



STANDING COMMITTEE ON WATER RESOURCES
(2015-2016)

SIXTEENTH LOK SABHA

MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA
REJUVENATION

DEMANDS FOR GRANTS (2014-2015)

{Action Taken by the Government on the Observations / Recommendations
contained in the First Report (Sixteenth Lok Sabha) of the
Standing Committee on Water Resources}

SIXTH REPORT



LOK SABHA SECRETARIAT

December, 2015/Pausha, 1937 (Saka)

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Presented to Lok Sabha on 22.12.2015

Laid in Rajya Sabha on 22.12.2015



LOK SABHA SECRETARIAT
NEW DELHI

December, 2015/Pausha, 1937 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON WATER RESOURCES
(2015-2016)

Shri Hukum Singh - Chairperson

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3. Shri Devusinh Jesingbhai Chauhan
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SECRETARIAT

- | | | | |
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| 1. | Shri Shiv Kumar | - | Joint Secretary |
| 2. | Smt. Rita Jaikhani | - | Director |
| 3. | Shri Kushal Sarkar | - | Additional Director |
| 4. | Shri Ginsuanlian Guite | - | Committee Officer |

INTRODUCTION

I, the Chairperson, Standing Committee on Water Resources (2015-2016) having been authorised by the Committee to submit the Report on their behalf, present the Sixth Report on the Action Taken by Government on the observations / recommendations contained in the First Report (Sixteenth Lok Sabha) of the Standing Committee on Water Resources (2014-2015) on Demands for Grants (2014-2015) of the Ministry of Water Resources, River Development & Ganga Rejuvenation.

2. The First Report of the Committee was presented to Lok Sabha and laid in Rajya Sabha on 23 December, 2014. The replies of the Government to all the recommendations contained in the Report were received on 28 October, 2015.

3. The replies of the Government were examined and the Report was considered and adopted by the Committee at their sitting held on 17 December, 2015.

4. An analysis of the Action Taken by the Government on the observations / recommendations contained in the First Report (Sixteenth Lok Sabha) of the Committee is given in Appendix-II.

NEW DELHI;
17 December, 2015
Chairperson,
26 Agrahayana, 1937 (Saka)

HUKUM SINGH,

Standing Committee on Water Resources

CHAPTER I

REPORT

This Report of the Standing Committee on Water Resources deals with the action taken by the Government on the observations / recommendations contained in their First Report (16th Lok Sabha) on "Demands for Grants (2014-15)" of the Ministry of Water Resources, River Development & Ganga Rejuvenation, which was presented to Lok Sabha on 23 December, 2014.

2. Action taken notes received from the Government in respect of all the 44 observations / recommendations of the Committee have been categorised as follows:-

(i) Observations / Recommendations which have been accepted by the Government:

Para Nos. 1.70, 1.71, 1.73, 1.74, 1.75, 1.76, 1.77, 1.78, 1.79, 1.80, 1.81, 1.82, 1.88, 1.90, 2.16, 2.18, 2.19, 2.20, 3.25, 3.28, 3.29, 3.31, 4.23, 4.25, 4.28 and 4.29

(Total =26)

(ii) Observations / Recommendations which the Committee do not desire to pursue in view of the Government's replies:

Para Nos. 1.83, 1.84, 1.86, 1.87, 1.89, 2.17, 3.26, 3.27, 3.30, 3.33, 4.22, 4.24, 4.26 and 4.27

(Total =14)

(iii) Observations / Recommendations in respect of which replies of the Government have not been accepted by the Committee:

Para Nos. 1.72 and 3.24

(Total = 2)

(iv) Observations / Recommendations in respect of which final reply of the Government are still awaited:

Para Nos. 1.85 and 3.32

(Total = 2)

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

A. Budgetary Allocations

Recommendation (Para No. 1.70)

4. As per information provided to the Committee, the total Budget Estimates (BE) of the Ministry for the year 2014-2015 was Rs. 15,375.74 crore - which comprised of Plan allocation of Rs. 14,762 crore and Non-Plan allocation of Rs. 613.74 crore. The total Budget allocation for 2014-15 showed an overall increase by 86.32% as compared to total Budget allocation of Rs. 2,102.65 crore made in 2013-14 which, the Ministry maintained, was due to transfer of erstwhile "State Sector Scheme" of AIB&FMP as "Centrally sponsored scheme" with placing of funds (Rs. 8,992.22 crore) towards this scheme in the Ministry and introduction of new schemes. Further, the Committee's analysis of actual expenditure incurred in the both Plan and Non-Plan sections by the Ministry during 2013-14 indicated that the actual expenditures have consistently lagged behind Budget projections at both BE and RE stages, revealing thereby that the Government had clearly failed to put in place a mechanism for utilization and effective implementation of the various projects/schemes in time. It also indicated the Budget projections as made for 2013-14 had been wholly unrealistic and removed from the ground reality.

The Committee while expressing their disappointment over this trend, strongly recommended that efforts should be made to put in place an effective mechanism by proper Budgetary pre-planning exercise to ensure optimum utilization of Budget allocations (both Plan and Non-Plan) so that the Budget projections come nearer to actual expenditures. They also recommended the Ministry to undertake Budgetary exercises after framing proper, achievable targets for both Plan and Non-Plan schemes to ensure a more realistic and achievable Budget projections in future.

5. The Ministry, in its action taken note have replied as follows:-

"The Valuable observations of the Parliamentary Standing Committee have been noted for future compliance. For the planning of the budget, the Pre-Planning exercise was taken in the different National Level consultation organized by the Ministry. The key

issues were discussed in the 3day conference 'Jal Manthan' by the Ministry with the State Governments. Many State Chief Ministers, Irrigation Ministers, Chief Secretaries and Irrigation Secretaries participated in the Jal Manthan. The following matters were discussed;

- (a) Funding pattern of Centrally Sponsored Scheme,
- (b) Need for refining guidelines of the Schemes,
- (c) Smooth and timely processing of the project proposals from the states.

Many of these issues have since been resolved. A portal has been developed for processing and online review of proposals; the guidelines have been revised to allow for 20% cost overrun; 2 years extension for completion of projects in case of adequate justification and approved cost as on 1st April 2012, as the basis for re-imburement under AIBP, if other conditions of the scheme have been complied with. The issue of paripassu implementation of CAD projects was clarified. Such projects can be completed within a period of two years after completion of the dam, main canal and the branch canal network.

As a result there was a steep increase in expenditure; it jumped from Rs.800 crs in September to Rs.4800 crs at the end of March, 2015."

6. The Committee note from the reply furnished by the Ministry that the pre-planning exercise for the planning of the budget was taken in the different National Level Consultations organised by the Ministry. They also note that the key issues relating to Budgetary Planning were also discussed in 3 day conference 'Jal Manthan' organized by the Ministry with State Governments - with the participation of many State Chief Ministers, Irrigation Ministers, Chief Secretaries and Irrigation Secretaries, wherein the issues viz. (a) funding pattern of Centrally-sponsored schemes, (b) need for refining guidelines of the Schemes, and (c) smooth and timely processing of the project proposals received from the States were discussed and many of these issues have since been resolved. The Committee desire that the Ministry undertakes effective follow-up steps with States/UTs/concerned agencies to ensure that concrete results are achieved in respect of the issues which were discussed at ' Jal Manthan'. They also

hope and expect that the Ministry take follow-up measures in consultation with concerned States/UTs and other implementing Organisations to chalk out specific, time-bound action plan for completion of the dam, main canal and the branch canal work so as to achieve better implementation of these projects under AIBP and CAD and also apprise the Committee of the results achieved thereby accordingly.

B. Utilisation of Budgetary Allocations

Recommendation (Para No. 1.72)

7. The Committee also observe that the total Budget Estimate for 2013-14 of the MoWR, RD and GR earmarked at Rs. 2,102.65 crore was reduced to Rs. 1,279.50 crore at Revised Estimate (RE) stage, which shows a reduction of Rs. 823.15 crore over BE 2013-14. The reasons put forth by the Ministry for this reduction was that there was delay in obtaining approval of many schemes by as late as six to nine months, resulting in quite low expenditure in respect of these schemes by the month of September 2013, which had led the Ministry of Finance to curtail the Budget at Revised Estimate stage during 2013-14. Taking a serious note of this inordinate delay in getting requisite approvals of projects/schemes, the Committee recommend the Ministry to undertake pre-Budget exercise by getting necessary approval of concerned authorities (i.e. Planning Commission, Expenditure Finance Committee, Cabinet Committee on Economic Affairs, etc.) in respect of projects/schemes proposed to be included in Budget allocations before submission of formal Budget proposal in each financial year, so that much time is not wasted in bureaucratic delays and procedural bottlenecks.

8. The Ministry, in its action taken note have replied as follows:-

“Observations of the Parliamentary Standing Committee are noted for future compliance. Despite best efforts of the Ministry, there have been delays in getting

approvals from the MOF where staff component has been involved. These are being pursued with the MOF through IFD.”

9. The Committee are dismayed to note that despite best efforts of the Ministry, the problem of delays in getting approvals from the Ministry of Finance in respect of many schemes has persisted, which was the cause of quite low expenditure in respect of many schemes upto September, 2013 – which, in turn, had led the Ministry of Finance to curtail the Budget at the Revised Estimate stage during 2013-14. They are also disappointed to learn that the Ministry preferred to take recourse to giving the off-repeated reply the "observations of the Parliamentary Standing Committee are noted for future compliance". Instead of initiating concrete remedial steps in the matter the Ministry have failed to get the necessary approval of concerned authorities (i.e. Planning Commission, Expenditure Finance Committee, Cabinet Committee on Economic Affairs etc.) in respect of projects/schemes proposed to be included in the Budgetary allocations in each financial year as a part of the pre-Budget exercise. The Committee, therefore, desire the Ministry to initiate pragmatic and concrete steps at the earliest to reduce bureaucratic delays and procedural bottlenecks that stands in the way of seeking and securing timely approvals of the schemes specially those of the Central schemes and Centrally - sponsored schemes. They also would like the Ministry to apprise the Committee of the outcome of efforts made with the Ministry of Finance's Internal Finance Division (IFD) in this regard.

C. River Basin Management

Recommendation (Para No. 1.74)

10. The Committee noted that the Plan scheme called "River Basin Management" (RBM) was formulated during 2013-14 by merging two ongoing schemes, viz. River Basin Organisation (RBO) and Investigation of Water Resources Development Scheme. The Committee's examination revealed that a provision of Rs. 250 crore (BE) had been kept for River Basin Management during the financial year 2014-15, which represents an increase of Rs. 50 crore over the Budget allocations under the same Head during 2013-14. Interestingly however, the Committee observed that although Rs. 200 crore had been allocated during 2013-14, this allocation had to be reduced to Rs. 150 crore at Revised Estimate. The Committee were pained to note that the new component of the River Basin Management (RBM) Plan

scheme could not be initiated during 2013-14, as the approval of the Cabinet Committee on Economic Affairs (CCEA) was accorded only on 28.02.2014. They, therefore, recommended the Ministry to devise a mechanism to shorten the lengthy bureaucratic procedure being followed for getting the timely approval of RBM Plan scheme by CCEA in future and apprise the Committee accordingly.

11. The Ministry, in its action taken note have replied as follows:-

"The approval of the scheme as per laid down procedure require circulation of the plan scheme for the inter-ministerial consultations and thereafter getting it recommended from the Expenditure Finance Committee (EFC) before placing it for the consideration and approval of the Cabinet Committee on Economic Affairs (CCEA). In the EFC meeting on River Basin Management Scheme held on 9th April, 2013, out of four components of the original EFC proposal, the two components viz Restructuring of CWC and River Basin Organisation were advised to be excluded from the proposal and to be dealt with separately. Accordingly, a revised EFC proposal in respect of River Basin Management, containing only two components namely, (1) Brahmaputra Board and (2) Investigation of Water Resources Development Schemes was considered by EFC on 3rd October, 2013 and an outlay of Rs. 975 crore recommended. Some delay in the processing was due to the Assembly elections in the Delhi State in 2013 and getting NoC from the Election Commission of India for holding the EFC meeting. The observation of the Committee is noted and accordingly it has been decided to advance the process of framing the scheme in consultation with the stakeholders to avoid delay in the future.

The proposal for restructuring of CWC is at an advanced staged of processing and will be put up for consideration of the Government. The aim of restructuring is to strengthen CWC for the following activities:

- (i) Holistic development of Water Resources
- (ii) Conflict resolution in inter-State disputes
- (iii) Rapid appraisal/monitoring
- (iv) Flood Management
- (v) Climate change
- (vi) Coordination planers & decision makers
- (vii) Water quality

- (viii) Dam safety
- (ix) Water conservation
- (x) Capacity building .”

12. The Committee note the Ministry's reply that the approval of the scheme as per laid down procedure require circulation of the Plan scheme for the inter-Ministerial consultations and thereafter getting it recommended from the Expenditure Finance Committee (EFC) before placing it for the consideration and approval of the Cabinet Committee on Economic Affairs (CCEA). They also note that in the aftermath of the EFC meeting on the River Basin Management (RBM) scheme held on 09 April, 2013, a revised EFC proposal in respect of the RBM containing only two components, viz. (i) Brahmaputra Board and (ii) Investigation of Water Resources Development Scheme was considered by the EFC on 03 October, 2013 and an outlay of Rs. 975 crore was recommended, the processing of which was, however, delayed due to the Assembly Elections in Delhi and getting No Objection Certificate (NOC) from the Election Commission for holding the EFC meeting. Keeping in view the persistent bureaucratic procedural delays experienced in getting the RBM scheme approved by the CCEA in the past, the Committee reiterates their recommendation to the Ministry to devise a mechanism to shorten and streamline the lengthy bureaucratic procedure being followed for securing the timely approval of RBM plan scheme by the CCEA and also apprise the Committee in the matter accordingly. They also hope and expect that the processing of the two components, viz. (i) Brahmaputra Board and (ii) Investigation of Water Resources Development Scheme as already approved by the EFC on 09 April, 2013 may be completed expeditiously and the total outlay of Rs. 975 crore recommended for them may also be expeditiously sanctioned and released to achieve better outcome of the implementations of the two schemes. Noting further that the proposal for restructuring of the Central Water Commission (CWC) is at an advanced stage of processing and will be put up for consideration of the Government, the Committee strongly recommend that the work pertaining to restructuring of the CWC be completed within a definite time-frame without any further delay during the year 2015-16 so that the CWC after being revamped and restructured is able to achieve its mandated

aims and objectives in the near future. The Committee would like to be informed of the further action taken in this regard.

D. Accelerated Irrigation Benefits Programme (AIBP)

Recommendation (Para No. 1.77)

13. The Committee noted that AIBP, a Centrally-sponsored scheme, had been restructured from the financial year 2014-15 and renamed 'Accelerated Irrigation Benefits and Flood Management Programme' (AIBFMP). The programme includes fund released to States/UTs in respect of the (i) AIBP and National Projects (ii) Command Area Development and Water Management (iii) Flood Management Programme and (iv) Repair, Renovation and Restoration of Water Bodies. A total Budget allocation of Rs. 6,265.22 crore was made during 2014-15 by the Ministry towards AIBP and National Projects. The Committee's examination of the performance of AIBP revealed consistent short falls in actual achievements in terms of fund released as against outlays from 2009-10 onwards. As against financial outlay of Rs. 7,342 crore made in 2012-13, the actual release was only Rs. 6,523 crore. The corresponding figures for the financial year 2013-14 were Rs. 6,162 crore and Rs. 4,033 crore respectively. About the shortfalls, the Ministry replied that the shortfalls generally happen due to requisite state matching budget provision and also due to the fact that the CCEA approval for continuation of AIBP was accorded only in September, 2013, for which follow-up actions were taken from time to time with State Governments.

14. The Ministry, in its action taken note have replied as follows:-

"As detailed in para 1.70 the constraints in the implementation of the AIBP have been resolved in consultation with the states; the expenditure picked up manifold after revision during 2014-15.

The Ministry is now in a position to spend the earmarked allocations effectively in a time bound manner. Currently, there is a backlog of more than Rs. 6000 crores, which is payable to the States as per the MoU signed with them. In addition, unpaid claims worth Rs. 2000 crores are under process in the Ministry."

Recommendation (Para No. 1.78)

15. Being unhappy with the state of affairs, the Committee urged upon the Ministry to vigorously pursue with the State Governments and implementing agencies to submit schemes/projects for the AIBP to improve additional irrigation potential in the States and for initiating steps for concurrent evaluation of the AIBP projects/schemes through third party and also to strictly ensure that no release of funds is made without fulfillment of above modified criteria. The Committee desired the Ministry to inform of further action taken in the matter. The Committee also noted that the Ministry had carried out physical and financial monitoring of projects included under the AIBP since 1996-97 through the CWC, and that various bottlenecks in implementation of these projects had been identified which included factors like land acquisition issues, Rehabilitation and Resettlement (R&R) issues, timely release of grants by State Governments to the implementing agencies, lack of coordination between other departments such as the National Highways Authority of India and the Railways, contractual problems, etc. Further, the State Governments are requested from time to time to resolve these bottlenecks and based on past experience, certain policy modifications have also been brought out in the AIBP during 12th Plan. The Committee expected that the Ministry would continue to strictly exercise comprehensive physical and financial monitoring of the projects included under the AIBP by use of modern techniques including remote sensing satellites and also addressed in a time bound manner, the deficiencies found in the implementation by modifying the AIBP wherever necessary. The Committee also recommended the Government to ensure that the adequate funds are allocated for National Projects. The Committee should be informed of action taken.

16. The Ministry, in its action taken note have replied as follows:-

“For providing adequate funds to National Projects, ministry is making efforts to get adequate funds from Ministry of Finance for which ministry has already written d.o. letters to Ministry of Finance, NITI Aayog indicating the importance of completion of these national projects. Hon'ble Minister has made personal visit along with the officers

of Planning Commission emphasizing the need for higher allocation towards national projects. Ministry will continue to pursue higher allocation for national projects from Ministry of Finance.

While all out efforts are being made for close monitoring of the AIBP projects through physical verification and remote sensing, a major constraint today is lack of funds. Because of budgetary constraints, the Ministry is not able to honour its commitments to the states. This is delaying the completion of the projects. If the budgetary constraints persist, we will need to consider innovative ways of funding such projects, to ensure their timely completion."

17. The Committee note from the Ministry's reply that the constraints in the implementation of the AIBP have been resolved in consultation with the States and the expenditure on the restructured AIBP had picked up manifold during 2014-15 which has put the Ministry in a position to spend the earmarked allocations effectively in a time-bound manner. Noting further that there is a backlog of Rs.6,000 crore waiting to be released to States as per the Memorandum of Understanding (MoU) signed with them and unpaid claims worth Rs.2,000 crore were being processed in the Ministry, the Committee strongly recommend that the Ministry expedite the process of release of the backlog of Rs. 6,000 crore to the States and also take prompt steps to complete settlement of unpaid claim worth Rs. 2,000 crore lying with the Ministry in a time-bound manner under intimation to the Committee. They also note, in this connection, that there have been bottlenecks in monitoring of the AIBP Projects/Schemes due to budgetary constraints as a result of which the Ministry is not able to honour their commitments to the States, thereby causing delay in the completion of the Projects. The Committee would, therefore, desire the Ministry to take necessary steps to persuade the Government to make increased allocations for the AIBP Projects/Schemes for the use of remote sensing satellite so as to usher in a process of comprehensive physical monitoring of the AIBP Projects/Scheme. They would also reiterate their earlier recommendation contained in their First Report on Demands for Grants (2014-15) for

initiating steps to undertake concurrent evaluation and monitoring of the AIBP Projects/Schemes through third party i.e. an independent agency. The Committee would like to be apprised of the concrete action taken by the Ministry in this regard.

E. Micro Irrigation under Command Area Development and Water Management

Recommendation (Para No. 1.80)

18. The Committee were given to understand that during 12th Plan, installation of micro irrigation had been kept as an alternative for construction of field channels, which would also address the problem of tail end farmers as also water logging in the fields caused by agriculture. However, the Committee were distressed to note that no proposal was received during the Plan for micro irrigation. The Committee would like the Ministry to popularize micro irrigation through awareness raising programmes, workshops and by involving Gram Panchayats, local bodies etc., and apprise the Committee of the results achieved in this regard.

