As soon as the report is available a copy of the same will be made available to the Committee.

A proposal has been framed by Central Water Commission (CWC) to install the advance warning system in the upper reaches of river system in the Himalayan region to the extent possible for monitoring of Glacial Lake Outburst Floods (GLOFs) with an estimated cost of Rs 95.80 crore and the same has been included in the draft EFC Memo of DWRIS for the period 2021-26. The salient features of the proposal are:

Phase-1 (0-2 years)

In the phase-1, the sensors/equipment's including siren system will be installed in upper reaches of river system as far as possible near to identified lakes and downstream up to the existing network of CWC. This will provide gauge to gauge warning to the local inhabitants for few hours so that precious life can be saved due to disaster of glacial lake outburst. The work of preparation of inventories of glacial lakes of 0.25 ha and above will also be carried out during this phase. All glacial lakes having size greater than 10 ha will be monitored on monthly basis during monsoon season in this phase.

Phase-2(2-5 years)

In the Phase-2, vulnerability index of lakes will be find out based on satellite input and ground verification as far as possible. In addition to this, the frequency of glacial lake monitoring of vulnerable lakes will be increased from currently monthly to weekly basis. Also, glacial lake outburst modelling of selected vulnerable lakes will be carried out periodically and based on the result affected area in the downstream will be identified. On the basis of this input, if required additional sensors/equipment's will be installed.

A team of experts was constituted by National Disaster Management Authority (NDMA), New Delhi for joint study to understand the causes of the flash floods in river Rishiganga and Dhauliganga and suggest mitigation/preparedness measures to prevent such flood events. The major scope of the joint study are hazard assessment, monitoring, forecasting and Early Warning Systems, suggestions for reducing risks etc.

The team carried out a field visit in March 2021 in which all the sites were visited by the team members. The report, being prepared by NDMA, is under progress and in final stage. The steps suggested / undertaken after the joint study will be made available to the Committee. Also, necessary action will be taken on the report of the study”.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

Recommendation No. 24 (Para No. 2.25)

Dam Rehabilitation and Improvement Project – Phase II and Phase II

The Committee were happy to note that the Dam Rehabilitation and Improvement Project (DRIP) Phase II & Phase III with a budgetary outlay of Rs 10,211 crore and financial assistance of the World Bank (WB), and Asian Infrastructure Investment Bank (AIIB) for improving the safety and operational performance of selected dams across the country, along with institutional strengthening and system wide management approach had been approved by the Union Cabinet and was likely to commence w.e.f. May/June 2021. The Committee noted that at present 19 States and 3 Central Agencies were on board for rehabilitation of 736 dams. However, the Committee were concerned to note that some of the major dams like Hirakud Dam did not find place in the Programme as consent of the respective States was required. The Committee were of

the considered view that all such large dams should be brought under DRIP II & III so as to obviate any unlikely event of failure of such dams which may cause destruction of unprecedented scale. The Committee urged upon the Department to take all possible steps to persuade the respective State Governments to give their consent for inclusion of big dams located in their States under the ambit of DRIP Programme.

Reply of the Government

Hirakud dam, one of the dams of national importance, is a part of ongoing DRIP which was scheduled for closure in March 2021. However, the work of construction of additional spillway of Hirakud dam to safely pass the revised design flood, could not be completed under the scheme due to unilateral withdrawal by contractor and foreclosure of the contract. Ministry took up the matter of inclusion of Hirakud dam in the new DRIP Phase II and Phase III with State Government of Odisha. State Government expressed its inability to include this dam but agreed that rehabilitation of Hirakud dam will be done through State budget in order to ensure that safety concerns are addressed comprehensively.

As per National Register of Large Dams (NRLD), seventy(70) dams in the country are dams of national importance. Out of these, 18 dams have been rehabilitated under the DRIP. Also, 21 dams have been proposed under new DRIP Phase II and Phase III. Five (5) of these dams are owned by Central PSUs. The Ministry reviewed the matter related to safety concerns of these dams which may be included in the new DRIP. In pursuance to this objective, in August 2020, Ministry requested all major States(Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Punjab, Telangana, Uttar Pradesh, and West Bengal) to review the safety concerns of remaining dams of national importance in their States and if required these may be included in the new DRIP Scheme which has the approval of Cabinet Committee on Economic Affairs (CCEA) for need-based inter-component re-allocation from one component to other within the Scheme, as well as inter-agency reallocation including need-based swapping of selected dams by the partner agencies so that State(s) can bring the remaining dams of national importance. The matter is being pursued with the concerned States.