19. The Ministry, in its action taken note have replied as follows:-

“Ministry is already trying to achieve and bridge the entire gap between the irrigation potential created and potential utilized for which prioritization of those States which are having a large gap and higher allocation of funds for CAD and modifications in the existing guidelines of Command Area Development and Water Management for taking up a minimum of 10% to 50% micro irrigation of CAD area of ongoing projects under CAD& WM is being proposed. For creating awareness of benefits of micro irrigation the funds will be made available to educate the farmers towards the benefits during ‘Jal Kranti Abhiyan’ 2015-16.

During the deliberations on the issues/constraints flagged in the Jal Manthan, the importance of micro irrigation was also discussed at length. A National Convention of Water User Association (WUA) Presidents’ was convened on 7th & 8th November, 2014. The role of Union Ministry, State Government and Water User Associations has been deliberated in the Convention for initiating steps for strengthening Participatory Irrigation Management in the country. During deliberations, the efficacy of micro

irrigation was also highlighted and shared by the participants of the Convention. Further, as 10% of Culturable Command Area (CCA) of each CADWM project has been made mandatory for coverage under micro irrigation during XII Plan, the State governments are submitting project proposals with 10% micro irrigation being included as per XII Plan Guidelines. Detailed Project Proposals on micro irrigation, a component of CADWM Programme, are to be examined by the core group of officers of the ministry before release of central share for micro irrigation. A meeting of the core group of officers was held on 16.02.15.

A model project can be seen in Sanchore District of Rajasthan, where a large scale project has been taken up for drip and sprinkler irrigation for effective use of Narmada waters.

The state of Karnataka proposes to take up a project for micro-irrigation with the sugar cane farmers, in collaboration with the sugar industry. The Government of Madhya Pradesh has taken up another pilot project to promote micro-irrigation in 50 thousand hectares between Chambal and Shipra basins in and around Indore."

20. The Committee note from the reply of the Ministry that for creating awareness about the benefits of Micro Irrigation, funds will be made available to educate the farmers towards the benefits during 'Jal Kranti Abhiyan' 2015-16. The Committee would like the Ministry to concretise the proposal and to popularise Micro Irrigation among the farmers by providing adequate funds to States/UTs during 'Jal Kranti Abhiyan' 2015-16 and through the increased participation of the local bodies like Panchayats etc. The Committee would like to be apprised of the further progress made in this regard.

The Committee further note that a National Convention of Water Users Association (WUA) Presidents was convened on 7th and 8th November, 2014, wherein, the efficiency of Micro Irrigation was highlighted and shared by the participants and the roles of Union Ministry, State Government and Water User Association (WUAs) has also been deliberated upon for initiating steps towards strengthening of Participatory Irrigation Management (PIM) in the country. The Committee desire to be updated about

the history, progress and the status of the Participatory Irrigation Management (PIM) and Water User Association (WUAs) in India specially under the Command Area Development & Water Management (CAD & WM) Programme, including the details of the total funds allocated and utilized for the same from time to time till date. They would, however, further desire the Ministry to initiate specific measures to activate and rejuvenate PIM and WUAs at the earliest, so that they serve as catalyst for promoting Micro Irrigation under CAD & WM across the country. Noting further the crucial importance of Participatory Irrigation Management (PIM) for better irrigation and water management in the country, the Committee also recommend that the specific information pertaining to follow-up steps taken to strengthen PIM and WUAs - in the aftermath of the National Convention of WUAs held on 7-8 November, 2014 be furnished to them.

The Committee also note with appreciation that a large-scale model project has been taken up in Sanchole District of Rajasthan for the drip and sprinkler irrigation for effective use of Narmada waters, that the Government of Madhya Pradesh has also taken up a pilot project to promote Micro Irrigation in 50,000 ha. between Chambal and Shipra basins in and around Indore, and that the State of Karnataka proposes to take up a project for Micro Irrigation with the sugar cane farmers in collaboration with the sugar industry. The Committee would like to be apprised of the progress made in respect of Micro Irrigation in the three States of Rajasthan, Madhya Pradesh and Karnataka, and would further recommend the Ministry to initiate steps for persuading the other remaining States/UTs to adopt Micro Irrigation as an alternative for the construction of field channels and also to thereby address the problem of tail-end farmers and water logging in the agricultural fields.

F. Budgetary Allocation for Minor Irrigation

Recommendation (Para No. 3.24)

21. The Committee noted that the Minor Irrigation (MI) schemes are those ground and surface water schemes which have a Culturable Command Area (CCA) upto 2,000 hectare individually. The Budget allocations for the Minor Irrigation under Plan Head was Rs. 256.02

crore for BE 2013-14, which was hiked to Rs. 357.02 crore for 2014-15 (BE). That represented an increase of Rs. 101.00 crore over the allocation in 2013-14, although the allocations had to be reduced during the corresponding period from Rs. 256.02 crore at BE stage to Rs. 119.00 at RE stage. As informed by the Ministry, the reason for reduction of Budget allocations at RE stage was that the approval in respect of the scheme was obtained after elapse of six months. For this reason, the expenditure was quite low by the month of September, 2013 due to which the budget was curtailed at RE stage by the Ministry of Finance. The Ministry also informed that due to delay in approval of scheme of 'Ground Water Management & Regulation', the activities as envisaged could not be taken up. The Committee were distressed to note that the problem of reduction of Budget allocations at Revised Estimate stage had been persistently plaguing the budgetary projections of the Ministry in Minor Irrigation sector. The Committee noted with concern that the reduction of allocations at RE stage shows poor pre-planning, lack of monitoring and control on the part of the Ministry. They, therefore, recommended that the Ministry must take concrete steps at the earliest to streamline and simplify the process of getting approval of water resources schemes under Minor Irrigation and thus avoid in future the chronic issue of reduction of allocations at RE stage so that both the manpower and resources were not wasted away in the process of estimation of allocations.

22. The Ministry, in its action taken note have replied as follows:-

"The MI scheme of Ministry is for MI census and Ground Water Management. It does not deal with creation of Minor Irrigation schemes as such. Due to late approval of schemes in XII plan, the expenditure could not pick up and led to reduction at RE stage.

Observations of the Parliamentary Standing Committee are noted for future compliance."

23. The Committee having noted with utter disappointment that the approval in respect of the Minor Irrigation census and Ground Water Management was obtained after the elapse of six months had strongly recommended the Ministry to take concrete steps to simplify the process of getting the approval of water resources schemes covered under the Minor Irrigation. The Committee, however, find the reply furnished by the Ministry thereto silent on this issue. The Committee further note that due to late

approval of the schemes in the 12th Plan, the expenditure could not pick up which led to reduction at Revised Estimate (RE) stage (2014-15). The Committee would, therefore, like to know the specific reasons for the same, and reiterate their earlier recommendation to take concrete steps to address the chronic issue of reduction of allocation of RE stage so that both manpower and resources are not wasted in the process of improper estimation of the Budgetary allocations. They would like to be apprised of the concrete action taken in the matter.

G. Central Ground Water Board

Recommendation (Para No. 3.29)

24. The Committee noted that the CGWB has 18 regional offices, each headed by a Regional Director, supported by 17 engineering Divisions and 11 State Units for undertaking various activities. The Committee's examination of Demands for Grants revealed that a Budget allocation of Rs. 136.35 crore had been made for Central Ground Water Board for 2014-15, which was almost the same amount allocated during BE 2013-14, i.e. Rs. 134.31 crore. The Ministry informed that the CGWB made an assessment of the dynamic ground water resources in the country in 2009 and assessed the annual replenishable ground water resource to be 431 billion cubic metre (BCM) and the stage of ground water development was 61%. However, as per the assessment of dynamic ground water resources carried out jointly by the Central Ground Water Board and State Ground Water Departments (a report entitled 'Dynamic Ground Water Resources of India' is placed on website of CGWB www.cgwb.gov.in), the annual replenishable ground water resources in India (as on 31 March, 2014) is 433 BCM while the net annual ground water availability and annual ground water draft for irrigation, domestic and industrial usages respectively are 398 BCM and 245 BCM. The stage of ground water development was stated to be 62%, and 697 assessment units were semi-critical, 217 assessment units critical, 1071 assessment units over-exploited, and 92 assessment units were saline. This showed that as compared to 2009, the ground water quantity in 2011, had deteriorated in 156 assessment units in the country, Further, the saline assessment units had

also increased from 71 to 92 during the same period, and there are 1,071 over-exploited assessment units as against 802 in the year 2009.

25. The Ministry, in its action taken note have replied as follows:-

"In general, the number and percentage of over exploited and Critical units have increased over time. However, in certain places, reverse trends have been observed where the category has changed from over exploited/critical to semi-critical/safe. Reasons for such changes are attributed to - Successive good rainfall, Enhanced activities on water conservation and rainwater harvesting in Andhra Pradesh, Gujarat and few other states.

The increase in saline assessment units is mainly due to change of assessment units from Blocks to Firka or similar administrative units. In Tamil Nadu the saline assessment units has increased from 11 in 2009 to 35 in 2011 due to change in assessment units from Block to Firka."

26. The Committee note from the reply furnished by the Ministry that though in general, the number and percentage of over exploited and Critical units have increased over the time, however, in certain places, reverse trends have also been observed where the category has shown a change from Over-exploited / Critical to Semi-critical / Safe units. And the reasons for such changes have been attributed to successive good rainfall, enhanced activities on water conservation and rainwater harvesting in Andhra Pradesh, Gujarat and few other states. While noting the positive trends towards change in the category from Over-exploited/ Critical to Semi-critical / Safe units in a few States, the Committee would like to be given complete details thereabout. They would also recommend the Government to initiate specific action plan to reverse the negative trend wherever the quality of ground water level has shown a deteriorating trend elsewhere in the country as well. The Committee further note that the CGWB made an assessment of the dynamic ground water resources in the country in 2009 and assessed the annual replenishable ground water resource to be 431 billion cubic metre (BCM) and the stage of ground water development as 61%. However, as per the assessment of dynamic ground water resources carried out jointly by the Central Ground Water

Board and State Ground Water Departments (a report entitled 'Dynamic Ground Water Resources of India' placed on website of CGWB www.cgwb.gov.in), the annual replenishable ground water resources in India (as on 31 March, 2014) happens to be 433 BCM. The Committee, therefore, would like the Ministry to seriously verify and put an accurate, updated information uploaded on the website of the Central Ground Water Board (CGWB).

H. Ground Water Pollution by industries

Recommendation (Para No. 3.31)

27. The Committee noted that the quality of ground water in some parts of the country have deteriorated due to pollution of underground water by industries like tannery, meat plant, etc. They also noted the reply of the Ministry that an online census had been ordered by the Ministry of Environment, Forests and Climate Change and the Central Ground Water Board in respect of such areas associated with illegal activities by 31st March, 2015. The Committee urged upon the Ministry to vigorously pursue it with the Ministry of Environment, Forests and Climate Change and the Central Ground Water Board to ensure timely completion of the stated online census by the schedule date, 31st March, 2015 and apprise the Committee accordingly.

28. The Ministry, in its action taken note have replied as follows:-

"MoEF has taken up the issue and directions have been issued to State Pollution Control Boards and other related Organizations to direct all relevant Industries to set up online effluent quality monitoring system (EQMS). The time line fixed for establishing online monitoring facility by 30th June, 2015.

In the meantime CGWB has entered into a Memorandum of Understanding (MOU) with Central Pollution Control Board (CPCB) for sharing of data and information and take up common programme for monitoring geogenic and anthropogenic contamination in respect of ground water pollution."

29. The Committee note from the Ministry's reply that with a view of tackling pollution of underground water by certain industries like tannery, meat plant, etc., the

Ministry of Environment, Forests & Climate Change (MoEF&CC) had issued direction to State Pollution Control Boards (SPCBs) and other related organisations to direct all relevant Industries to set up an Online Effluent Monitoring System (EQMS) by the fixed timeline, i.e. 30 June, 2015. They also note further that the Central Ground Water Board (CGWB) had entered into a Memorandum of Understanding (MoU) with the Central Pollution Control Board (CPCB) for the sharing of data and information and to also take up common programme for monitoring geogenic and anthropogenic contamination in respect of the ground water pollution. The Committee would like to be informed of the updated status regarding establishing online monitoring facility by relevant industries in the country including tannery, meat plant, etc. and also the reasons for failure to achieve the targeted timeline, i.e. 30 June, 2015 (if any). The Committee would also like to be apprised of the further progress achieved regarding the common programme for monitoring geogenic and anthropogenic contamination on ground water and sharing of data and information entered into by the CGWB and the CPCB.

I. Flood Control

Recommendation (Para No. 4.23)

30. The Committee noted that under the Plan scheme of Flood Control, a total expenditure of Rs. 152.94 crore was incurred since 11th Plan on Flood Forecasting, a total of Rs. 777.16 crore on the River Management Activities and Works related to Border Areas, and a total of Rs. 4,259.73 crore on Flood Management Programme. They noted that under Flood Forecasting programme, modern system of automatic data collection was installed at 222 stations besides the system installed at 223 stations prior to 11th Plan. One Earth Receiving Station (ERS) was set up at New Delhi besides two earlier ERS at Bural and Jaipur for downloading the data signals, while 10 Modelling Centres were established besides 11 such centres already set up before 11th Plan, for data analysis and its validation including flood forecast formulation. In addition, under Flood Management Programme, 517 flood management projects were included since 11th Plan, out of which 252 projects were completed providing flood protection to 2.589 lakh ha. of old flood-affected area and 19.593 lakh ha. of new flood-affected area benefitting a population of 197.277 lakh in various States, while the remaining projects were in progress.

The Committee desired the Government to take action expeditiously for installing modern system of automatic data collection in additional stations besides 223 stations already installed prior to 11th Plan under Flood Forecasting scheme. They also desired the Ministry to accelerate the pace of works pertaining to Earth Receiving Station (ERS) already set up at New Delhi, Bural and Jaipur, and also the Modelling Centres besides 11 such centres set up prior to 11th Plan, for data analysis and its validation including flood forecast formulation.

31. The Ministry, in its action taken note have replied as follows:-

“The works of installation of modern system of automatic data collection equipment, establishment of additional Earth Receiving Stations (ERS) and Modelling Centres are proposed by CWC during XII Plan. The scheme of Flood Forecasting during XII Plan is under the process of approval. However, preparatory actions viz. finalization of specifications of equipment and draft tender documents have been initiated by CWC in anticipation of approval of the Scheme in 2015-16.

This will raise the number of flood forecasting sites to 275 from the existing level of 175; build capacity for modeling in all the regional offices of CWC.”

32. The Committee note from the Ministry's reply that although the works of installation of modern systems of automatic data collection equipment, establishment of additional Earth Receiving Station (ERS) and Modeling Centers are proposed by the Central Water Commission (CWC) during the 12th Plan, the scheme of Flood Forecasting during 12th Plan is still under the process of approval and preparatory action viz. finalization of specification of equipment and draft tender documents have been initiated by the CWC in anticipation of approval of the Scheme in 2015-16, which is expected to raise the number of flood forecasting sites to 275 from the existing level of 175 and also build the capacity for modelling in all the regional offices of the CWC. The Committee deplore the fact that the 12th Plan is already past mid-life whereas the scheme of Flood Forecasting happens to be still under the process of approval. The Committee, therefore, urge the Ministry to expedite completion of the approval of the Flood Forecasting without any further delay as also the rounding up of related

preparatory actions, i.e. finalization of specifications of equipment and draft tender documents - already initiated by the CWC and apprise the Committee accordingly. They further desire that specific actions be initiated by the Ministry to active the target of 275 flood forecasting sites from the existing level of 175 within a definite time-frame during 2015-16. The Committee would like to be apprised of the further action taken in this regard.

CHAPTER II

OBSERVATIONS / RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation (Para No. 1.70)

As per information provided to the Committee, the total Budget Estimates (BE) of the Ministry for the year 2014-2015 was Rs. 15,375.74 crore - which comprised of Plan allocation of Rs. 14,762 crore and Non-Plan allocation of Rs. 613.74 crore. The total Budget allocation for 2014-15 showed an overall increase by 86.32% as compared to total Budget allocation of Rs. 2,102.65 crore made in 2013-14 which, the Ministry maintained, was due to transfer of erstwhile "State Sector Scheme" of AIB&FMP as "Centrally sponsored scheme" with placing of funds (Rs. 8,992.22 crore) towards this scheme in the Ministry and introduction of new schemes. Further, the Committee's analysis of actual expenditure incurred in the both Plan and Non-Plan sections by the Ministry during 2013-14 indicated that the actual expenditures have consistently lagged behind Budget projections at both BE and RE stages, revealing thereby that the Government had clearly failed to put in place a mechanism for utilization and effective implementation of the various projects/schemes in time. It also indicated the Budget projections as made for 2013-14 had been wholly unrealistic and removed from the ground reality.

The Committee while expressing their disappointment over this trend, strongly recommended that efforts should be made to put in place an effective mechanism by proper Budgetary pre-planning exercise to ensure optimum utilization of Budget allocations (both Plan and Non-Plan) so that the Budget projections come nearer to actual expenditures. They also recommended the Ministry to undertake Budgetary exercises after framing proper, achievable targets for both Plan and Non-Plan schemes to ensure a more realistic and achievable Budget projections in future.

Reply of the Government

The Valuable observations of the Parliamentary Standing Committee have been noted for future compliance. For the planning of the budget, the Pre-Planning exercise was taken in the different National Level consultation organized by the Ministry. The key issues were discussed in the 3day conference 'Jal Manthan' by the Ministry with the State Governments.

Many State Chief Ministers, Irrigation Ministers, Chief Secretaries and Irrigation Secretaries participated in the Jal Manthan. The following matters were discussed;

- (a) Funding pattern of Centrally Sponsored Scheme,
- (b) Need for refining guidelines of the Schemes,
- (c) Smooth and timely processing of the project proposals from the states.

Many of these issues have since been resolved. A portal has been developed for processing and online review of proposals; the guidelines have been revised to allow for 20% cost overrun; 2 years extension for completion of projects in case of adequate justification and approved cost as on 1st April 2012, as the basis for re-imburement under AIBP, if other conditions of the scheme have been complied with. The issue of paripassu implementation of CAD projects was clarified. Such projects can be completed within a period of two years after completion of the dam, main canal and the branch canal network.

As a result there was a steep increase in expenditure; it jumped from Rs.800 crs in September to Rs.4800 crs at the end of March, 2015.

Comments of the Committee

(Please see Para No. 6 of Chapter-I of the Report)

Recommendation (Para No. 1.71)

Noting further that there has been a quantum jump in total Budget allocations by as much as 86.32 % in this financial year (i.e. 2014-15) as compared to 2013-14, the Committee urge the Ministry to make a workable action plan for achieving better fund utilization of the increased allocations made, in view of the fact that only about four months are left for the Government to concretize utilization of allocated funds for 2014-15. The Committee would like to be apprised of action taken by the Ministry in this regard.

Reply of the Government

Apart from the action taken as outlined in para 1.70 above, the Hon'ble Minister (WR, RD & GR) and senior officers of the Ministry are holding regular review meetings to identify the constraints in the way of achieving the set targets in respect of the schemes of the Ministry and resolve them through consultations/discussions with wing heads.

The AIBP Scheme of the Ministry has been made on line. This is a part of the Project Monitoring System. All old projects have been uploaded in the Project Monitoring System and all new projects for funding under AIBP will be required to be submitted online from 2015-16 onwards by State Govts.

In addition, Minister (WR, RD & GR) and other senior officers of the Ministry visited Bihar, Jharkhand, Maharashtra, Meghalaya, Assam, Arunachal Pradesh, Odisha, Uttar Pradesh, Uttarakhand and Rajasthan to expedite pending projects and resolve outstanding issues. Many other Chief Ministers such as those from Telangana and Andhra Pradesh met her personally.

Recommendation (Para No. 1.73)

While noting the reply of the Ministry that the expenditure is monitored on monthly basis, the Committee are however disappointed to know that no proposal / study has been initiated to avoid reduction of Budget allocation at RE stage, which speaks volume about the lackadaisical manner in which the Ministry is tackling the persistent issue of reduction of Budget allocations year after year. The Committee, therefore, urge upon the Ministry to come out with a fresh initiative in this regard so that Budget projections are made on realistic and pragmatic basis. Noting further from the reply of the Ministry that the approval of majority of schemes has been obtained now and the new components can now be implemented in financial year 2014-15, the Committee desire the Ministry to make all-out effort during the remaining part of this Financial Year by holding frequent meetings with the implementing agencies and vigorously monitoring the progress of the various schemes/projects for ensuring optimal fund utilization during 2014-15. The Committee desire to be apprised of the action taken in this regard.

Reply of the Government

The observations of the Parliamentary Standing Committee are noted and will be taken care of in the BE 2015-16.

After taking action outlined in para 1.70, as well as circulation of revised guidelines for submission of proposals, the Minister (WR) wrote to the Finance Minister as well as the Chairman NitiAyog to apprise them of the action taken and request for review of allocation for the Ministry at the RE stage, She subsequently met them with the key officials of the Ministry to press the claim. However, despite these efforts as well as the improved functioning of the Ministry, the Finance Ministry could not accede to the request of this Ministry in view of the overall budgetary constraints as well as larger devolutions to the states in accordance with the recommendations of the 14th Finance Commission. The Ministry has a backlog of more than Rs 6000 crs due to the various states; even currently, there are unpaid claims for Rs 2000 which, are being processed for approval. Therefore, allocation for the Ministry needs a serious reconsideration, to meet the genuine needs of the states as per approved pattern of AIBP.

Recommendation (Para No. 1.74)

The Committee noted that the Plan scheme called "River Basin Management" (RBM) was formulated during 2013-14 by merging two ongoing schemes, viz. River Basin Organisation (RBO) and Investigation of Water Resources Development Scheme. The Committee's examination revealed that a provision of Rs. 250 crore (BE) had been kept for River Basin Management during the financial year 2014-15, which represents an increase of Rs. 50 crore over the Budget allocations under the same Head during 2013-14. Interestingly however, the Committee observed that although Rs. 200 crore had been allocated during 2013-14, this allocation had to be reduced to Rs. 150 crore at Revised Estimate. The Committee were pained to note that the new component of the River Basin Management (RBM) Plan scheme could not be initiated during 2013-14, as the approval of the Cabinet Committee on Economic Affairs (CCEA) was accorded only on 28.02.2014. They, therefore, recommended the Ministry to devise a mechanism to shorten the lengthy bureaucratic procedure being followed for getting the timely approval of RBM Plan scheme by CCEA in future and apprise the Committee accordingly.

Reply of the Government

The approval of the scheme as per laid down procedure require circulation of the plan scheme for the inter-ministerial consultations and thereafter getting it recommended from the Expenditure Finance Committee (EFC) before placing it for the consideration and approval of the Cabinet Committee on Economic Affairs (CCEA). In the EFC meeting on River Basin Management Scheme held on 9th April, 2013, out of four components of the original EFC proposal, the two components viz Restructuring of CWC and River Basin Organisation were advised to be excluded from the proposal and to be dealt with separately. Accordingly, a revised EFC proposal in respect of River Basin Management, containing only two components namely, (1) Brahmaputra Board and (2) Investigation of Water Resources Development Schemes was considered by EFC on 3rd October, 2013 and an outlay of Rs. 975 crore recommended. Some delay in the processing was due to the Assembly elections in the Delhi State in 2013 and getting NoC from the Election Commission of India for holding the EFC meeting. The observation of the Committee is noted and accordingly it has been decided to advance the process of framing the scheme in consultation with the stakeholders to avoid delay in the future.

The proposal for restructuring of CWC is at an advanced staged of processing and will be put up for consideration of the Government. The aim of restructuring is to strengthen CWC for the following activities:

- (i) Holistic development of Water Resources
- (ii) Conflict resolution in inter-State disputes
- (iii) Rapid appraisal/monitoring
- (iv) Flood Management
- (v) Climate change
- (vi) Coordination planers & decision makers
- (vii) Water quality
- (viii) Dam safety
- (ix) Water conservation
- (x) Capacity building ."

Comments of the Committee

(Please see Para No. 12 of Chapter-I of the Report)

Recommendation (Para No. 1.75)

The Committee note that the Ministry made an increased Budget allocations of Rs. 50 crore in BE 2014-15 over BE 2013-14 in respect of River Basin Management scheme specifically to take care of additional requirement of works relating to Majuli Island. According to information received from the Ministry, a total sum of Rs. 96.25 crore was incurred on Phase I and II works pertaining to Protection of Majuli Island (Assam) till October, 2014. In view of the fact that hardly four months are left in the current Financial Year for implementing the additional flood protection works in Majuli Island, the Committee suggest the Ministry to make all out efforts to utilize the remaining months (which are also mainly rain-free and dry season) judiciously for ensuring full utilization of allocated funds and for execution of stipulated works and apprise the Committee of tangible results achieved in this regard.

Reply of the Government

The work on Phase-II and III for protection of Majuli Island with estimated cost of Rs. 115.99 Crore are under execution. 88.59 % of the works have been completed upto March 2015 at an expenditure of Rs. 103.70 crore. This has resulted in prevention of coastal erosion of Majuli and reclamation of area previously eroded. The results obtained due to this effort are as follows:

Year	Area of Majuli Island (in sq km)	Net Area reclaimed (in sq km)
2004	502.21	
2008	506.37	4.16
2011	520.26	13.89
2012	522.73	2.47
2014	523.88	1.15
Total land mass gained from 2004 to 2014		21.67

Recommendation (Para No. 1.76)

The Committee are displeased to observe that despite their recommendations in 14th (2012-13) & 17th (2013-14) Reports regarding restructuring of CWC, the work is still under approval stage. The Committee are at a loss to understand as to why their recommendations are not taken up seriously by the Ministry and reiterate their earlier recommendation contained in 17th Report on Demands for Grants (2013-14) for completion of all the processes and formalities involved in the restructuring exercise by the Ministry in a time bound manner so that a new, revamped CWC will see the light of the day, which will serve as catalyst for effective and efficient management of river basin and water resources. The Committee also feel that the proposals pending with CWC particularly Dr. B.R. Ambedkar Lift Irrigation – Pranhitachavalaproject in the State of Telangana may be expedited and also urge upon the Government to impress upon the State Governments to speed up submission of pending proposals with them, particularly

AthikadavvAvanishi Project in the State of Tamil Nadu. The Committee should be informed of follow-up action taken by the Ministry in this regard.

Reply of the Government

Restructuring of CWC

The matter of restructuring of CWC was referred to DoP&T who examined the matter on 08.7.2013 and referred the matter to Ministry of Finance. After examining the matter on 26.02.2014, Ministry of Finance desired that some information may be submitted to them and returned the proposal with the observation that the proposal of Cadre Review of CWC should be in consonance with the proposal of Cadre Review of CWES and their guidelines issued vide OM No. 5(3)/E.III/97 dated 07/01/1999 regarding review/restructuring. The matter remained under active consideration in CWC and in this Ministry.

A meeting was last held on 18.03.2015 in the Ministry where proposal was discussed at length. It was decided that the proposal needs to be reviewed and reworked. Accordingly, the proposal is under review in CWC and a modified / revised proposal will be submitted by the end of June 2015.

From the above it may please be observed that as various factors are linked towards the Restructuring of CWC, the matter has been under active consideration in CWC and the Ministry.

The aims of restructuring of CWC have been given in reply to para 1.74.

2. Dr. B.R. Ambedkar Pranahita Chevella Sujala Sravanthi Project:

The DPR of Dr. B.R. Ambedkar Pranahita Chevella Sujala Sravanthi Project was submitted by the State of Telangana to CWC for appraisal. The CWC has given certain observations on Hydrology, Barrage and Canal Design, Hydrel Civil Design, Electro Mechanical Cost Estimate and Electrical aspects, Integrated Planning Aspects etc. in between December 2014 to April 2015. The proposal was discussed in a meeting taken by Additional Secretary, MoWR,RD&GR on 8.5.2015. The project authority informed during the meeting they are in a process of revising the project proposal. Accordingly, the State Government has been requested to confirm the revision of proposal and submit the revised DPR. There are serious design faults in the existing proposal.

3. Athikadavv Avanishi Project, Tamilnadu:

The proposal "Athikadavv Avanishi Project, Tamilnadu" was submitted by Tamil Nadu Government to the Regional CWC office at Coimbatore in April 2013. The CWC issued certain observations in May, 2013. The compliance of the observations has not been received from the State Government so far. However, the State Government has informed that the project report is under revision and necessary investigations for considering various alternatives are being carried out to ensure technical and financial viability and satisfying guidelines of Central and the State Government.

Recommendation (Para No. 1.77)

The Committee noted that AIBP, a Centrally-sponsored scheme, had been restructured from the financial year 2014-15 and renamed 'Accelerated Irrigation Benefits and Flood Management Programme' (AIBFMP). The programme includes fund released to States/UTs in respect of the (i) AIBP and National Projects (ii) Command Area Development and Water Management (iii) Flood Management Programme and (iv) Repair, Renovation and Restoration of Water Bodies. A total Budget allocation of Rs. 6,265.22 crore was made during 2014-15 by

the Ministry towards AIBP and National Projects. The Committee's examination of the performance of AIBP revealed consistent short falls in actual achievements in terms of fund released as against outlays from 2009-10 onwards. As against financial outlay of Rs. 7,342 crore made in 2012-13, the actual release was only Rs. 6,523 crore. The corresponding figures for the financial year 2013-14 were Rs. 6,162 crore and Rs. 4,033 crore respectively. About the shortfalls, the Ministry replied that the shortfalls generally happen due to requisite state matching budget provision and also due to the fact that the CCEA approval for continuation of AIBP was accorded only in September, 2013, for which follow-up actions were taken from time to time with State Governments.

Reply of the Government

As detailed in para 1.70 the constraints in the implementation of the AIBP have been resolved in consultation with the states; the expenditure picked up manifold after revision during 2014-15.

The Ministry is now in a position to spend the earmarked allocations effectively in a time bound manner. Currently, there is a backlog of more than Rs. 6000 crores, which is payable to the States as per the MoU signed with them. In addition, unpaid claims worth Rs. 2000 crores are under process in the Ministry.

Comments of the Committee

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

Recommendation (Para No. 1.78)

Being unhappy with the state of affairs, the Committee urged upon the Ministry to vigorously pursue with the State Governments and implementing agencies to submit schemes/projects for the AIBP to improve additional irrigation potential in the States and for initiating steps for concurrent evaluation of the AIBP projects/schemes through third party and also to strictly ensure that no release of funds is made without fulfillment of above modified criteria. The Committee desired the Ministry to inform of further action taken in the matter. The

Committee also noted that the Ministry had carried out physical and financial monitoring of projects included under the AIBP since 1996-97 through the CWC, and that various bottlenecks in implementation of these projects had been identified which included factors like land acquisition issues, Rehabilitation and Resettlement (R&R) issues, timely release of grants by State Governments to the implementing agencies, lack of coordination between other departments such as the National Highways Authority of India and the Railways, contractual problems, etc. Further, the State Governments are requested from time to time to resolve these bottlenecks and based on past experience, certain policy modifications have also been brought out in the AIBP during 12th Plan. The Committee expected that the Ministry would continue to strictly exercise comprehensive physical and financial monitoring of the projects included under the AIBP by use of modern techniques including remote sensing satellites and also addressed in a time bound manner, the deficiencies found in the implementation by modifying the AIBP wherever necessary. The Committee also recommended the Government to ensure that the adequate funds are allocated for National Projects. The Committee should be informed of action taken.

Reply of the Government

For providing adequate funds to National Projects, ministry is making efforts to get adequate funds from Ministry of Finance for which ministry has already written d.o. letters to Ministry of Finance, NITI Aayog indicating the importance of completion of these national projects. Hon'ble Minister has made personal visit along with the officers of Planning Commission emphasizing the need for higher allocation towards national projects. Ministry will continue to pursue higher allocation for national projects from Ministry of Finance.

While all out efforts are being made for close monitoring of the AIBP projects through physical verification and remote sensing, a major constraint today is lack of funds. Because of budgetary constraints, the Ministry is not able to honour its commitments to the states. This is delaying the completion of the projects. If the budgetary constraints persist, we will need to consider innovative ways of funding such projects, to ensure their timely completion.

Comments of the Committee

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

Recommendation (Para No. 1.79)

The Committee note that the Command Area Development and Water Management (CAD&WM) programme was started as a Centrally Sponsored Scheme in 1974-75 with the objective to bridge the gap between irrigation potential created and utilized through micro level infrastructure development for efficient water management and enhancement of agricultural production and productivity so as to improve socio-economic conditions of the farmers. Under this programme, 219 irrigation projects have been completed since its inception till March, 2013 and 150 other projects are presently under implementation. The Committee further note that there have been persistent under-achievements in performance of Central assistance vis-à-vis Budget allocations since 2010-11 which according to the Ministry depends on the degree of proposals received from the State Governments. The Committee are dismayed to see the passive attitude of the Government in not pursuing the matter with the State Governments and inducing them to submit proposals for CAD&WM programme on time. The Committee, therefore, recommend the Government to initiate immediate action in this regard to induce the State Governments to expedite submission of proposals for CAD&WM programme during this Financial Year (2014-15).

Reply of the Government

MoWR, RD & GR has already prioritized completion of Command Area Development works under its scheme and accordingly has taken up a study in collaboration with State Governments to identify the states, which are having a large gap of irrigation potential and utilization and will formulate a strategy for timely completion of these CAD works on priority. The same is also likely to be a major part of PMKSY with higher percentage of allocation in the scheme. Ministry is also likely move a Cabinet Note for removing the various hindrances in implementation of CAD&WM as indicated during 'Jal Manthan' by several State Governments, such as:

- (i) Time period for pari-passu implementation of CAD works be increased upto 4 years as per quantum of irrigation potential after its creation for large projects where large potential has been created before XII Plan guidelines came into force.
- (ii) Central assistance to be released by Govt. of India as per the memorandum of understanding (MoU) on achieving the physical and financial targets of CADWM components including capacity building.
- (iii) The on-going projects spilled over from XI Plan may continue to get the central assistance as per current funding pattern (i.e. at XII Plan) if the project is likely to be completed early i.e. within XII Plan or first two years of XIII Plan and minimum 50% micro-irrigation and suitable capacity building, is attended too.
- (iv) In case of Special category States/areas such as North Eastern states/hilly states/tribal areas/DDP/DPAP areas/Left Wing Extremism (LWE) areas, CAD&WM fundings should be at par with that of AIBP instead of 50:50 and in case of general category States, funding pattern is to be enhanced from 50:50 to 75:25.
- (v) New cost norms adopted during XII Plan to be applicable for the ongoing projects also, since the cost of construction has increased considerably over the years. Unit cost may be taken as Rs.25000/- per hectare. However, financial implications may be limited to total allocation under CAD&WM as in Para 9(iv). States may be free to choose the type of water course of 1 cusec as per their requirements.
- (vi) Micro-irrigation under CAD&WM programme to be taken up as per proposals received from State Governments without any restriction. Use of underground pipelines to be made eligible in lieu of field channels.

Recommendation (Para No. 1.80)

The Committee were given to understand that during 12th Plan, installation of micro irrigation had been kept as an alternative for construction of field channels, which would also address the problem of tail end farmers as also water logging in the fields caused by

agriculture. However, the Committee were distressed to note that no proposal was received during the Plan for micro irrigation. The Committee would like the Ministry to popularize micro irrigation through awareness raising programmes, workshops and by involving Gram Panchayats, local bodies etc., and apprise the Committee of the results achieved in this regard.

Reply of the Government

Ministry is already trying to achieve and bridge the entire gap between the irrigation potential created and potential utilized for which prioritization of those States which are having a large gap and higher allocation of funds for CAD and modifications in the existing guidelines of Command Area Development and Water Management for taking up a minimum of 10% to 50% micro irrigation of CAD area of ongoing projects under CAD& WM is being proposed. For creating awareness of benefits of micro irrigation the funds will be made available to educate the farmers towards the benefits during 'Jal Kranti Abhiyan' 2015-16.

During the deliberations on the issues/constraints flagged in the Jal Manthan, the importance of micro irrigation was also discussed at length. A National Convention of Water User Association (WUA) Presidents' was convened on 7th & 8th November, 2014. The role of Union Ministry, State Government and Water User Associations has been deliberated in the Convention for initiating steps for strengthening Participatory Irrigation Management in the country. During deliberations, the efficacy of micro irrigation was also highlighted and shared by the participants of the Convention. Further, as 10% of Culturable Command Area (CCA) of each CADWM project has been made mandatory for coverage under micro irrigation during XII Plan, the State governments are submitting project proposals with 10% micro irrigation being included as per XII Plan Guidelines. Detailed Project Proposals on micro irrigation, a component of CADWM Programme, are to be examined by the core group of officers of the ministry before release of central share for micro irrigation. A meeting of the core group of officers was held on 16.02.15.

A model project can be seen in Sanchore District of Rajasthan, where a large scale project has been taken up for drip and sprinkler irrigation for effective use of Narmada waters.

The state of Karnataka proposes to take up a project for micro-irrigation with the sugar cane farmers, in collaboration with the sugar industry. The Government of Madhya Pradesh

has taken up another pilot project to promote micro-irrigation in 50 thousand hectares between Chambal and Shipra basins in and around Indore.”

Comments of the Committee

(Please see Para No. 20 of Chapter-I of the Report)

Recommendation (Para No. 1.81)

The Committee note that the Demands for Grants (2014-15) of the MoWR, RD and GR contain a new major head titled 'Ecology and Environment'. Under this head, allocations have been made for Plan expenditures in respect of National River Conservation Plan (NRCP), National Ganga River Basin Authority (NGRBA) and National Ganga Plan (NGP). The Ministry informed that the 'National River Conservation Plan' is a new scheme included in the budget of their Ministry during the financial year 2014-15. For greater efficiency in programme delivery, the programme has been shifted to the MoWR, RD and GR from Ministry of Environment, Forests and Climate Change. The Committee further note that an Integrated Ganga Conservation Mission namely, 'Namami Gange', programme has been worked out as per the provisions made in the Union Budget 2014-15 for Rs. 2,037 crore. The breakup of this amount is Rs. 1,500 crore for Namami Gange, Rs. 355 crore for ongoing NGRBA activities and Rs. 182 crore towards National River Conservation Plan, which includes approximately Rs. 100 crore for Ganga tributaries. In addition, Rs. 100 crore have been allocated for improvement of Ghats in 7 specified locations. The budget provision for Rs. 82 crore exclusively pertains to Ministry of Environment, Forests and Climate Change (MoEF&CC).

Reply of the Government

Statement of facts and hence no comments required.

Recommendation (Para No. 1.82)

The Committee also note that the action plan for 'Namami Gange' drawn on the recommendations of the Group of Secretaries (GoS) has been discussed and approved by the Apex Committee of NGRBA in its 4th meeting chaired by the Vice-Chairperson of NGRBA and the Hon'ble Minister, Water Resources, River Development and Ganga Rejuvenation held on 27th October, 2014. The recommendations of the Group of Secretaries (GoS) indicated several short-term, medium-term and long-term action plans to be implemented by the Government in conjunction with State Governments, Urban Local Bodies and associated Ministries such as Ministries of Rural Development, Drinking Water & Sanitation, Shipping and Tourism. The Committee recommend the Ministry to initiate urgent action in conjunction with all stakeholders for ensuring that the short-term action plans related to Namami Gangebe implemented effectively and vigorously within the stipulated 3 years period so that the rest of the works/activities planned for medium and long terms gain early momentum thereby setting the pace for achieving the goal of rejuvenation of Ganga by 2019. The Committee should be informed of the action taken by the Government and allied agencies in this regard.

Reply of the Government

Activities undertaken for implementing the short-term action plans are listed in Annexure I.

Recommendation (Para No. 1.88)

According to the Ministry, the Central Pollution Control Board (CPCB) of the Ministry of Environment, Forests and Climate Change has given direction to 17 polluting industries to set up electronic sensors or real time/online effluent quality monitoring system by 31st March, 2015 at their own costs for monitoring the kind of pollution present in water which shall be continuously monitored by the State Pollution Control Boards (SPCBs) through a 24X7 display mechanism to be installed suitably by the SPCBs at strategic location and also be accessible by the Central Pollution Control Board on real-time basis. Direction has been issued by the CPCB on 05.02.2014 under Section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to 11 Ganga Basin States regarding continuous monitoring of industrial effluent quality before final disposal into river Ganga and its tributaries by the industries. The Committee recommend that the CPCB rigorously pursue with the 17 polluting industries to

ensure that the direction issued for setting up electronic sensors/real time effluent monitoring system by 31st March, 2015 is duly complied with by them so that necessary monitoring work regarding the kind of pollution in water may be taken up by the State Pollution Control Boards on real-time basis. They also desire the Ministry to initiate steps for imposition of punitive measures including fine, penalties, etc., on non-complying industries under the relevant Section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974. Noting that several follow up meetings/consultative workshops have been organized by the Central Pollution Control Board with the State Pollution Control Boards and the representatives of Grossly Polluting Industries during September and October, 2014, the Committee would further like to be informed of the findings of the meetings held in this regard and the action taken thereon.