(O.M. No. G-30013/1/2021-Bud/62 dated 02.08.2021)

CHAPTER – III

**RECOMMENDATIONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN
VIEW OF THE GOVERNMENT'S REPLIES**

NIL

CHAPTER – IV

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

Recommendation No. 7 (Para No. 2.7)

Need for a study to assess the water use efficiency

The Committee noted that though a 'Sahi Fasal' campaign had been launched by National Water Mission to encourage farmers in the water stressed areas to grow crops which were not water intensive and use water very efficiently, no specific study with regard to measuring water use efficiency in respect of any crop had been undertaken by the National Water Mission (NWM) / Central Water Commission (CWC). The Committee were also perturbed to learn that the data regarding water use efficiency in respect of major cereal and commercial crops in India vis-a-vis international standards was also not available at present. The Committee noted from the submission of the Department that the water use in the irrigation sector was the biggest component of total water demand in the country which was appx. 78.50% of the total water demand in the 2010, and was projected to be around 72.50% and 68.40% in the year 2025 and 2050 respectively. The Committee were of the considered view that in the present scenario of fast depletion of the water resources both surface and ground water improving the water usage efficiency was the need of the hour and therefore recommended the Department to commission a study to assess the water use efficiency regarding the major cereal and commercial crops in India vis-a-vis international standards in order to ensure prudent and economic use of water by agricultural sector.

Reply of the Government

“Details regarding water use efficiency in respect of major cereal and commercial crops in the irrigation sector in India vis-a-vis international standards are not available. However, water use efficiency of completed irrigation projects is assessed for optimum utilization of water resources. In this regard, ‘Guidelines for improving Water Use Efficiency in Irrigation, Domestic & Industrial Sectors’ has been published by the Central Water Commission (CWC). In order to make a realistic assessment of water use efficiency of completed major/medium irrigation projects; during 10th & 11th Five year Plans, CWC conducted 35 water use efficiency studies for completed major/medium irrigation projects in 7 (seven) States. The overall project efficiency of the studied projects ranged from 13 to 62 % with the group weighted average (on culturable command area basis) of the projects studied at around 36 %. The studies, in general, revealed inadequate maintenance, dilapidated condition of canals due to silting, cracks in lining, weed growth, inefficient operation, low water rates, poor participatory irrigation management etc. Corrective project specific structural or non-structural interventions were detailed in the study reports to improve the water use efficiency of the projects. The findings were conveyed to the respective States for follow-up for enhancing water use efficiency of the irrigation projects in their States aiding in better water management.

Baseline studies have been undertaken by National Water Mission for improving water use efficiency in irrigation and studies have been awarded to North Eastern Regional Institute for Water and Land Management (NERIWALM- Tezpur), Water and Land Management Training Institute (WALMTARI- Hyderabad), Water and Land Management Institute (WALMI – Aurangabad) and Centre for Water Resources Development and Management (CWRDM - Kerala)”.

Comment of the Committee

(Please see Para No. 11 of Chapter – I of the Report)

Recommendation No. 23 (Para No. 2.24)

Himalayan Glacier System

Keeping in view the fact that the glaciers in the Himalayan region are constantly retreating and melting due to climate change and global warming, the Committee recommended the Department to commission a

comprehensive study to assess the behaviour of Himalayan glaciers as well as the impact of the Hydro Electric Projects (HEP) if any, located in the region in causing Glacial Lake Outburst Flood. The Committee would categorically like to be apprised of the steps taken by the Ministry in this regard, within six months from the presentation of this Report to the Parliament.

Reply of the Government

“The studies being carried out under Department of Science and Technology sponsored NMSHE project has been completed by National Institute of Hydrology and the expected to be submitted soon. As soon as the report is available a copy of the same will be made available to the Committee.

A proposal has been framed by Central Water Commission (CWC) to install the advance warning system in the upper reaches of river system in the Himalayan region to the extent possible for monitoring of Glacial Lake Outburst Floods (GLOFs) with an estimated cost of Rs 95.80 crore and the same has been included in the draft EFC Memo of DWRIS for the period 2021-26. The salient features of the proposal are:

Phase-1 (0-2 years)

In the phase-1, the sensors/equipment's including siren system will be installed in upper reaches of river system as far as possible near to identified lakes and downstream up to the existing network of CWC. This will provide gauge to gauge warning to the local inhabitants for few hours so that precious life can be saved due to disaster of glacial lake outburst. The work of preparation of inventories of glacial lakes of 0.25 ha and above will also be carried out during this phase. All glacial lakes having size greater than 10 ha will be monitored on monthly basis during monsoon season in this phase.