Reply of the Government

The CPCB has conducted a series of meetings on 19th& 29thSeptember, and 16th October, 2014 with the all the State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs), industry associations across the country and other stake holders including the 11 basin states, wherein the compliance of direction issued by the CPCB on 05.02.2014 under Section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974 to 11 Ganga basin states regarding continuous monitoring of industrial effluent quality before final disposal into river Ganga and its tributaries (Ganga river basin) by the industries was discussed.

Also, on 8th October, 2014, National Mission for Clean Ganga (NMCG) in association with Central Pollution Control Board (CPCB) has organized a "Dialogue on Industrial Pollution in Ganga" which was attended by a large number of delegates. The workshop brought together the government officials, academicians, experts and industry representatives of Grossly Polluting Industries on a single platform to effectively deliberate and contrive a road map to curb industrial pollution in Ganga. The participants included representatives from CPCB, five states pollution control boards (SPCBs) and representatives of Grossly Polluting industries in these five states.

In addition, Ministry of Environment, Forest and Climate Change (MOEF&CC) has drawn up an action plan for CPCB in January, 2015 for i) re-verification of compliance and

taking enforcement measures, ii) Zero Liquid Discharge and iii) incentivizing On-line Monitoring Devices.

As per the orders of National Green Tribunal (NGT) dated 17.11.2014, all the industries (a) discharging their untreated industrial/trade effluents directly or indirectly into the River Ganga and/or any of its tributaries, (b) operating without consent of the concerned Boards and (c) have not installed any ETP or any requisite pollution control devices have be directed to stop their activities except with the specific orders of the Tribunal. The NGT has also constituted three committees – The Principal Committee, Implementation Committee and State Level Committee to ensure proper implementation of the orders of the Tribunal. The 1st meeting of the Principal Committee has been held on 2nd January, 2015. The Committee (PC) has recommended that the Implementation Committee's recommendation be obtained for finalization of criteria for categorization of industries and finalization of guidelines for 'Zero Liquid Discharge'.

Recommendation (Para No. 1.90)

The Committee note that the Government has declared Gangetic Dolphin as the National Aquatic Animal in an effort towards conservation of existing aquatic life in river Ganga. According to the Ministry, the disposal of unburnt or half burnt dead bodies in the river are responsible for pollution of river Ganga throughout its length. The Committee note that a number of crematoria have been developed in this regard mostly in West Bengal under GAP and NGRBA programme and widely accepted by the community there. The Committee, therefore, recommend that efforts should be initiated by the Ministry/NMCG and allied implementing agencies including State Governments to popularize the practice of electric crematorium in the Ganga Basin States in order to reduce the practice of disposal of unburnt or half burnt dead bodies in the river Ganga. Further noting that the Ministry are proposing to develop improvised wood-based crematorium requiring smaller quantity of wood, keeping the social sensitivity in mind as discussed during the national dialogue 'Ganga Manthan' in July

2014, the Committee would like the Ministry to expedite necessary action in this regard and apprise them accordingly.

Reply of the Government

Under NGRBA program, 6 (six) projects (1 in Bihar and 5 in West Bengal) having component of electric crematorium have been sanctioned for Rs. 299.59 crore, out of which 5 (five) projects in West Bengal have been completed.

Priority has been given in the short term action plan drawn under 'Namami Gange' program for creating model cremation ghats on the banks of the river and promoting eco-friendly methods of cremation of dead bodies taking religious leaders into confidence. To facilitate the State Governments, a draft Expression of Interest (Eoi) for improvised wood-based crematoriums under preparation by NMCG/Ministry. The Expert Committee formed for evaluation of new technologies is also looking after technology options for innovative/improvised wood-based crematoriums. NMCG has also developed guidelines for development of crematoria and has requested the SPMGs to submit proposals for consideration.

Recommendation (Para No. 2.16)

The Committee note that the Ministry provide technical know-how to the State Governments through its subsidiary organizations for planning, formulation and execution of all Medium Irrigation projects. The Non-Plan Budget allocation for 2014-15 has been increased to Rs 263.81 crore as compared to the previous financial year 2013-14, which was Rs 251.66 at BE stage. The total increase amounts to Rs 12.15 crore. When asked the reasons for increased allocation by Rs. 12.15 crore during 2014-15 over BE 2013-14, despite the decrease in allocation at RE stage in the same year by Rs. 17.14 crore, the Ministry replied that the reduction at RE 2013-14 stage (Rs.17.14 crore) is mainly due to reduction of Rs.12.49 crore under 'Data Collection' by Ministry of Finance under object heads (1) 'Minor Works' for worked charged staff and (2) Rs.4.99 crore under the Sutlej Yamuna Link Canal Scheme (provided for in anticipation of decision of Hon'ble Supreme Court, which is still awaited), whereas the reasons for increase in BE 2014-15 over 2013-14 under Medium Irrigation is mainly due to increase in salaries, increment, enhancement in DA etc. The Committee are unhappy to note

the reduction of Budget allocations at Revised Estimate stage during 2013-14 again by the Ministry despite being asked to desist from this tendency by the Committee in their earlier Reports on Demands for Grants (2011-12, 2012-13 and 2013-14). The Committee observe that the Ministry has not taken the recommendation of the Committee in this regard in the right earnest inspite of repeated assurances. The Committee are therefore, constrained to recommend again that the Ministry should formulate their Budget Estimates judiciously with pre-planning exercise in addition to exercising effective control over its various Offices/Agencies so that in future no room is left for reduction at Revised stage in Budget Estimates. They also hope and expect that the Ministry will make all-out efforts to achieve full utilization of the increased allocation of Rs. 12.15 crore during 2014-15 in respect of the sectors/heads for which allocations have been envisaged. The Committee desire to be apprised of the status in this regard.

Reply of the Government

Recommendation of the Committee has been noted for future compliance. Ministry of Finance has imposed 10% mandatory cut under non-plan schemes during RE stage except object heads 'Salary' and 'Salary' under non-salary object heads i.e. "Professional Services" and "Minor Works" etc.

After 10% mandatory cut during RE stage, the budget should have been reduced to Rs. 237.43 crore from BE 2014-15 of Rs.263.81 crore. However, at RE 2014-15 stage, this Ministry kept Rs.252.58 crore under Medium Irrigation Projects component. The increase was due to Salary and Salary under non-salary components. As per expenditure upto 31.3.2015 for FY 2014-15, Rs. 244.40 crore under this head has been incurred. Expenditure with respect of BE 2014-15 is 92.64% and w.r.t. RE 2014-15 is 96.76%, which appears to be satisfactory.

To monitor improve expenditure under various Plan and non-plan schemes of this Ministry, regular monthly expenditure meeting is held under chairmanship of Secretary (WR, RD&GR) with senior officers.

Recommendation (Para No. 2.18)

The Committee further note that the CWC is at present monitoring 87 important reservoirs in the country. Reportedly, the State Governments collect reservoir data and send the same to CWC, which publish the live storage status of reservoirs in the form of weekly bulletins to Crop Weather Watch Group (CWWG) constituted by the Ministry of Agriculture to monitor various agricultural activities in the country. According to the Ministry many a times, reservoir data is not received in time and therefore, the Ministry/CWC has decided to install automatic water level recorders on the important reservoirs in the country during 12th Plan so that the data is transmitted to the monitoring cell in real time, through satellite-based transmission network. During 12th Plan, a total of 120 (87 existing plus 33 additional) reservoirs have been selected in the country for data collection. The Committee desire that the Ministry should take expeditious and effective steps to achieve its goal of installing automatic water level recorders on all important reservoirs in the country during 12th Plan and also complete the target set for this exercise in the 12th Plan. The Committee also feel that installation of Automatic Water Level Recorders should not be confined only to important reservoirs, rather efforts should be made to cover all the reservoirs in the country in a phased manner. They should be apprised of further action taken in this regard.

Reply of the Government

A scheme namely "Telemetry Based Reservoir Monitoring System (TBRMS)" to install Automatic Water Level Sensors (AWLS) on 120 reservoirs has been included under ongoing scheme "Development of Water Resources Information System (DWRIS)" during 12th Five Year Plan, amounting to Rs.15.00 crore.

At present, Central Water Commission is monitoring live storage of 91 important reservoirs of the country. It may also be stated here that as per an assessment carried out by the CWC in 2010, the live storage capacity of completed dams in the country was 253.388 BCM. CWC is at present carrying out live storage monitoring of 91 important reservoirs having

total live storage capacity of 157.799 BCM which is about 62% of total live storage capacity of 253.388 BCM.

Out of 91 reservoirs, Automatic Water Level Sensors (AWLS) are already installed on 46 reservoirs by the CWC/State Governments. Work of installation of water level sensors is proposed to be commenced on 66 reservoirs during current year under the scheme, which inter-alia includes 36 stations already under live storage monitoring and 30 new reservoirs. Draft Tender document for this is under finalization. Concurrence of the respective State Governments for 9 more reservoirs are being pursued by the field offices of the CWC with the respective State Governments. Thus, 121 reservoirs are likely to be equipped with Automatic Water Level Sensors (AWLS).

Further, this is to inform that number of AWLS will increase in the monitoring system when:

- 1) Sensors proposed on a number of dams under ongoing flood forecasting (FF) scheme of CWC and under proposed flood forecasting including modernisation and expansion of network scheme of CWC, and under upcoming Hydrology Project-III (HP-III) are installed and integrated with the live storage monitoring system.
- 2) The data from State Governments/Project Authorities who have also installed Automatic Water Level Sensors on some of the reservoirs, which are not covered in the list of 46 reservoirs mentioned in the preceding paragraph also start coming in the live storage monitoring system of CWC.

Thus, sufficiently large data is expected to be available on completion of the proposed schemes, which can be thereafter integrated under Telemetry Based Reservoir Monitoring System (TBRMS) by developing appropriate software/system.

Subsequently, the coverage of agro-climatic sub-divisions (36 nos. as per IMD) can be examined vis-à-vis total live storage capacity of the country, and if felt necessary, more stations can be proposed under a further new scheme.

Recommendation (Para No. 2.19)

As per the information compiled through National Register of Large Dams (NRLD) maintained by the Central Water Commission, presently there are 5195 large dams in India.

Out of these, 4847 are completed and 348 dams are stated to be under construction. Out of the completed large dams, about 76% were completed before 1990. Noting that there are as many as 67 dams constructed before 1900 and 306 between 1900 and 1950 in the country, the Committee are perturbed to note that the Government has not carried out any assessment about the safety-levels of Dams in the country on the plea that the maintenance, operation and safety aspects related to dams are being looked after by the concerned State Governments. The Committee are given to understand that it has been prescribed by the Dam Safety Organization of the Central Water Commission that the States shall arrange safety review of dams, which are more than 15 metre in height or which store 50,000 acre feet or more of water by an independent panel of experts once in 10 years and further that the CWC has published a report on Dam Safety Procedures containing necessary guidelines for the benefits of State Governments to maintain the dams under their custody. The Committee, therefore, urge the Ministry to ensure safety review of dams, which are more than 15 metre high or which, store 50,000 acre feet or more, by an independent panel of experts once in 10 years as prescribed. Given the fact that there are as many as 373 large dams in the country over 60 years old, the Committee is agonized that the Government is not keeping a list of large dams in the country having the risk of dam failure. The Committee while expressing displeasure over this, strongly recommends the Government to immediately take concrete action in this regard before the expiry of this financial year (2014-15) and apprise the Committee as well as all stake-holders.

Reply of the Government

As per the Report on Dam Safety Procedures, states shall arrange Safety review of Dams which are more than 15metre in height or which store 50,000 acre feet or more water by an independent panel of experts once in 10 years.

Ten states having significant number of dams namely, Andhra Pradesh, Bihar, Chhatisgarh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab and Tamil Nadu have already constituted Dam Safety Review Panel(DSRP) consisting of independent experts who are mostly from outside the concerned state.

There are about 731 dams for which, dam safety review has been conducted by the states prior to DRIP as given at Annexure-III.

Further the matter regarding conducting dam safety reviews by DSRP is being followed up by the CWC during the meetings of NCDS conducted twice every year.

Under the ongoing World Bank funded Dam Rehabilitation and Improvement Project (DRIP), wherein the report of the DSRP is the starting project for conducting safety review of the dam, states are further encouraged to constitute more than one DSRP if the number of dams are more, in order to expedite dam safety review.

The following concrete actions have already been taken to take care of dam safety management and providing financial and technical assistance rehabilitation of dams in distressed condition.

Dam Rehabilitation and Improvement Project (DRIP):

As part of continuous strengthening of the dam safety activities in India, Dam Rehabilitation and Improvement Project (DRIP) has been taken up with World Bank assistance since 2012. About 217 large dams in five states i.e. Madhya Pradesh, Odisha, Kerala, Tamil Nadu and Karnataka would be rehabilitated under this project. DRIP is a six-year project launched in 2012.

Name of the States:	No.of Dams under DRIP
Madhya Pradesh	29
Odisha	26
Kerala	28
Tamil Nadu	107
Karnataka	27
Total	217

The list of dams under DRIP is given at Annexure-IV

Apart from structural and non-structural measures for rehabilitation and improvement of identified dams, the scope of project includes the development of appropriate institutional mechanisms for the safe operations and maintenance of all large dams in participating states.

In addition, strengthening of the institutional setup for national level dam safety surveillance and guidance would be taken up in Central Water Commission (CWC) under Ministry of Water Resources, RD & GR.

There are further two more agencies ViZ: Uttarakhand Jal Vidyut Nigam Limited (UJLVN) and Damodar Valley Corporation(DVC) who have between them, 8 dams in their control, are likely to join DRIP shortly. Therefore the targeted number of dams under DRIP is likely to rise to 225.

For inclusion of dams under DRIP, the states have been asked to prioritize the dams as per their distress conditions. Project authorities have prepared the Project Screening Template (on line with DPR) of 212 DRIP dams, out of which 163 have been reviewed.

(i) Dam Safety Bill:

A comprehensive Draft Dam Safety Bill to provide for proper surveillance, inspection, operation and maintenance of all dams in India to ensure their safe functioning and to ensure uniform dam safety procedure which shall ensure national investment and benefits by safeguarding human life, livestock and property was prepared and earlier circulated to the State Governments for comments.

After getting the proposal for enactment of dam safety legislation under article 252 of the Constitution as approved by the Cabinet on 13th May, 2010, was introduced in 15thLokSabha and tabled before the Parliament on the 30th August, 2010, and was referred to the Parliamentary Standing Committee on Water Resources on 9th September, 2010 for examination.

The Parliamentary Standing Committee submitted its recommendations which were examined by the Ministry for appropriate compliance and accordingly, a modified Dam Safety Bill was prepared which was duly vetted by the Ministry of Law. In the mean time, the Dam Safety Bill 2010 introduced in 15thLokSabha lapsed with the dissolution of the 15thLokSabha.

Further, as per Andhra Pradesh Reorganisation Act, 2014, the erstwhile State of Andhra Pradesh has now been bifurcated in to State of Telangana and bifurcated State of Andhra Pradesh. The matter was earlier discussed with the MoLJ and it was advised that both the newly created States may be approached for concurrence of said resolution in their respective Houses as was passed by the erstwhile State of Andhra Pradesh. However, the response from the State of AP and Telangana is still awaited.

Meanwhile, considering the importance of implementation of dam safety procedure, a new draft of the Dam Safety Bill (2014)- seeking national level applicability (under entry 56 or entry 97 of List-I of Seventh Schedule of Constitution of India) of the bill was prepared afresh by the CWC which has been under consideration of the Ministry in consultation with the Ministry of Law & Justice.

Recommendation (Para No. 2.20)

Noting further that the CWC has published Guidelines for the preparation of Emergency Action Plan (EAP) and is pursuing the dam owners, who are mostly State Governments, to prepare EAP of all the dams under their control as per Glacial Lake Outburst Flood (GLOF) and Dam Break studies, the Committee expect an immediate and fresh initiative by the Ministry to ensure that the Emergency Action Plan Guidelines under reference are fully adhered to by all dam owners in the country. The Committee would like to be apprised of the action taken in this regard.

Reply of the Government

The responsibility for formulating and implementing Emergency Action Plans (EAPs) lies with Dam Owners, who are mostly state governments/ PSUs. Central Government provides a guiding and advisory role in matters concerning Dam Safety. While discharging the advisory role, the MoWR, RD & GR through its attached office CWC, has framed an exhaustive guideline for Development and Implementation of Emergency Action Plan for dams and disseminated to all the States. CWC has emphasised preparation of Emergency Action Plans to mitigate hazard due to large releases including dam break. For dams in Himalayan regions, whose catchment having identified dangerous glacial lakes, the criteria of including Glacial Lake Outbreak Flood (GLOF) as part of PMF is strictly adhered for new projects coming for appraisal in CWC. Not only this, CWC has been motivating States for doing it and also assisting them whenever required in conducting dam break analysis, a vital input in formulation of an EAP for a dam.

The matter regarding preparation of EAPs has been repeatedly stressed by the CWC during NCDS meetings as a result some of the states/ DSOs have stated to have taken up the

preparation of EAPs for important dams. During the 34th meeting of the NCDS held on 23rd March, 2015 State Governments/ DSO's were requested to make all out efforts for the preparation of EAPs. A list containing the status of preparation of Emergency Action Plans by various states/ Dam Safety Organizations is enclosed at Annexure-V.

Further, under the Dam Rehabilitation and Improvement Project (DRIP) presently under implementation in five states, the EAPs will be prepared for all dams by the states.

As per the proposed Dam Safety Legislation, it would become mandatory for the Dam owners to prepare EAP before the first filling of any new large dam and for each existing large dams, dam owners shall have to prepare the EAP within five years from the date of effectiveness of Dam Safety Act in the respective State. All efforts will be undertaken to provide assistance to the states technically as well as financially to help reach the targets.

Recommendation (Para No. 3.25)

The Committee note that the Scheme of Ground Water Management and Regulation (GWM&R) was launched with the merger of some of the 10th Plan schemes at a cost of Rs.460.00 crore for implementation by the Central Ground Water Board during 11th Plan. The Committee further note that a Budget allocation of Rs. 232.50 crore was made during 2013-14 which was reduced to Rs. 106.00 crore at Revised Estimate Stage. The Budget allocation for 2014-15 was kept at Rs. 350.00crore, which shows an increase of Rs. 128.50 over BE 2013-14 . The Ministry stated that the reason for the curtailment of the allocations was because of the scheme of Ground Water Management & Regulation was approved only in September 2013, as a result of which the budget was curtailed. However, it is now expected that full utilization of funds will take place during the current financial year. In view of high priority accorded by the Government to Aquifer Mapping and Management Programme in the country in the 12th Plan, it was decided to retain the original allocation of Rs350.00 crore for the year 2014-15. The Committee are optimistic that concerted efforts will be made by the Ministry to fully utilize the Budget allocation of Rs. 350.00 crore made for Ground Water Management and Regulation during 2014-15 by constant monitoring and control and apprise the Committee accordingly.

The Committee also feel that accountability should be fixed for under-utilization of funds as it has serious implications in the overall management of finances in the country.

Reply of the Government

All out effort have been made to expedite the activities envisaged under Ground Water Management and Regulation (GWMR) so as to achieve the financial targets. A thorough planning was done to achieve the entire target of 8.89 lakh Sq. km under aquifer mapping for activities pertaining to data compilation and data gap analysis which has been fully achieved. The data generation activity for the targeted area of 1.30 lakh Sq. km has been undertaken during 2014-15 through in-house activities which include exploratory drilling, geophysical survey (VES), water level monitoring, water quality sampling & analysis etc. High level meetings of Project Management Group (PMG) and National Interdepartmental Steering Committee (NISC) held at regular intervals to steer the project. During 2014-15, out of BE of Rs 350 Crore, two major heads includes M&E under which an amount of Rs 95 Crore was earmarked for procurements of Machineries and equipments and Major Works under which Rs 153.31 Crore was allocated for data generation under aquifer mapping.

Under the M & E head, majority of the equipments and machineries were requisitioned from DGS & D and accordingly the Letter of Authority (LOA) was placed. However, due to delay in delivery of the requisitioned items an expenditure of only Rs 18.5 crore was incurred during the year 2014-15.

Under Major works the key activity envisaged was data generation for aquifer mapping. An expenditure of Rs 37.74 crore was incurred towards data generation through in house resources of CGWB. In respect of activities beyond the capacity of CGWB, tender documents amounting to Rs 125 crore (approx) has been prepared for data generation through outsourcing. These activities will be undertaken after necessary approvals from MOWR, RD & GR.

Recommendation (Para No. 3.28)

The Committee note that Central Ground Water Authority (CGWA), constituted under Section 3(3) of the Environment (Protection) Act, 1986, had notified a total 162 over-exploited/critical areas in the country and issued directions to the Authorized Officer (s) to ensure that no person/ organization/ industry will take any scheme/ project in the notified area without prior specific approval of the CGWA. The Ministry informed that a total of 133 complaints have been received by Central Ground Water Authority which have been forwarded to Authorized Officers (District Collectors /Deputy Commissioners/ District Magistrates) for taking penal action as per Environment (Protection) Act, 1986. As per information available with CGWA, apparently some cases are under trial in courts. The Ministry also informed that some of the Authorized Officers in the notified areas have taken penal action like sealing of tube wells, filing of court cases etc. in case of violations of directions of CGWA. Taking serious note of depletion of ground water level in the country, the Committee strongly recommend the Ministry to take vigorous steps to get the existing directions of CGWA enforced by the concerned authorities, namely District Collectors/Magistrates, courts, State Governments (State Pollution Control Boards) and Central Pollution Control Boards without fear or favour. They also recommend the Government to press for toning up the functioning of such regulatory/ enforcement bodies such as Central Ground Water Authority, Central Pollution Control Board and State Pollution Control Boards so that there is no slackness in the implementation of the relevant directions by them.

Reply of the Government

The CGWA at present is vested with the powers to give directions under the provisions of Section 5 of the Environment (Protection) Act, 1986. The powers to give direction under this section included the powers to direct:

- a) The closure, prohibition or regulation of any industry, operation or process ; or
- b) Stoppage or regulation of the supply of electricity or water or nay other services.

The CGWA in exercise of its power under section 5 of EPA, 1986 and has issued directions to Chief Officer-in-Charge of Revenue District whether called as Collector or Deputy Commissioner or by the any other name. CGWA has also Authorised the Collector / Deputy

Commissioner concerned to take suitable measures like disconnection of electricity to energised bore wells, seizure of drilling rig or sealing of the bore well as the case may be, in case of violation of directions.

In addition to above violations of directions attracts penal action under the provisions of section 15 of the EPA, 1986 and the court take cognizance of offence in terms of section 19 of the EPA, 1986, in accordance with the notice procedure prescribed under rule 11 of the Environment Protection Rule, 1986.

Complaints are received at CGWA and with concerned Authorised Officers of notified areas. As per the feedback received till date, action on 1298 complaints has been initiated against the violators by the authorised officers.

CGWA is pursuing the matter regarding action taken on complaints by the Authorised Officers in the Notified Areas. A communication in this regard was sent to Authorised Officers from CGWA on 21.11.2014. The direction has been issued to Regional Director to liaison with concerned Authorised Officers of Notified Areas under their jurisdiction for needful.

In addition to above, CGWA has adopted following measures in notified areas.

- a. Impact assessment has been carried out in 43 areas and in remaining areas it is under progress. It is observed that there is improvement in some areas but many areas indicate no change; whereas in few blocks condition has been deteriorated further.
- b. As per the guidelines framed, permission to extract groundwater is not accorded to any new industry / project in notified areas.
- c. Permission is granted for groundwater withdrawal for drinking and domestic purposes only. Such powers are vested with the authorised officers of the notified areas.
- d. CGWA has directed Authorised Officers to furnish reports on groundwater regulation being done in notified areas. A format is being sent to Authorised officers to submit a quarterly report to CGWA giving details of the status of the complaints received / action taken / permission issued for ground water withdrawal etc., in notified areas.
- e. States where groundwater regulation is being done through State Ground Water Authorities / State Government Departments, CGWA has requested them to provide information on Groundwater Regulation being done in the state, status of the

complaints received / action taken / permission issued for ground water withdrawal etc., as per prescribed format.

Recommendation (Para No. 3.29)

The Committee noted that the CGWB has 18 regional offices, each headed by a Regional Director, supported by 17 engineering Divisions and 11 State Units for undertaking various activities. The Committee's examination of Demands for Grants revealed that a Budget allocation of Rs. 136.35 crore had been made for Central Ground Water Board for 2014-15, which was almost the same amount allocated during BE 2013-14, i.e. Rs. 134.31 crore. The Ministry informed that the CGWB made an assessment of the dynamic ground water resources in the country in 2009 and assessed the annual replenishable ground water resource to be 431 billion cubic metre (BCM) and the stage of ground water development was 61%. However, as per the assessment of dynamic ground water resources carried out jointly by the Central Ground Water Board and State Ground Water Departments (a report entitled 'Dynamic Ground Water Resources of India' is placed on website of CGWB www.cgwb.gov.in), the annual replenishable ground water resources in India (as on 31 March, 2014) is 433 BCM while the net annual ground water availability and annual ground water draft for irrigation, domestic and industrial usages respectively are 398 BCM and 245 BCM. The stage of ground water development was stated to be 62%, and 697 assessment units were semi-critical, 217 assessment units critical, 1071 assessment units over-exploited, and 92 assessment units were saline. This showed that as compared to 2009, the ground water quantity in 2011, had deteriorated in 156 assessment units in the country, Further, the saline assessment units had also increased from 71 to 92 during the same period, and there are 1,071 over-exploited assessment units as against 802 in the year 2009.

Reply of the Government

In general, the number and percentage of over exploited and Critical units have increased over time. However, in certain places, reverse trends have been observed where the category

has changed from over exploited/critical to semi-critical/safe. Reasons for such changes are attributed to - Successive good rainfall, Enhanced activities on water conservation and rainwater harvesting in Andhra Pradesh, Gujarat and few other states.

The increase in saline assessment units is mainly due to change of assessment units from Blocks to Firka or similar administrative units. In Tamil Nadu the saline assessment units has increased from 11 in 2009 to 35 in 2011 due to change in assessment units from Block to Firka."

Comments of the Committee

(Please see Para No. 26 of Chapter-I of the Report)

Recommendation (Para No. 3.31)

The Committee noted that the quality of ground water in some parts of the country have deteriorated due to pollution of underground water by industries like tannery, meat plant, etc. They also noted the reply of the Ministry that an online census had been ordered by the Ministry of Environment, Forests and Climate Change and the Central Ground Water Board in respect of such areas associated with illegal activities by 31st March, 2015. The Committee urged upon the Ministry to vigorously pursue it with the Ministry of Environment, Forests and Climate Change and the Central Ground Water Board to ensure timely completion of the stated online census by the schedule date, 31st March, 2015 and apprise the Committee accordingly.

Reply of the Government

MoEF has taken up the issue and directions have been issued to State Pollution Control Boards and other related Organizations to direct all relevant Industries to set up online effluent quality monitoring system (EQMS). The time line fixed for establishing online monitoring facility by 30th June, 2015.

In the meantime CGWB has entered into a Memorandum of Understanding (MOU) with Central Pollution Control Board (CPCB) for sharing of data and information and take up

common programme for monitoring geogenic and anthropogenic contamination in respect of ground water pollution.”

Comments of the Committee

(Please see Para No. 29 of Chapter-I of the Report)

Recommendation (Para No. 4.23)

The Committee noted that under the Plan scheme of Flood Control, a total expenditure of Rs. 152.94 crore was incurred since 11th Plan on Flood Forecasting, a total of Rs. 777.16 crore on the River Management Activities and Works related to Border Areas, and a total of Rs. 4,259.73 crore on Flood Management Programme. They noted that under Flood Forecasting programme, modern system of automatic data collection was installed at 222 stations besides the system installed at 223 stations prior to 11th Plan. One Earth Receiving Station (ERS) was set up at New Delhi besides two earlier ERS at Bural and Jaipur for downloading the data signals, while 10 Modelling Centres were established besides 11 such centres already set up before 11th Plan, for data analysis and its validation including flood forecast formulation. In addition, under Flood Management Programme, 517 flood management projects were included since 11th Plan, out of which 252 projects were completed providing flood protection to 2.589 lakh ha. of old flood-affected area and 19.593 lakh ha. of new flood-affected area benefitting a population of 197.277 lakh in various States, while the remaining projects were in progress. The Committee desired the Government to take action expeditiously for installing modern system of automatic data collection in additional stations besides 223 stations already installed prior to 11th Plan under Flood Forecasting scheme. They also desired the Ministry to accelerate the pace of works pertaining to Earth Receiving Station (ERS) already set up at New Delhi, Bural and Jaipur, and also the Modelling Centres besides 11 such centres set up prior to 11th Plan, for data analysis and its validation including flood forecast formulation.

Reply of the Government

The works of installation of modern system of automatic data collection equipment, establishment of additional Earth Receiving Stations (ERS) and Modelling Centres are

proposed by CWC during XII Plan. The scheme of Flood Forecasting during XII Plan is under the process of approval. However, preparatory actions viz. finalization of specifications of equipment and draft tender documents have been initiated by CWC in anticipation of approval of the Scheme in 2015-16.

This will raise the number of flood forecasting sites to 275 from the existing level of 175; build capacity for modeling in all the regional offices of CWC.”

Comments of the Committee

(Please see Para No. 32 of Chapter-I of the Report)

Recommendation (Para No. 4.25)

The Committee note that annual floods during 11th and 12th Plans (2007-13) have affected 21.821 Mha. Area and 167.617 million people with approximately 14,000 loss of human lives. Besides, the damages caused in terms of damages to crops, houses, cattle lost, damage to public utilities also amounted to Rs. 1,03,841.197crore in monetary terms during the same period. In this connection, the Committee note that recurrent floods have recently been experienced in basins besides Ganga & Brahmaputra. They also note that the National Water Policy, 2002 envisaged that there should be a Master Plan for flood control and management for each flood-prone basin and that accordingly, the Brahmaputra Board has prepared 57 Master Plans for NE States and the GFCC has prepared 23 Master Plans for Ganga basin States and the same had been forwarded to concerned States for implementation. The Committee desire that apart from the Ganga and Brahmaputra basins which form the major flood-prone zones, the Government should initiate steps for having Master Plans for flood control and management for the other remaining river basins of the country. They also feel that the Ministry should pursue with the concerned State Governments of the Ganga and Brahmaputra basins through frequent meetings, written reminders, seminars etc. to ensure timely execution of the Master Plans. Additionally, the Committee would like to see accelerated pace of activities/works in flood control and management by concerned authorities, and they therefore, recommend the Ministry to initiate urgent steps to overhaul the organization and functioning of Ganga Flood Control Commission and Brahmaputra Board to enable them to

achieve their mandate effectively. The Committee would like to be apprised of further action taken in this regard.

Reply of the Government

Till XI Five Year plan, Brahmaputra Board identified 57 River Basin / Sub-Basins to prepare Master Plans. Board completed all 57 Master Plans during XI Five Year Plan. Out of 57 Master Plans, Government of India has approved 49 Master Plans and submitted to concerned State governments for implementation.

During XII Five Year Plan, preparation of Master Plan for another 11 river Sub-Basins has been targeted. Out of 11 river Sub-basins, 3 Master Plans have been completed and another 3 Master Plans are targeted for completion in the year 2014-15.

Regarding implementation of recommendations of Master Plans, Board is constantly in contact with State Governments to convene a meeting to discuss and chalk out the programme for implementation of recommendations of Master Plans. In this regard 6th reminder has been issued in April 2014. Response from State Governments is still awaited.

Ministry has initiated steps for restructuring of Brahmaputra Board as a River Basin Authority, the observations of all the NE States have been received on the proposal. The proposal is under active consideration of the Ministry currently.

The Brahmaputra Board and Ganga Flood Control Commission have been having regular interaction meetings with the concerned State Governments wherein flood management issues of concerned States are deliberated upon. Recently, Brahmaputra Board had convened 7th meeting of High Powered Review Board at Shillong on 11.02.2014 which was attended by Chief Ministers of NE States. This was followed by the 8th Meeting at Delhi on 18.06.2015. Similarly, GFCC also had meeting of GFCC in February, 2015 which was attended by the officers of Ganga Basin States. Besides, the ministry had also organized "Jal Manthan" at New Delhi in the month of November, 2014 wherein Ministers, Officers, Experts and NGO had participated and deliberated upon specific problems of WR sector including flood management.

Further, a meeting of Ganga Flood Control Board (GFCB) was held under the chairmanship of Hon'ble Minister(WR, RD & GR) 28.05.2015 at Patna, which was attended by

Chief Minister, Bihar, Irrigation Ministers of UP, Bihar and Chhattisgarh and senior officers of all Ganga Basin States. In the meeting, effective and time bound implementation of master plans was emphasized.

Recommendation (Para No. 4.28)

When asked about the functioning of Brahmaputra Board which is entrusted with flood control and mitigation works in the region, the Ministry informed that out of the 7 statutory posts in Brahmaputra Board, only the post of Secretary is filled in and other remaining 6 posts are lying vacant. The Committee are at a loss to understand as to how the Brahmaputra Board is working with only one Secretary and therefore, recommend the Ministry to expedite the process of filling up the remaining 6 statutory posts so that the Board is sufficiently strengthened and equipped before the onset of the next Monsoon season. Further given the fact that all the N.E. States and West Bengal have in principle agreed for proposed restructuring of Brahmaputra Board as Brahmaputra & Barak River Basin Authority for which "Draft Policy Documents of restructuring of Brahmaputra Board as Brahmaputra & Barak River Basin Authority" (BBRBA) has been formulated and sent to N.E. States including West Bengal for their views and draft Bill on Brahmaputra & Barak River Basin Authority is being finalized in the Ministry, the Committee would like the Ministry to pursue this matter vigorously with concerned States and authorities so that a revamped Brahmaputra Board would see the light of the day soon.

Reply of the Government

The Restructuring of Brahmaputra Board is under active consideration of Ministry of Water Resources. In the last meeting of the High Powered Review Board (HPRB) held on 18th June, views of all the states for restructuring of the Brahmaputra Board have been received. The same are now being processed for the approval of the Government.

Recommendation (Para No. 4.29)

The Committee note that an unprecedented flood devastated Jammu and Kashmir this year (September, 2014), causing untold misery to the people. The Committee also note that in

Jammu and Kashmir (J&K), the Central Water Commission (CWC) is operating 11 hydrological observation sites in Chenab and 5 sites in Jhelum to collect data for water resources planning purposes and that the CWC is not maintaining Flood Forecasting sites in the State. The Committee are shocked to note that no flood forecasting site is being maintained by CWC in Jammu and Kashmir and while they would like to know the reasons behind it, strongly recommend the Ministry to initiate urgent action for setting up Flood Forecasting networks in the State of J&K as done in the rest of the country so as to help avoid any chances of unpreparedness in facing flood fury in future. Further, given the peculiar nature of the topography of the Kashmir valley, the Committee also would like the Ministry to undertake a comprehensive study of the entire flood-related scenario in the area within the next 6 months and come up with an implementable time-bound set of action programme. The Committee would like to be apprised of the action taken.

Reply of the Government

As already apprised to Hon'ble Committee, the flood forecasting activities in the State of J&K were performed by the State Government for which they had their own network. However, hydrological data of existing 16 sites of CWC (11 sites in Chenab basin and 5 sites in Jhelum basin) had been regularly provided by CWC to State Government. During XII Plan, CWC proposes to set up 19 additional flood forecasting sites in J&K out of which flood forecasts are proposed to be issued at 5 sites in the State.

(i) The State of J&K experienced heavy to very heavy rainfall during September 3-7, 2014 resulting in widespread flooding in different parts of the State. The maximum impact of flooding was around Srinagar city. As per IMD records, the average rainfall in the drainage area of Jhelum river up to Srinagar during September 3-7, 2014 was about 303 mm. This rainfall was about 320% more than the maximum monthly normal of the monsoon months. Resulting runoff from continuous heavy rainfall was many times more than the carrying capacity of the Jhelum river, causing overtopping of flood protection embankments of Jhelum and consequent inundation in almost entire Srinagar town.

Similarly, the departure of actual rainfall in Chenab basin was about 300% of monthly normal on monsoon period

The Ministry of Water Resources constituted an Expert Group headed by Chairman, CWC which inspected the important areas of the State and submitted a report in October, 2014. The Group has analysed the problem and has suggested immediate, short-term and long-term measures, which are summarized below:

- (a) Immediate Measures (to be implemented before next monsoon):
 - (i) Closing of breaches: All the breaches need to be closed before next monsoon and the section of the embankments restored including pitching, if required.
 - (ii) Development of Flood Forecasting and Warning Networks: A rainfall based flood forecasting model may be developed along with establishment of protocol for generation of operational forecast followed by its dissemination and appropriate action by the disaster management authority. Due to bowl shape of Srinagar valley the conventional flood forecast techniques like gauge to gauge correlation may not serve the desired purpose. In such type of terrain a mathematical model comprising of rainfall-runoff, hydrodynamic/hydrological routing and flood forecast components shall be required. MIKE 11 may be considered to be one of the time tested platform to develop such operational flood forecasting tool. Based on established flood forecasting procedures and considering Sangam as base station, the available warning time for Srinagar will about 3 to 4 hours only. However, advisory forecasts based on rainfall can be issued with a lead time of about 8 hours after validating the model for two to three seasons. Surveys for the river cross section between Sangam and Wularlake including those in flood spill channel may be initiated immediately for the model development to meet the deadline. Further work to be made in this direction is covered in long term measures.
- (b) Short-Term measures (to be implemented within 2 to 3 years)
 - (i) Raising/ strengthening of existing embankment: The design of existing embankments may be revisited and appropriate raising/ strengthening may be planned and implemented wherever required. Proper maintenance of embankment may also be ensured by State Govt. Suitable anti-erosion measures as may be required may also be undertaken at the vulnerable areas.

- (ii) Enhancement of carrying capacity of existing Flood Spill Channel (FSC): With passage of time, the carrying capacity of existing FSC got reduced from 481.45 cumec (17000 cusec) to nearly 100 cumec (3531cusec). As informed by officials of J&K Govt., works were undertaken to enhance its capacity under scheme "Flood threat of river Jhelum-urgent works" but the same are yet to be completed. The balance works may be completed to maintain the designed capacity of River Jhelum passing near Srinagar city.
 - (iii) Dredging of Out Fall Channel (OFC) to increase its carrying capacity: OFC is the only drainage outlet taking off surface flow out of valley. It was informed by officials of J&K that dredging to avoid siltation was carried out from 1950 to 1986 in the OFC which was later discontinued. Dredging requirement of OFC may be ascertained immediately and may be taken up so that discharge through OFC is increased.
 - (iv) Setting up of rapid action dewatering facilities in urban areas: A number of low lying areas have been urbanized. Hence, flooding even under a lesser magnitude flood can not be ruled out. The State Govt. may consider to plan and implement storm drainage network in consultation with drainage experts. .
 - (v) Establishment of adequate emergency response measures and rescue areas: By establishing high flood marks, the areas likely to be available for temporary relief may be identified and provisions for evacuation to these areas within the forecast time available may be taken up by State Disaster Management Authority.
- (c) Long term Measures (to be implemented within 5 to 10 years):
- (i) Additional Supplementary Flood Spill Channel: The officials of the Govt. of J&K informed, as River Jhelum has very limited carrying capacity, an additional supplementary flood spill channel just downstream of Sangam was contemplated earlier. The same may be useful. However, this may only be considered after detailed study and its effect/impact on environment/ ecology/ habitation and the economics involved and in between crossings over existing channels including Dudhganga.
 - (ii) Creation of Storage: Small storages on various tributaries of Jhelum for General, Power and/or Flood purposes as per provisions of Indus water Treaty 1960 may be planned

and created. This will help in moderating the floods and also enable in reducing the sediment load of River Jhelum.

- (iii) Development and enhancing the capacity of Wular Lake: As informed by the officials of the Govt. of J&K, the live storage capacity of the Wularlake has reduced due to siltation etc. which has further reduced its capacity to absorb the floods. Therefore, the same may be restored by appropriate measures. This shall help in reducing back water effect and absorb more flood waters thereby reducing the impact of flood in its upstream area.
- (iv) Flood Plain Zoning: Flood Plain Zoning Bill may be enacted on priority by State Govt. The process of Flood Plain Zoning may be completed at the earliest and regulation of Flood Plains may be ensured.
- (v) Lot of sewage/solid waste from urban areas goes to Jhelum and connecting lakes which also cause reduction in the capacity of flow channel due to growth of algae. Necessary measures in this regard may be taken up by State Govt.
- (vi) Afforestation and catchment area treatment along the hill slopes may be beneficial in reduction of silt load in Jhelum and maintaining the carrying capacity of the channels.
- (vii) The flood warning times can be improved further from 8 hours in long term after establishing of further reliable point/ gridded rainfall prediction within a relatively narrow variation range by joint effort by IMD and CWC.