Phase-2(2-5 years)

In the Phase-2, vulnerability index of lakes will be find out based on satellite input and ground verification as far as possible. In addition to this, the frequency of glacial lake monitoring of vulnerable lakes will be increased from currently monthly to weekly basis. Also, glacial lake outburst modelling of selected vulnerable lakes will be carried out periodically and based on the result affected area in the downstream will be identified. On the basis of this input, if required additional sensors/equipment's will be installed.

A team of experts was constituted by National Disaster Management Authority (NDMA), New Delhi for joint study to understand the causes of the flash floods in river Rishiganga and Dhauliganga and suggest mitigation/preparedness measures to prevent such flood events. The major scope of the joint study are hazard assessment, monitoring, forecasting and Early Warning Systems, suggestions for reducing risks etc.

The team carried out a field visit in March 2021 in which all the sites were visited by the team members. The report, being prepared by NDMA, is under progress and in final stage. The steps suggested / undertaken after the joint study will be made available to the Committee. Also, necessary action will be taken on the report of the study”.

Comment of the Committee

(Please see Para No. 17 of Chapter – I of the Report)

CHAPTER – V

**RECOMMENDATION/OBSERVATION IN RESPECT OF WHICH FINAL REPLY OF THE GOVERNMENT
IS STILL AWAITED**

NIL

**New Delhi
02 December, 2021
11 Agrahayana, 1943 (Saka)**

**Dr. SANJAY JAISWAL
Chairperson
Standing Committee on Water Resources**

**MINUTES OF THE FIRST SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES
(2021-22) HELD ON THURSDAY, 21 OCTOBER, 2021**

The Committee sat from 1130 hours to 1200 hours in Committee Room No. '3', 'A' Block, Parliament House Annexe Extension, New Delhi.

PRESENT

Dr. Sanjay Jaiswal – Chairperson

MEMBERS

LOK SABHA

2. Shri Vijay Baghel
3. Shri Bhagirath Choudhary
4. Dr. K. Jayakumar
5. Shri Kuruva Gorantla Madhav
6. Shri Hasmukhbhai Somabhai Patel
7. Shri P. Ravindhranath
8. Smt. Agatha K. Sangma
9. Shri Pratap Chandra Sarangi
10. Shri Chandan Singh

RAJYA SABHA

11. Sardar Balwinder Singh Bhunder
12. Shri Harshvardhan Singh Dungarpur
13. Dr. Kirodi Lal Meena
14. Shri Subhash Chandra Singh

SECRETARIAT

1. Shri M.K. Madhusudhan - Director
2. Shri R. C. Sharma - Additional Director

2. At the outset, the Chairperson welcomed the Members to the sitting and offered his greetings to them on their nomination /re-nomination to the Committee for the year 2021-22.

3. xxx xxx xxx xxx xxx xxx

4. The Committee then took up for consideration draft Reports on the Action Taken by the Government on the Observations / Recommendations contained in the Tenth and Eleventh Reports of the Committee on "Demands for Grants (2021-22)" of the Ministry of Jal Shakti (Department of Water Resources, River Development & Ganga Rejuvenation) and Department of Drinking Water & Sanitation, respectively. After some deliberation, the Committee adopted both the draft Reports without any changes / amendments. The Committee also authorized the Chairperson to present the Reports to both Houses of Parliament in the next Session of Parliament.

The Committee, then, adjourned.

ANNEXURE – II

[Vide Para 4 of the Introduction]

**ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE
RECOMMENDATIONS/OBSERVATIONS CONTAINED IN THE TENTH REPORT (SEVENTEENTH LOK
SABHA) OF THE COMMITTEE**

(i)	Total number of Recommendations/Observations	24
(ii)	Recommendation/Observations which have been accepted by the Government Recommendation Nos. 1,2,3,4,5,6,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22 and 24	Total – 22 Percentage– 91.66 %
(iii)	Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies Recommendation Nos. NIL	Total – 00 Percentage – Nil
(iv)	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee Recommendation Nos.7 and 23	Total – 2 Percentage – 8.33%
(v)	Recommendation/Observation in respect of which final reply of the Government is still awaited Para Nos. NIL	Total – 00 Percentage – Nil