The measures of flood management are taken by concerned State Governments as per their priorities as the subject falls in their purview. However, Government of India supplements the efforts of the State Government by providing technical advice and also financial assistance for management of floods in critical areas. The Government of India had launched Flood Management Programme during XI Plan and in October, 2013, the Cabinet approved its continuation during XII Plan with an outlay of Rs. 10,000 crore. Under this Programme, a total of 42 projects of J&K were approved and central assistance of Rs. 326.31 crore had been released so far for undertaking works related to flood management and anti-erosion.

The State Government of J&K has its own flood forecasting network, however, with a view to have more effective system of flood forecasting, Central Water Commission under the Ministry has proposed installation of total 19 additional stations comprising of 5 new Level

Forecast Stations and 14 Base Stations on rivers Jhelum, Chenab and Indus in the State of Jammu & Kashmir in XII Plan.

Besides above, the State Govt. has formulated a project for emergent flood management measures in Jhelum Basin for Rs. 399.29 crore, which has been accepted by the Advisory Committee of the MoWR, RD &GR.

CHAPER III

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

Recommendation (Para No. 1.83)

The Committee also observe from the Ministry's reply that in the year 2010-11 the Ministry of Environment, Forests and Climate Change appointed a consortium of seven Indian Institutes of Technology (IITs) to prepare a long-term Ganga River Basin Management Plan. The first version of this Plan is likely to be available later this year. They also note that projects and activities with respect to long-term action plan (a period of 10 years and more) will be assessed from the final report of the Ganga River Basin Management Plan of the Consortium of 7 IITs for restoration of the wholesomeness of river Ganga and its tributaries including river Yamuna in terms of defining concepts of "Aviral Dhara", "Nirmal Dhara" and maintaining the ecological and geological integrity of the river. The Committee also desire the Ministry to expeditiously complete the report of the Ganga River Basin Management Plan being prepared by a Consortium of 7 IITs within three months of the presentation of this report, so that an overall picture of projects/activities required under Ganga River Basin Management Plan may be made available for the use of the Ministry/National Mission for Clean Ganga (NMCG) and allied agencies for taking up further necessary works including DPRs and related activities concerned with implementation of Ganga rejuvenation. The Committee would like to be apprised of further action taken in the matter.

Reply of the Government

The IIT consortium submitted the 1st draft Ganga River Basin Management Plan on 31st January, 2015. In order to preserve and invigorate National River Ganga, a holistic approach needs to be adopted. After extensive research and consultations, the "wholesomeness of National River Ganga", viewed from a dynamic perspective, can be managed by focusing on the four main aspects: 'Aviral Dhara' i.e. continuous flow, 'Nirmal Dhara' i.e. unpolluted flow, Ecological Entity & Geologic Entity. Given the escalating impacts of

human activities on Ganga river basin, the above objectives guided the formulation of eight important areas where restorative actions need to be carried out in Mission mode, viz.: 'Aviral Dhara', 'Nirmal Dhara', 'Ecological Restoration', 'Sustainable Agriculture', 'Geological Safeguarding', 'Basin Protection Against Disasters', 'River Hazard Management' and 'Environmental Knowledge-Building and Sensitization'.

These reports briefly describe the river Ganga in basin perspective; management of resources in Ganga Basin; philosophy of GRBMP; issues and concerns of the Ganga river basin Environment; suggestions and recommendations in the form of various Missions, and a framework for effective implementation of the recommendations. The Main Plan Document (MPD) is complemented by eight Mission Reports (MR) and many Thematic Reports (TR) prepared by the Consortium of IITs to describe the strategy, information, methodology, analysis, suggestions and recommendations pertinent to the GRBMP.

The major recommendations of draft of the 1st Ganga River Basin Management Plan submitted by the IIT Consortium are placed at Annexure II. The 1st Ganga River Basin Management Plan is expected to be finalized based on the review of the draft submitted by the concerned ministries and standing committee constituted for the purpose.

Recommendation (Para No. 1.84)

The Committee observe that one of the components of 'Namami Gange' pertains to "Nirmal Dhara" or ensuring sustainable sewage management. Noting that the Ministry of Urban Development is in the process of working out detailed action plan in this regard, the Committee keeping in view the gravity of the problems desire that the Ministry vigorously pursue with the Ministry of Urban Development to ensure that there is no delay in preparation of Detailed Project Report (DPR) pertaining to the composite sewage treatment plan so that the municipal wastes (solid and liquid) and industrial wastes emanating from urban areas and selected pockets like Kanpur are treated properly before their discharge into the river Ganga and its tributaries.

Reply of the Government

The Ministry is in close coordination with the Ministry of Urban Development to ensure that the cities and towns on river Ganga are given due priority for taking up projects on both liquid and solid waste for mitigation of pollution of the river, particularly from the Class –I cities like Haridwar, Kanpur, Allahabad, Varanasi, Patna and Kolkata. In order to ensure the inter-ministerial cooperation the forum of NGRBA has representation not only from the states but also from the key union ministries. The project appraisal body i.e. the Empowered Steering Committee chaired by the Secretary, MOWR, RD& GR is also similarly represented. In addition, a High Level Task Force under the chairmanship of Cabinet Secretary has also been constituted to facilitate inter-ministerial coordination.

The Ministry of Urban Development (MOUD) has since informed that MOUD is already operating the Swachh Bharat Mission (SBM) under which, the component of Solid Waste Management is covered. MOUD has already requested the states to prepare DPRs for solid waste management and the first installment of Central Assistance as per the guidelines has already been released to the main Ganga states of Bihar, Jharkhand, Uttarakhand, Uttar Pradesh and West Bengal.

Recommendation (Para No. 1.86)

The Committee observes that the Ministry of Drinking Water and Sanitation (MoDW&S) are contemplating a scheme at an estimated cost of Rs. 1800 crore for making the Gram Panchayats numbering 1649 in Ganga bank free from open defecation under 'Nirmal Dhara' to tackle sewage from rural areas. They also note that there are about 1688 Gram Panchayats in rural areas located on the main stem of river Ganga and that an action plan has been prepared and is under submission to the Government for approval with objective to cover all the sanitation/sewage coming from rural areas in one-two years period. The Committee feel that mere preparation of schemes without proper implementation has become a trend, which needs to be discouraged and discontinued. The Committee, therefore, desire that sustained and coordinated efforts should be made immediately by the Ministry for expeditiously getting the approval of the Government in respect of action plan submitted to the Government in this regard so that preparation of the required DPRs may be taken up without delay to ensure

tangible results in managing sewage from rural areas on the mainstream of River Ganga. The Committee would like to be apprised of the programme made in this regard.

Reply of the Government

The Ministry of Drinking Water and Sanitation (MODW&S) has identified 1649 Gram Panchayats (GPs) for implementation of rural sanitation program with priority for comprehensive sanitation coverage and making them free from open defecation. Model projects on pilot basis as 'Ganga Grams' in 66 GPs (one in each district) have been planned. NMCG has since received the Ganga Action Plan under Swachh Bharat Mission from (MODW&S). Release of fund for making the identified GPs Open Defecation Free (ODF) is under process. NMCG has requested District Magistrates in states to identify 3-4 villages in each district for developing Ganga Grams.

Recommendation (Para No. 1.87)

The Committee note that under the scheme of 'Nirmal Dhara', for managing industrial discharge, a general project titled 'Pollution Inventorization, Assessment and Surveillance' (PIAS) has been sanctioned for Rs. 34.77 crore under NGRBA in March, 2011 for implementation for 5 years by a NGRBA Cell setup in Central Pollution Control Board (CPCB). Further, CPCB has listed 764 Grossly Polluting Industries (GPIs) to be covered under the project, out of which 727 GPIs have been inspected and actions taken against 178 non-complying industries under Water (Prevention and Control of Pollution) Act, 1974 and Environment (Protection) Act, 1986 by CPCB. Further, it was informed that closure notices have been issued by CPCB to 48 GPIs. The Committee note with grave concern the practice by some industries of discharging untreated, contaminated water into river Ganga and its tributaries, and therefore strongly recommend the Ministry to vigorously pursue with the Central Pollution Control Board of the Ministry of Environment, Forests and Climate Change to prosecute 178 non-complying industries under the relevant statutory act. They also recommend that the Ministry take up with the CPCB (NGRBA cell) for ensuring timely completion of project of 'Pollution Inventorization, Assessment and Surveillance' (PIAS)', which

was sanctioned for Rs. 34.77 crore for completion within 5 years. They also recommend that the Ministry would continue to keep a tab on CPCB to ensure that closure notices issued to 48 GPs are duly complied with by them and report any failure on the part of GPs to law enforcement authorities, if necessary. The Committee would like to be apprised of further action taken in this regard.

Reply of the Government

The Central Pollution Control Board (CPCB) has reported inspection of 727 Grossly Polluting Industries (GPIs), out of which actions have been taken against 378 non-complying industries under Water (Prevention and Control of Pollution) Act, 1974 and Environment (Protection) Act, 1986 by CPCB till December, 2014.

The CPCB has drawn out a detailed action plan in this regard which can be seen at Annexure-VII.

Recommendation (Para No. 1.89)

The Committee note that under the Ministry of Urban Development (MoUD), restoration and rejuvenation of Sewage Treatment Plants (STPs) have been taken up including 14 STPs which have since been completed under the Ganga Action Plan. Besides, the National Environmental Engineering Research Institute (NEERI) has been roped in, and it has started some research works in this regard. The Ministry also informed that the States have been requested to take up conditional assessment of STPs and submit DPRs for rehabilitation and up-gradation of all such STPs for effective abatement of pollution while the MoUD has been requested to assist the States with necessary support by experts, if required for carrying out the conditional assessment of STPs and in preparation of DPRs/ proposals for restoration/ rehabilitation of STPs. The Ministry also informed that a committee has been setup with involvement of NEERI, CPCB and Professor Vinod Tare of IIT, Kanpur for making a review of appropriate sewage treatment technology in this regard. The Committee are dismayed to note that no proposals/DPRs for restoration of STPs have been received so far from the States. The Committee would like to know what steps have been taken by the Government to pursue the State Governments to submit the proposals and recommend the Ministry to take up the matter

immediately with the State Governments so that works/ activities related to rehabilitation and upgradation of STPs located in Ganga basin are taken up without delay by the Ministry and other implementing agencies. The Committee also desire that the Committee set up for review of sewage treatment technology completes its work and submit its report expeditiously.

Reply of the Government

To assist the State Governments for conditional assessment for rehabilitation and upgradation of STPs and other sewerage components through consultants/expert institutions like NEERI, the Ministry has prepared draft Terms of Reference (TOR) to facilitate assignment of the work by the State Governments to identified agencies. The Expert Committee formed for evaluation of new technologies such as in-situ treatment of drains, surface cleaning of river, improved crematoria, effluent and sewage treatment has so far evaluated 22 proposals.

Further, state governments are being pursued at various for a like High Level Task Force etc. for sanction of necessary rehabilitation proposals. NMCG has also organized conferences of DPR Preparation Consultants to facilitate states in DPR preparation and of ULBs to sensitize ULBs and guide them to prepare the necessary action plans for abatement of pollution of River Ganga.

Recommendation (Para No. 2.17)

The Committee note that under the Scheme of Development of Water Resources Information System (DWRIS) launched by the Government in June, 2008, field work and data processing for 4th Minor Irrigation (MI) census were targeted to be achieved during 2009-10. Giving the updated status of completion of 4th and 5th Minor Irrigation Census, the Ministry submitted that 4th Minor Irrigation (MI) Census has been completed with reference year 2006-07 and the report is available on website of Ministry.

The Ministry has decided to conduct the 5th Minor Irrigation Census with traditional methodology with reference to year 2013-14, for which the Plan Scheme was approved in December, and the exercise is proposed for completion by the end of 12th Plan period ending March, 2017. The Committee, however, note with concern that for DWRIS the BE for 2013-14

was Rs. 150 crore and the RE was Rs. 43 crore. The Committee are not happy with this tendency of overestimations at the BE stage by such a huge margin and impress upon the Ministry to be more realistic while preparing BE. Noting that the Development of Water Resources Information System has a vital objective to develop a water resources information system, the Committee recommend that all-out efforts should be made for completion of the exercise for 5th Minor Irrigation Census by the scheduled target i.e. March, 2017 under intimation to this Committee.

Reply of the Government

Rationalisation of Minor Irrigation Statistics (RMIS)" is one of the components of the Central Sector Plan Scheme "Development of Water Resources Information System". The Budget Estimate (BE) for 2013-14 for the component 'RMIS' was Rs. 25.00 cr. and RE-2013-14 was Rs. 2.9 cr. whereas the total BE & RE for DWRIS are Rs. 150 cr. and 43 cr. respectively.

Under RMIS, the 5th Minor Irrigation (MI) Census with Reference Year 2013-14 is being conducted in 34 States/UTs.

All six Regional Training Workshops for the Census have been completed in six regions during 2014-15. First installment of funds for conduct of 5th Minor Irrigation Census have also been released to 30 States/UTs so far. Following fund release, 24 States/UTs have already conducted training for district level officers. Fund release to remaining UTs is also being actively pursued.

Various activities of the Census like field work, scrutiny, data entry, validation, checking of Census data at Central Level, generation of tables are spread over remaining period of the 12th Five Year Plan. All efforts are being made to ensure completion of all Census related activities with active participation from the States/UTs by the end of the 12th Plan Period.

Further, it is informed that against BE:2013-14 of Rs. 150 crore, RE of Rs. 43 crore was demanded and expenditure was Rs. 41.30 crore as per the table below:

Component	BE 2013-14	RE 2013-14	Exp. 22013-14
Hydrological Observation Monitoring System	92.00	29.00	29.15
Irrigation Census	27.00	2.90	1.36
Water Quality Assessment Authority and Monitoring	2.00	0.25	0.22
Strengthening of Monitoring Units in CWC	10.70	7.50	7.56
Data Bank and Information system and Web enabled Water Resources Information System and setting up of NWIC	18.30	3.35	3.01
Total	150.00	43.00	41.30

These components were proposed to be implemented during 12th Plan period (2012-17). However, since the scheme was approved by Government in December 2013, major part of the financial year could not be utilised for implementation of these components resulting in surrendering of major portion of budget. The provision for budget was kept for implementation of these components as per provisions made in scheme expecting that scheme would be approved such that significant duration of financial year would be available for implementation of these components.

Recommendation (Para No. 3.26)

The Committee note that Aquifer mapping is one programme among the major activities proposed during 12th Plan under GWM&R. An amount of Rs. 140 crore has been allocated for this programme during 2014-15, whereas Rs. 80.40 crore was incurred during 2013-14. The target set for Aquifer mapping during 12th Plan is 8.89 lakh sq. km, against which Aquifer mapping has been initiated so far in 2.76 lakh sq.km. and is under different stages of progress.

The Committee note that in order to realize the targets under Aquifer Mapping, State-level Ground Water Coordination Committee has been set up in most of the States / UTs. Various activities like Data Compilation, Identification of Data Gap, Data Generation, Data Integration, Aquifer Map Preparation, Aquifer Response Modelling & Aquifer Management Plan are being taken up. Regular meetings of National Inter-departmental Steering Committee and Project Monitoring Group are being held.

Recommendation (Para No. 3.27)

While appreciating that the Ministry is proposing a new technique called 3-D Aquifer Mapping and also recognizing the potential benefit of this technique in identification of areas feasible for ground water development, ground water regulation, rainwater harvesting and artificial recharge, yield potential, depth and design of wells, water logged areas and quality problem areas etc., the Committee strongly recommend that this new improved technique should be introduced in all the priority areas such as over-exploited, critical, semi-critical, quality-affected and water scarce regions all over the country based on participatory approach involving in the programme various end-users like farmers and other stake-holders. They, therefore, urge upon the Ministry to come up with a suitable action plan for achieving the same during 2014-15 and inform the Committee accordingly.

Reply of the Government (Para Nos. 3.26 & 3.27)

During the 12th Five Year Plan, under the Ground Water Management and Regulation Scheme, Aquifer Mapping programme on 1:50,000 scale and in 3-D has been undertaken in a total target area of 8.89 lakh sq.km. Under the aquifer mapping programme, application of advanced techniques have been suitably dovetailed. Priority has been given to over-exploited, critical, semi-critical, quality-affected and water scarce regions of the country.

Amongst the various activities envisaged in the programme, data collection & compilation and data gap analysis have been completed for the entire area of 8.89 lakh sq.km. Data generation for an area of 0.28 lakh sq.km has been fully completed. Data generation activities based on the data gap analysis has been initiated in an area of 2.51 lakh sq.km. during 2012-15. During 2015-16 the balance data generation work of 2.51 lakh Sq.Km area will

be continuing while new area of 0.42 lakh sq.km. has also been taken up in the current plan of 2015-16. Data generation activity for the remaining 5.68 lakh Sq.Km area of 12th Plan will be undertaken during 2016-17. A break up of the area is given in following table;

Table Status of data generation under NAQUIM in 12th Plan period

Year	Area (Lakh Sq.Km)	Status of data generation Activity
2012-15	0.03	Data generation fully completed in NAQUIM area Covered through Pilot aquifer mapping area falling in 5 States (Rajasthan, Maharastra, Karnataka, Tamilnadu & Bihar)
2012-14	0.25	Data generation fully completed in NCR area
2012-15	2.51	Work initiated throughout the country under NAQUIM
2015-16	0.42	Continuation of balance work in 2.51 lakh Sq.Km. area and in 0.42 lakh Sq.Km. new area
2016-17	5.68	Data generation to be undertaken in the remaining area
Grand Total		8.89 sq.km.

In this regard, it is also mentioned that CGWB has already undertaken six Pilot Studies for aquifer mapping in five States viz. Rajasthan, Bihar, Maharashtra, Karnataka and Tamil Nadu covering an area of 3,000 sq.km in varied hydrogeological terrains where advanced geophysical techniques including Heli-borne TEM, ERT, and ground TEM have been applied. In addition, exploratory drilling, VES etc were also carried out to delineate the aquifer geometry in order to know the aquifer potential. The data thus generated has been integrated and aquifer maps pertaining to different existing aquifers prepared. The aquifer response models for each individual aquifer and aquifer management plans were developed. These management plans will facilitate sustainable management of ground water by end users through participatory approach.

The findings of Pilot studies including the efficacy of advanced geophysical technology will be suitably incorporated for aquifer mapping and preparation of aquifer management plans being carried out during the Plan period.

The data generation has been fully completed in National Capital Region area. Aquifer Mapping and Management Plan of National Capital Region is under process.

Recommendation (Para No. 3.30)

Noting that the overall ground water scenario in the country has deteriorated in the last 5 years or so and that the proposal for revamping the Central Ground Water Board is on the anvil of the MoWR, RD and GR, the Committee hope that this exercise be completed in a time-bound manner at the earliest so that the Board become empowered, adequately staffed and strengthened to undertake its various activities and thereby fulfill its mandate effectively and satisfactorily. The Committee would like to be apprised of the action taken in the matter.

Reply of the Government

- The restructuring proposal of CGWB has been examined by Ministry and as per the suggestions of the Ministry; the proposal is being modified to accommodate upcoming challenges.
- A committee has been constituted under Member (RGI), CGWB to look in to the restructuring proposal.
- A consultant is being appointed to assist the committee in finalization of restructuring / Care Review proposal of CGWB.

Recommendation (Para No. 3.33)

Further noting the importance of compilation and maintenance of data regarding the number, size and ownership status of water bodies spread across the country for comprehensive and coordinated efforts by the Centre and States for repair, renovation and restoration of water bodies, the Committee recommend the Ministry to undertake a comprehensive census of water bodies in India and place the data on public domain such as website of the Ministry and WRIS so that it serves as useful tool for policy-makers, planners,

water users and other stake-holders. The Committee would like to apprise of action taken in this regard.

Reply of the Government

The MoWR, RD & GR has already placed the 4th Minor Irrigation Census Report on the MoWR website.

Central Water Commission has already prepared a layer of all existing water bodies and assigned Unique Identification Number for each water of the bodies.

Recommendation (Para No. 4.22)

The Committee observe that the Plan allocation for Flood Control for the year 2013-14 was earmarked at Rs. 206.00 crore. However, it was reduced to Rs. 51.20 crore at the Revised Estimate stage for the same financial year and the allocation for 2014-15 was kept at Rs. 114.00 crore. The Committee are unhappy to note the reduction in the Budget allocations for Flood Control from the previous financial year, i.e. 2013-14 onwards and hope that this does not represent downscaling or sluggishness of works pertaining to flood control, flood protection and mitigation in the country. The Committee also note the Ministry's reply which attributed the reduction of allocation at RE stage to Rs. 51.20 crore during 2013-14 to non-approval of two main Plan schemes, viz. 'Flood Forecasting' and 'River Management Activities and works Related to Border Areas' by the competent authority due to which new activities proposed/planned in 2013-14 could not commence thereby causing the reduction at RE stage. The reasons put forward by the Ministry only reflect regrettable lack of foresightedness and seriousness at the time of making assessment of Budget allocations. The Committee would like to know the reasons behind "non-approval" of the said two main Plan schemes and also recommend the Ministry to simplify and streamline the procedures for getting approvals in order to eliminate administrative delays and apprise them of the action taken accordingly.

Reply of the Government

Out of the two plan schemes, the scheme "River Management Activities and Works Related to Border Areas" has been approved in December, 2014 with an estimated cost of Rs.

740 crore. The scheme "Flood Forecasting" for estimated cost of Rs. 794 cr. was earlier appraised by EFC headed by Secretary (Exp.) in August, 2013 & March, 2014. The scheme includes major component such as continuation of flood forecasting at 175 station, installation of satellite base telemetry at 219 existing remote stations, establishment of 410 (100 FF +310 BS) additional forecasting stations, inundation modeling using available DEM, updation of old PMP atlas, preparation of DEM. In the light of discussions held, the scheme has been modified to Rs. 281 crore. The component of digital elevation modeling (DEM) costing Rs. 400 crores has been shifted to NMCG, for greater synergy with NMCG and to avoid duplication of efforts. The revised proposal is in the process of approval of competent authority.

Recommendation (Para No. 4.24)

Further noting that only 252 projects out of the 517 flood management projects taken up since 11th Plan have been completed, the Committee urge the Government to vigorously pursue with the State Governments and various agencies such as Ganga Flood Control Commission, Central Water Commission and Brahmaputra Board to make all-out efforts for completing the remaining projects during the 12th Plan period so that more flood-affected areas are brought under the umbrella of flood protection, mitigation and relief. The Committee should be apprised of further development in the matter.

Reply of the Government

Under Flood Management Programme (FMP), 252 projects were completed till 31.03.2012. Thereafter, vigorous monitoring of the projects had been carried out by the Ministry and further 41 projects have been physically completed. Thus, a total of 293 projects have been physically completed till date. The issue of early completion of projects has been taken up with the concerned States and in the first meeting of the Inter-Ministerial Committee on Flood Management Programme (IMC-FMP) held under the chairmanship of Secretary (WR, RD & GR), the completion target of all those projects which, were approved in XI Plan, had been fixed as March, 2015. However, due to insufficient allocations under the Programme in the years 2014-15 and 2015-16, the projects have been prioritized based on their criticality for further release of central assistance.

Recommendation (Para No. 4.26)

The Committee note that the objective of the Flood Forecasting scheme is to strengthen flood forecasting and inflow forecasting network in India and develop forecast information system. A Budget allocation of Rs. 90.00 crore has been made for 2014-15 under this Plan head. The Ministry stated that the CWC through its monitoring stations numbering 175 (including 147 Level Forecast Stations plus 28 Inflow Forecast Stations) issues approximately 6,000 flood forecasts during floods to the concerned State Governments every year. The Ministry also informed that the overall accuracy of forecasts issued by CWC over the past years has been upwards of 96% forecasts, which compares well with international standards in view of the river characteristics in India. The Committee were informed that the Ministry also propose to undertake various works/activities on Flood Forecasting during 12th Plan to make it more effective and scientific. While appreciating near 100% accuracy in forecasting of floods by CWC over the years, the Committee would like the Ministry to prepare an implementable time-bound, year-wise action plan for achieving goals set for the 12th Plan and apprise the Committee of the achievements.

Reply of the Government

At present, CWC carries out activities of flood data collection at its 708 stations out which it issues flood forecasts at 175 stations in the country. CWC has modernized its 445 stations and it has planned to modernize remaining 219 of existing stations. In order to cover more areas under its flood forecasting network, CWC has planned to install 100 new flood forecasting stations in XII Plan to cover more areas. The Implementation Plan and timelines proposed by CWC for modernization of existing flood forecasting and expansion of its flood forecasting network during XII Plan are given at Annex-VI.

Recommendation (Para No. 4.27)

The Committee note that every year river Brahmaputra brought devastating floods in North-East region which impact thousands of people and property worth of crores. During 11th

Plan period alone, due to floods 1.053 Mha. area and 3.722 million people were affected with the loss of 112 human lives and total damages to crops, houses and public utilities amount to Rs. 537.070 crore. Further, due to annual floods in Brahmaputra, animal life in Kaziranga National Park is adversely affected. However, the Ministry has informed that only Rs. 3.23 crore has been allocated for strengthening and modernization of flood forecasting and hydrological observation network in Brahmaputra and Barak basin during 2014-15. The Committee feel that sufficient allocation should be made so that necessary works may be taken up by Brahmaputra Board more efficiently and effectively in this regard. The Committee also desire the Board to take up study on feasibility of dredging in the Brahmaputra River for addressing the problem of floods and erosion in Assam.

Reply of the Government

A Study based on multi-temporal satellite data on Erosion at Kaziranga National Park, Assam was carried out by Brahmaputra Board in association with Space Application Centre (ISRO), Ahmedabad. Further, Brahmaputra Board has carried out Hydrographic Survey of River Brahmaputra in the stretch of Kaziranga National Park during the year 2009-10 to identify the erosion prone reaches within the Kaziranga National Park area.

Flood management, being within the purview of States, the related schemes are formulated by concerned State Governments as per priority within the State. The Government of India provides support to the State Governments, which is technical, advisory, catalytic and promotional in nature. Ministry of water Resources approved Rs. 528.00 crore for the activities/works during XII Five Year Plan through letter NO: 2/3/2012-BM(Vol.I)/494-5121 dated 28.04.2014. An expenditure of Rs 241.00 crore has been incurred up to March 2015.

Dredging of rivers in general is not recommended for addressing the problems of flood & erosion due to high cost of post-dredging maintenance and problem of disposal of excavated earth. However, dredging of rivers could be undertaken if it is considered an absolute necessity based on model studies. Keeping in view the need for a long term bank protection of river Brahmaputra, Brahmaputra Board had prepared a draft conceptual proposal for "River Stabilization measures in the Main Stem of Brahmaputra". To assess the efficacy of the

proposal, a research project "Mathematical Model Study of River Brahmaputra with emphasis on climate change" to understand the river dynamics, its problem as well as evolving a long term sustainable solution to the complex problem of floods and erosion has been taken up. AnMoU in this regard has been signed with IIT Guwahati to conduct the Mathematical Model studies for river Brahmaputra during May 2014 for a period of four and half year at consultancy fees of Rs. 2.7 Cr.

CHAPTER – IV

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

Recommendation (Para No. 1.72)

The Committee also observe that the total Budget Estimate for 2013-14 of the MoWR, RD and GR earmarked at Rs. 2,102.65 crore was reduced to Rs. 1,279.50 crore at Revised Estimate (RE) stage, which shows a reduction of Rs. 823.15 crore over BE 2013-14. The reasons put forth by the Ministry for this reduction was that there was delay in obtaining approval of many schemes by as late as six to nine months, resulting in quite low expenditure in respect of these schemes by the month of September 2013, which had led the Ministry of Finance to curtail the Budget at Revised Estimate stage during 2013-14. Taking a serious note of this inordinate delay in getting requisite approvals of projects/schemes, the Committee recommend the Ministry to undertake pre-Budget exercise by getting necessary approval of concerned authorities (i.e. Planning Commission, Expenditure Finance Committee, Cabinet Committee on Economic Affairs, etc.) in respect of projects/schemes proposed to be included in Budget allocations before submission of formal Budget proposal in each financial year, so that much time is not wasted in bureaucratic delays and procedural bottlenecks.

Reply of the Government

Observations of the Parliamentary Standing Committee are noted for future compliance. Despite best efforts of the Ministry, there have been delays in getting approvals from the MOF where staff component has been involved. These are being pursued with the MOF through IFD.

Recommendation (Para No. 3.24)

The Committee observe that Minor Irrigation (MI) schemes are those ground and surface water schemes which have a Culturable Command Area (CCA) upto 2,000 hectare individually. The Budget allocations for Minor Irrigation under Plan head was Rs. 256.02 crore for BE 2013-14, which was hiked to Rs. 357.02 crore for 2014-15 (BE). This represents an increase of Rs. 101.00 crore over the allocation in 2013-14, although the allocations had to be

reduced during the corresponding period from Rs. 256.02 crore at BE stage to Rs. 119.00 at RE stage. As informed by the Ministry, the reason for reduction of Budget allocations at RE stage was that the approval in respect of the scheme was obtained after elapse of six months. For this reason, the expenditure was quite low by the month of September, 2013 due to which the budget was curtailed at RE stage by the Ministry of Finance. The Ministry also informed that due to delay in approval of scheme of 'Ground Water Management & Regulation', the activities as envisaged could not be taken up. The Committee are distressed to note that the problem of reduction of Budget allocations at Revised Estimate stage have been persistently plaguing the budgetary projections of the Ministry in Minor Irrigation sector. The Committee note with concern that the reduction of allocations at RE stage shows poor pre-planning, lack of monitoring and control on the part of the Ministry. They, therefore, recommend that the Ministry must take concrete steps at the earliest to streamline and simplify the process of getting approval of water resources schemes under Minor Irrigation and thus avoid in future the chronic issue of reduction of allocations at RE stage so that both the manpower and resources are not wasted away in the process of estimation of allocations.

Reply of the Government

The MI scheme of Ministry is for MI census and Ground Water Management. It does not deal with creation of Minor Irrigation schemes as such. Due to late approval of schemes in XII plan, the expenditure could pick up and led to reduction at RE stage.

Observations of the Parliamentary Standing Committee are noted for future compliance.

CHAPTER – V

OBSERVATIONS / RECOMMENDATIONS IN RESPECT OF WHICH FINAL REPLY OF THE GOVERNMENT ARE STILL AWAITED

Recommendation (Para No. 1.85)

The Committee further note that the Ministry of Urban Development jointly with National Mission for Clean Ganga (NMCG) has identified a total of 118 towns on both the banks of river Ganga main stem to undertake sewerage infrastructure projects to achieve 100% coverage of such towns with sewerage facilities under the plan for which a time line for preparation of DPRs is proposed to be three years under the short-term action plan of 'Namami Gange'. The Committee would like the Ministry to take further necessary actions as indicated above in respect of the 118 towns identified and apprise them accordingly.

Reply of the Government

Detailed action plan is under preparation by the Ministry of Urban Development (MOUD), and a Standing committee has been constituted by MOUD for this purpose. The MOUD has conducted State level workshop with Uttarakhand, Uttar Pradesh, Bihar and Jharkhand to expedite the process. States have been requested to submit DPRs with priority to the 56 Class-I cities out of 118 identified towns / ULBs and the issue has been taken up at the level of Chief Secretaries and also with Chief Ministers in Uttarakhand and Uttar Pradesh in December, 2014.

Recommendation (Para No. 3.32)

The Committee also note that for revival of water bodies, the scheme on Repair, Renovation & Restoration (RRR) of Water Bodies in 12th Plan was approved by the Union Government in September, 2013 and guidelines were issued in October, 2013. Under the Scheme, about 10,000 water bodies having a Culturable Command Area (CCA) of 6.235 lakh ha would be covered. Out of 10,000 water bodies, 9000 water bodies will be in rural areas and balance 1,000 water bodies will be in urban areas. An outlay of Rs. 6,235 crore has been provided under the scheme during 12th Plan, while a total grant amounting to Rs. 120.339 crore has been released to the States for completion of spill over water bodies from 11th Plan and

taking up new water bodies till date. Realizing the importance of water bodies as a major factor for recharging ground water all over the country, the Committee recommend that the Ministry explore the viability of convergence of works pertaining to RRR Scheme in rural areas with those taken up for ground water recharge under MNREGA Scheme so that at least 10% of the fund allocated under the MNREGA Scheme is utilized for activities taken up for repair, renovation and restoration of water bodies in the rural areas. The Committee are of the opinion that if necessary, the Ministry may also encourage Members of Parliament for making optimal utilization of their MPLAD funds in respect of works related to rejuvenation of water bodies.

Reply of the Government

As per the guidelines for continuation of the scheme on RRR of water bodies in 12th Plan, the proposal of only those water bodies in which catchment area treatment works have started under Integrated Watershed Management Programme (IWMP) would be included in the scheme of RRR of water bodies. During 12th Plan, an outlay of Rs 10,000 crore has been proposed under RRR of water bodies. The Planning Commission has kept an outlay of Rs. 6235 crore (Centre share) for RRR during 12th Plan. The remaining out lay of Rs. 3765 crore will be borne by the State Govt. itself under the scheme. Considering 20% of the estimated cost for tentative allocation for catchment area treatment, the tentative requirement for catchment area treatment work is estimated as Rs. 753 crore. The labour component can be considered as Rs. 377 crore i.e. 50% of Rs. 753 crore.

Considering the convergence of Repair, Renovation & Restoration of water bodies by State Government with MGNREGA funds can be planned and implemented for which Ministry may not have any objections and the proposals may be prepared by State Government indicating the same. As far as utilization of MPLAD funds are concerned, State Government may suitably devise a mechanism for the same considering the requirement of guidelines of utilization of MPLAD funds.

NEW DELHI
17 December, 2015
26 Agrahayana, 1937 (Saka)

HUKUM SINGH,
Chairperson,
Standing Committee on Water Resources

Annexure-I

New Initiatives proposed under NamamiGange

Objective	Programme	Sector	Activities
Nirmal Ganga	Infrastructure Development	Sewerage & Sanitation	Rehabilitation and up-gradation of existing sewage treatment plants (STPs) along Ganga.
			Pollution mitigation in open drains through "In situ treatment" etc. and other innovative methods
			Providing interception & diversion structures, STPs & identified essential associated interventions/infrastructure critical for maintaining water quality standards of Ganga & its tributaries in identified locations.
			Rural Sanitation schemes contemplated for improving sanitation and civic amenities in identified villages on the banks of river Ganga and to develop them as Ganga Grams to arrest the flow of pollution into the river and supplementing the programme of Ministry of Drinking Water and Sanitation in 1649 number of Gram Panchayats located on banks of river Ganga (MoDW&S/MoWR, RD & GR)
		River Front Management	River Front Management and Ghats' developments in selected cities and towns including public amenities etc.
		Industrial Pollution	Industrial Pollution abatement in major industrial clusters
		Solid Waste Management	Essential Solid Waste Management projects for towns /ghats.
Aviral Ganga	Infrastructure Investments		Misc. intervention aiming at improving flow & water availability
			Interventions emerging from final report of consortium of IIts& GRBMP recommendations
Program Support & Sustainability	Institutional Development		Institutional Development (augmentation of project implementation capacities on ground, capacity building, setting up of monitoring centres and Institutions)

			National Ganga Monitoring Centre
			Support for preparation of Detailed Project Reports (DPRs) to keep a shelf of projects ready
			Capacity building of urban local bodies
	Research & Development		Research, studies, pilots and training, workshops, seminars, publication etc.
			Model interventions for non-point pollution mitigation, agricultural runoff etc.
			GIS based data, mapping, spatial analysis for Ganga basin and related applications
			Assessment of Special Properties of Ganga Water
			Study of communities depending on Ganga for their traditional livelihood
			Special guidelines for sand mining in Ganga
			Study of possible diversion of a portion of river Bhagirathi at a suitable location
	Ecological Sustainability	Habitat Improvement activities in Ganga Basin	Action Plan for public amenities in rural / urban centres on the banks of river Ganga & its tributaries.
			Safe disposal of flowers and other puja material, improved methods of last rites on river banks
		Bio Diversity Conservation	Conservation of Aquatic life – special attention on Dolphin, Turtles and Ghariyals
			Afforestation – Conservation of Flora
			Conservation of wetlands
			Other measures for ensuring habitat improvement & bio-diversity conservation
Public	Communicati	Awareness	Media and Communication & public outreach activities and

Participation	on & public outreach activities	Creation	strengthening Public Participation in Ganga Rejuvenation and Public Awareness.
			Ganga Task Force / Ganga Vahini
		Dissemination	National & International Workshops, Seminar, Symposia, etc.
			National Awards, fellowship programmes
			Other measures for strengthening public outreach, participation & communication
Any other activity, which flows from the objectives			

Recommendations given in Ganga River Basin Management Plan (GRBMP) by IIT Consortium

Major issues in Ganga river basin

With increase and diversification of human activities having harmful environmental effects, National River Ganga and its basin have been degrading rapidly. The five main causes for this degradation are:

1. Over-use of natural resources of the basin
2. Discharge of pollutants into terrestrial and aquatic environments
3. Reduction in water-holding capacities and replenishment of water bodies
4. Mutilation of river by piecemeal engineering operations
5. Threats to geological processes in the basin.

The major human activities causing the above damages are Industrialization, Urbanization, Lifestyle Changes, Agriculture & Other Rural Activities, and Deforestation/Denudation. For devising appropriate remedial interventions requires in-depth analysis of the problems.

Vision of Ganga River

In order to preserve invigorate National River Ganga, her essential character needs to be grasped in a holistic manner. After extensive research and consultations, the “wholesomeness of National River Ganga”, viewed from a dynamic perspective, was determined to be the sanctity of the river system imbibed in the four points stated below:

1. **“AviralDhara” (i.e. “Continuous Flow”)**: The flow of water, sediments and other natural constituents of River Ganga are continuous and adequate over the entire length of the river throughout the year.
2. **“NirmalDhara” (i.e. “Unpolluted Flow”)**: The flow in the Ganga River Network is bereft of manmade pollution; hence the river water quality should not be sullied by human activities.
3. **Geologic Entity**: The Ganga River System is the earth’s creations of ancient times, which may not be repairable if damaged.
4. **Ecological Entity**: The Ganga River System is a delicately structured balance between various living species and the physical environment, achieved by nature over thousands of years and vulnerable to irreversible changes.

Formulation of Missions

Given the escalating impacts of human activities on Ganga river basin, the above objectives guided the formulation of eight important areas where restorative actions need to be carried out in Mission mode, viz.: “AviralDhara”, “NirmalDhara”, “Ecological Restoration”, “Sustainable Agriculture”, “Geological Safeguarding”, “Basin Protection Against Disasters”, “River Hazard Management” and “Environmental Knowledge-Building and Sensitization”.

The recommended actions for all the missions are given below:

Recommended Actions for AviralDhara (Mission 1)

- Determination of Ganga river basin's hydrological status more accurately and in greater detail.
- Preparation of water resources plan for Ganga river basin with emphasis on wetlands, forests and distributed groundwater and surface water storages rather than large reservoirs storages.
- Increase in anthropogenic water use efficiency through:
 - ✓ Realistic pricing of fresh water
 - ✓ Incentives, technical assistance, and allocation of water rights and entitlements to consumers
 - ✓ Reuse and recycling of water.
- Governmental policy shift bring Ganga river basin's waters under natural resource management, with emphasis on resource preservation, stakeholder control, expert guidance and regulation.
- Ensuring longitudinal river connectivity and E-Flows at dams, barrages and other manmade interferences, and adoption of new criteria for approving such projects.
- Control of water withdrawals in water-depleting regions.
- Assessment and monitoring sediment resources of the network including the quantity, quality and nutrient value of sediments trapped behind dams.
- Research to determine ecological limits, thresholds and interconnections of Ganga river basin's water resources, and river flow health assessments within the framework of ecohydrology.

Recommended Actions for NirmalDhara (Mission 2)

- Management of Solid and Liquid Wastes Generated from Domestic/Commercial Sources
- Riverfront development, Floodplain Management and Rejuvenation of Water Bodies

- Management of Solid and Liquid Wastes Generated from Industrial Sources
- Management of polluted Agricultural Runoff.

Effective co-ordination of these activities is envisaged through a high-level constitutional body tentatively named the 'National River Ganga Basin Management Commission (NRGBMC), pending whose formation the NMCG or some other dedicated government body may coordinate the activities. Project planning for urban works should begin with preparation of detailed Urban River Management Plans (URMP) for Class I towns, and subsequently also for Class II and Class III towns. The URMPs should be followed by preparation of DPRs, following which funds should be allocated for project implementation. Fund allocation should be prioritized for projects designed to prevent direct discharge of large quantities of liquid waste into the River System (Priority Level I), followed by projects designed to prevent direct discharge of large quantities of solid waste into the River System (Priority Level II), followed by projects concerning river-frame development and restoration floodplain in urban areas along the Ganga River System (Priority Level III), Other projects under Mission NirmalDhara (MND) may be executed at still lower priority depending on availability of funds.

Recommended Actions for Ecological Restoration (Mission 3)

- Restoration of longitudinal connectivity along with E-Flows at dams, barrages and other obstructions.
- Maintenance of lateral connectivity across floodplains.
- Restoration of unpolluted river flows.
- Restrictions on river bed farming and gravel-and sand-mining from river beds.
- Restrictions on plying noisy vessels, dredging, and bed and bank modifications.
- Control of alien species invasions, overfishing and fishing during spawning seasons.
- River nutrient assessment and release of sediments trapped behind dams/barrages into downstream river reaches.
- Long-term bio-monitoring of the Ganga river network.
- Synergizing actions under this mission with the Dolphin Conservation Action Plan – 2010.
- Comprehensive research on the ecological dynamics of the Ganga River System.

Recommended Actions for Suitable Agriculture (Mission 4)

The main reforms recommended to minimize negative environmental impacts of Ganga River Basin while maintain agricultural productivity and economic viability are identified as:

- Adoption of Conservation Agriculture (involving no tillage, crop diversification, and permanent organic soil cover), especially in degrading lands, to enhance long term soil fertility and agricultural output.
- Promotion of Organic Farming where essential and/or economically feasible.
- Economically beneficial improvements in water and nutrient application techniques in rice cultivation, especially by SRI (i.e. System of Rice Intensification) and Urea Deep Placement.
- Promoting other established resource conservation technologies where feasible.
- Promoting regional (landscape-scale) resource conservation steps to counter monotonous agro-ecosystem impacts.
- Infusing experimentation, adaptability and flexibility in Ganga river basin's agricultural practices to synthesize traditional knowledge with ongoing and future scientific discoveries.
- Devising appropriate policy measures to implement the above recommendations within the existing socio-cultural, economic and institutional framework prevalent in different regions of Ganga river basin.

Recommended Actions for Geological Safeguarding (Mission 5)

- Control/restriction geologically hazardous activities including deep groundwater withdrawals, underground excavations, explosions, tunneling, mining, fracking, and operation of large reservoirs.
- Region-specific restrictions on geo-morphologically harmful land-use practices such as deforestation and construction activities on hill slopes and in floodplains, excessive agricultural tillage, sand and gravel mining from river beds, and river bank modifications.
- Drainage improvement of low-lying areas and stabilization of disturbed areas.

- Mapping river migration zones, and continuous geological monitoring of Ganga river basin.

Recommended Actions for Basin Protection against Disasters (Mission 6)

- Routine hydro-meteorological and biological events – often perceived as disasters – are usually beneficial for the basin; hence they should not be countered.
- To withstand catastrophic disasters, ecosystems need strengthening by preserving wetlands, promoting mixed indigenous forests and vegetation, and curbing land-use disturbances and encroachments by humans.
- Extreme Floods are typical of sediment-charged Himalayan rivers of Ganga river basin, to combat which floodplain regulations and vegetative measures are preferable to embankments/levees, since the latter create perched rivers and increase the flood damage potential; but upstream dams (with longitudinal connectivity environmental flows) may prove beneficial if sediment trapped behind dams can be transferred to downstream floodplains.
- Ganga river basin's ecosystems have evolved over time against certain fire and biological regimes; hence the ecology of Forest Fires and of Epidemics & Biological Invasions in Ganga river basin's ecosystems needs to be studied extensively. Until then, active interventions to counter such events should be limited to checking harmful anthropogenic activities.
- Landslides in the Upper Ganga Basin and other hilly regions are aggravated by deforestation, road and building constructions, and unsafe debris disposal, which need to be strongly checked.
- Early rejuvenation of disaster-struck ecosystems should be aided by re-introducing indigenous species resistant to the specific disaster types and re-creating and enabling physical environment.

Recommended Actions for River Hazards Management

(Mission 7)

- Basing scale flood-risk maps should be prepared based on scientific data and reasoning, and they can be linked to an online data base and flood warning system.
- Drainage improvement and land reclamation in low-lying areas should be taken up systematically and urgently given successful case histories from different parts of the world.

- Assessment of soil salinity and its mitigation strategy are important; the latter may included the use of salinity resistant crops and soil improvement practices.
- Alternatives to embankments for flood management with emphasis on 'living with the floods' concept must be emphasized; this may include floodplain zoning and other non-structural approaches. There is also an urgent need for academia, governmental organization, NGOs, social institutions and the society at large to work together for this.
- Research needed on sediment dynamics and its application in river management projects designing sustainable river management strategies. The Kosi basin could be taken up as a case study since the Kosi is one of the highest sediments load carrying rivers in Ganga basin and it is also flood-prone.
- Some pilot projects may be undertaken in partnership with state governments, such as
 - ✓ Reactivation of paleo channels in the Kosi basin and design of flood spillway
 - ✓ Improving drainage congestion caused by unplanned rail/road network by providing additional culverts and pathways in several parts of UP and Bihar
 - ✓ Designing canals to drain water from permanently waterlogged areas
 - ✓ Initiation of flood awareness programme and educating people to move away from flood-prone areas
 - ✓ Developing reliable flood forecasting system for specific river basing through modeling, and better communication systems for timely action.

Recommended Actions for Environmental Knowledge-Building and Sensitization (Mission 8)

- Establishment of a comprehensive Data Bank by continuous collection, processing and storage of information on the basin's natural resources, anthropogenic activities, and environmental monitoring of basin;
- Preparation of secondary results (representative parameters, charts, tables, etc.) based on primary data;
- Preparation of documents and materials for easy understanding by non-specialized people;
- Keeping all the above information in open domain for easy access by interested individuals and institutions; and
- Conducting educational workshops and campaigns with stakeholders and interested citizens to enable their sensitization and comprehensive understanding of basin processes; and

- Conducting ground-level monitoring and field researches of Ganga river basin's environment with stakeholder participation

Annexure-III

Status of dam safety Reviews/Inspections carried out by States/DSOs

(As per furnished by States/DSOs)

Sl.No	State / DSOs	Details of comprehensive Dam Safety Reviews /Inspections made
1	Bihar	20 dams & 3barrages
2	Chhattisgrah	245 dams
3	Jharkhand	4dam(DVC)
4	Himachal Pradesh	3dam (BBMB)
5	Karnataka	138 dams
6	Kerala	16 dams
7	Madhya Pradesh	43 dams
8	Maharashtra	61 dams
9	Odisha	114 dams
10	Rajasthan	1dam
11	Tamil Nadu	75 dams
12	National Hydro Power Corp.(NHPC)	3dams

Annexure-IV

**DAMS PROPOSED UNDER DAM REHABILITATION AND IMPROVEMENT
PROJECT**

S No.	Name of Dam Proposed under DRIP
TAMIL NADU	
1.	Krishnagiri
2.	Thambalahalli
3.	Pambar
4.	Vaniar
5.	Shoolagirichinnar
6.	Kelavarapalli
7.	Chinnar
8.	Kesarigulihalla
9.	Nagavathi
10.	Thoppiar
11.	Sathanur
12.	Vidur
13.	Rajathopekanar
14.	Mordhana
15.	Manimukthanadhi
16.	Gomukinadhi
17.	Veeranam
18.	Vaigai
19.	Manjalar
20.	Marudhanadhi
21.	Sothuparai
22.	PilavukkalPeriyar
23.	PilavukkalKovilar
24.	Vembakottai
25.	Kullursandai
26.	Anaikuttam
27.	Golwarpatti
28.	Manimuthar
29.	Gatana
30.	Ramanadhi
31.	Karuppanadi
32.	Gundar
33.	Adavinainarkoil
34.	Vadakkupachayar
35.	Kodumudiyar
36.	Nambiar

146.	ManjhiKhedi
147.	GuradiaSurdas
148.	LaxmiKheda
149.	Chandrakeshar
150.	Jirbhar
151.	Sundrel
152.	Sampna
153.	Bundala
154.	Tawa
155.	Kolar
156.	Barna
157.	Deogaon
158.	Sanjay Sarovar
159.	Thanwar project
160.	Mehgaon tank
161.	Barnoo
162.	Mandai
163.	Sagarnadi
164.	Ari
165.	Kharadi
166.	Sarathi
167.	Moorumnalla
168.	Chawarpani
169.	Gangulpara
170.	Dhutiweir
171.	Nahlesara
172.	Badera
173.	Bamhodi
174.	Harrai
175.	Mandwajhiri
176.	Dongarbodi
177.	Karhi
178.	SurkhiPondi
179.	Sher
180.	Birnai
181.	Marhi
182.	Umrar
183.	Chandnatha

Annexure-V

Status for prepared EAP's by States/DSOs

(as per furnished by States/DSOs)

Sl.No.	State / DSO's	Status of EAP prepared	Remark
1	Andhra Pradesh	3	
2	Arunchal Pradesh	1	Prepared by North Eastern Electric Power Corporation Ltd.(NEEPCO)
3	Assam	1	Prepared by North Eastern Electric Power Corporation Ltd.(NEEPCO)
4	Bihar	20	
5	Chhattisgarh	57	
6	Gujarat	1	Disaster Management Plan of SardarSarovar Dam prepared every year.Elaborate arrangements made for evacuation in case emergency.
7	Himachal Pradesh	6	Prepared by Bhakra Beas Management Board(BBMB)-3dam &National Hydro-Electric Power Corporation(NHPC)-3dams
8	Jammu & Kashmir	5+1	EAP-5 dam prepared by NHPC & Disaster Management lan (DMP)-1dam prepared by J&K SPDC.
9	Karnataka	5+24*	5 Nos as per CWC guide lines remaining 24 nos. under review and furnishing as per CWC guide lines, require revision as per present condition.
10	Kerala	2	
11	Madhya Pradesh	32	
12	Maharashtra	39	
13	Manipur	1	

14	Odisha	2	
15	Telangana	1	
16	Punjab	12	Draft EAP submitted to CWC
17	Sikkim	2	Prepared by NHPC
18	Uttar Pradesh	2	
19	Uttarakhand	4	EAPs-2 dams prepared by NHPC & Disaster Management Plan (DMP) -2dams prepared by THDC India Limited.

Annexure-VI

Implementation plan and Time lines for activities during XII plan period (2012-17)

S No	Items	Qua ntity	Timelines (Year/ Quarter)																			
			2012-13				2013-14				2014-15				2015-16				2016-17			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Identification of new sites (for inflow/ level forecast stations) in consultation with State governments	410 sites																				
3	Upgradation of existing HO&FF stations (219 nos) and setting up of new HO&FF stations including procurement, installation, testing & commissioning of automatic data acquisition and real time data transmission system.	629 sites																				
3(a)	Technical specifications of specialised equipment & technical sanction of detailed work estimates by regional Chief Engineer's.																					
3(b)	Call of tenders & award of works by regional Chief Engineer's offices.																					
3(c)	Procurement of operational vehicles, mobile phone/ GPS system.																					

3(d)	Procurement of specialised items (level sensors, rainfall sensors, weather stations, satellite based communication system)																					
3(e)	Construction of civil foundations for automatic data acquisition and real time data transmission system.																					
3(f)	Construction of office buildings & other civil works																					
3(g)	installation, testing, commissioning & acceptance																					

ACTION PLAN FOR INDUSTRIAL POLLUTION CONTROL IN GANGA BASIN

SUGAR SECTOR

As per the standards notified during 1986 under the Environment (Protection) Rules 1986 and CREP guidelines in 2003, Sugar mills are required to meet the discharge standards and to utilise the treated water in irrigation. The maximum quantity of treated effluent discharge is limited to 100 l/tonne of cane crushed.

Action plan for sugar sector

- Waste water generation to be limited to 40 l/Tonne of cane crushed by implementing;
- Establish mini cooling tower or polishing tank for recycling the excess condensate water to process/utilities/allied units
- Up gradation of ETP system to meet the discharge standards for irrigation
- Scientific irrigation plan to be implemented for utilization of effluent
- No treated effluent to be discharged into drain or river
- Treated effluent to be re-used in the process to the maximum extent, before utilizing in irrigation
- Reduction in raw water abstraction

TEXTILE SECTOR

Standards for the discharge of effluents from textile industries are notified under the Environment (Protection) Rule, 1986 for effluents from textile industry including cotton textile industries (composite and processing), composite woolen mills man-made fibre industry (semi-synthetic) and common effluent treatment plants.

Action plan for textile sector:

As per the new concept in Textiles sector has been classified as:

- a) Small textile units having independent conventional ETP system (Standards apply to the small scale industries, i.e. total discharge up to 25 KL/Day, Standards to be achieved as per existing norms)
- b) Medium and large textile units which are going for ZLD based ETP system, and
- c) Textiles units working in clusters going for ZLD based CETPs.

Major points in the action plan:

For individual units:

- All Medium and Large Textile units (includes all Composite/woollen Textile Mills, integrated textile mills, all individual Textile Units having dyeing process) to switch over from conventional ETP to ZLD based ETP.
- The recovered water from the ZLD based ETP (R.O, MEE etc.) to be re-used in the textile processing within the unit
- No ground water abstraction to be allowed after implementation of ZLD based ETP.
- Not to permit any Medium and Large Textile units (includes all Composite/woollen Textile Mills, integrated textile mills, all individual Textile Units having dyeing process) in the ganga basin states without ZLD based ETP.

For Textile Clusters:

- Preparation of time target action plan for all existing clusters in the state of existing CETPs.
- Identifying clusters and preparation of DPR for installation/upgradation of CETPs
- Provision to be kept for the member units to utilize the recovered water from the ZLD based CETP (R.O, MEE etc.), through piped network connection.
- The recovered water from the ZLD based CETP (R.O, MEE etc.) shall be re-used in the textile processing within the member units and no ground water abstraction shall be allowed after implementation of ZLD based CETP.

PULP AND PAPER SECTOR

Major points in the action plan

- Dismantling & removal of chemical pulping facilities namely digesters, blown tank etc from Pulp & paper Mills not having CRPs (for Uttarakhand & Uttar Pradesh only)
- Submission of action plan to switch over to CRP by agro based Pulp & Paper industrial Units with lignin recovery plants
- Dismantling and removal of chemical pulping facilities from the Unit's premises in case of non-submission of action plan
- Preparation of Action Plans by individual Pulp & Paper Mills (for up gradation of process technology; to achieve fresh water requirement targets; and up gradation of ETP systems)
- Commissioning of CRP/CCRP in Agro based Kraft Paper Mills in Ganga River Basin States
- Installation of sealed flow meter /running hours meter on bore wells and inlet pipe line of different process section i.e. pulp mill, paper machine, boiler
- Color coding of pipe lines carrying recycled process water and fresh process water

DISTILLERY SECTOR

CPCB notified discharge standards and formulated CREP (Corporate responsibility for environment protection) and zero spent wash discharge was prescribed for distilleries. After assessing the performance of distilleries CPCB restricted the options of achieving ZLD to bio-composting and concentration cum incineration.

Action plan for distillery sector:

Ensuring achievement of zero liquid discharge by distilleries

- Industries to install either;
 - systems for Solid separation (R.O etc)

- evaporation & concentration system and incineration
- OR;
- adopt advanced technologies (cont. fermentation, multi-pressure distillation, integrated evaporation, etc) for reduction in spent wash generation upto 6-8KL/KL
- evaporation & concentration system and incineration
- Industries shall also achieve/adopt
 - Reduction in raw water consumption
 - Installation of monitoring system for water consumption & reuse
 - Zero discharge of other effluents apart from spent wash

TANNERIES SECTOR

In Tanneries the conventional treatment methods aimed to treat organic matter and no significant reduction of the TDS achieved due to inorganic salts of mono-valent cations. Standards for discharge of CETP effluent into surface waters and on land have a maximum permissible limit for TDS of 2100 mg/L.

Action plan for Tannery sector:

- Directed the three CETPs for tanneries clusters in Kanpur and Unnao to submit time bound action plans for up gradation of the CETPs within one year to comply effluent standards for all parameters including TDS.
- U.P. Government has awarded the work for DPR preparation for upgradation of Kanpur CETP.
- UPPCB directed the three CETPs to submit action plans to upgrade the CETPs and achieve ZLD.

All the above action plans in different sectors are time targeted and is expected to be implemented within a time of two years (max.). The progress in implementation of the action plan are monitored through MIS and regular reviews at national level.

APPENDIX – I

MINUTES OF THE THIRD SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES (2015-16) HELD ON THURSDAY, 17 DECEMBER 2015

The Committee sat from 1500 hours to 1515 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Hukum Singh – Chairperson

MEMBERS

LOK SABHA

2. Shri Radheshyam Biswas
3. Shri Devusinh Jesingbhai Chauhan
4. Shri Sukhbir Singh Jaunpuria
5. Shri B. Vinod Kumar
6. Shri Maganti Murali Mohan
7. Shri Sidhant Mohapatra
8. Shri Abhijit Mukherjee
9. Shri Rodmal Nagar
10. Shri Subhash Patel
11. Shri Sanjaykaka Ramchandra Patil
12. Shri Vishnu Dayal Ram
13. Shri Ram Prasad Sarmah
14. Smt. V. Sathyabama
15. Shri Lallu Singh

RAJYA SABHA

16. Shri Balwinder Singh Bhunder
17. Smt. Naznin Faruque
18. Mir Mohammad Fayaz
19. Prof. Mrinal Miri
20. Shri Amar Shankar Sable
21. Shri A.V. Swamy
22. Shri Lal Sinh Vadodia

SECRETARIAT

- | | | | |
|----|--------------------|---|---------------------|
| 1. | Shri Shiv Kumar | - | Joint Secretary |
| 2. | Smt. Rita Jaikhani | - | Director |
| 3. | Shri Kushal Sarkar | - | Additional Director |

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee. Thereafter, the Committee took up for consideration (a) Draft Report on the subject "Review of Ground Water Scenario, need for a comprehensive policy and measures to address problems in the country with particular reference to (i) Dark Blocks; and (ii) Contamination of underground water by certain industries"; (b) Draft Report on Action Taken by the Government on the Observations / Recommendations contained in the First Report (16th Lok Sabha) on Demands for Grants (2014-15) of the Ministry of Water Resources, River Development & Ganga Rejuvenation; and (c) Draft Report on Action Taken by the Government on the Observations / Recommendations contained in the Third Report (16th Lok Sabha) on Demands for Grants (2015-16) of the Ministry of Water Resources, River Development & Ganga Rejuvenation. After some deliberations, the Committee adopted the aforesaid three draft Reports without any modification.

3. The Committee then authorized the Chairperson to present the above three Reports to both the Houses of Parliament in the current Winter Session.

The Committee then adjourned

APPENDIX – II

[Vide Para 4 of the Introduction]

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/ RECOMMENDATIONS CONTAINED IN THE FIRST REPORT (SIXTEENTH LOK SABHA) OF THE COMMITTEE

- | | | |
|-------|---|------------------------------------|
| (i) | Total number of Observations/ Recommendations | 44 |
| (ii) | Observations/ Recommendations which have been accepted by the Government

Para Nos.1.70, 1.71, 1.73, 1.74, 1.75, 1.76, 1.77, 1.78, 1.79, 1.80,1.81, 1.82, 1.88, 1.90, 2.16, 2.18, 2.19, 2.20, 3.25, 3.28, 3.29, 3.31, 4.23, 4.25, 4.28 and 4.29 | Total : 26
Percentage : 59.09% |
| (iii) | Observations/ Recommendations which the Committee do not desire to pursue in view of the Government's replies

Para Nos. 1.83, 1.84, 1.86, 1.87, 1.89, 2.17, 3.26, 3.27, 3.30, 3.33, 4.22, 4.24, 4.26 and 4.27 | Total : 14
Percentage : 31.81 % |
| (iv) | Observations/ Recommendations in respect of which replies of the Government have not been accepted by the Committee

Para Nos. 1.72 and 3.24 | Total : 02
Percentage : 4.54 % |
| (v) | Observations/ Recommendations in respect of which final reply of the Government are still awaited

Para Nos. 1.85 and 3.32 | Total : 02
Percentage : 4.54% |