STANDING COMMITTEE ON WATER RESOURCES (2012-13)

FIFTEENTH LOK SABHA

MINISTRY OF WATER RESOURCES

DEMANDS FOR GRANTS (2013-14)

SEVENTEENTH REPORT



LOK SABHA SECRETARIAT NEW DELHI

April, 2013/Vaisakha,1935 (Saka)

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MINISTRY OF WATER RESOURCES

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Presented to Lok Sabha on 29.04.2013

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LOK SABHA SECRETARIAT NEW DELHI

April, 2013/Vaisakha,1935 (Saka)



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COMPOSITION OF THE STANDING COMMITTEE ON WATER RESOURCES (2012-2013)

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- 4. Smt. Raj Kumari Chauhan
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2. Shri R.C. Tiwari - Director

Smt. Rita Jailkhani - Additional Director
 Shri Ginsuanlian Guite - Committee Officer

Shri A.H. Khan Choudhry, MP, Lok Sabha ceased to be the Member of the Committee w.e.f. 28.10.2012.

^{*} Nominated w.e.f. 13.12.2012.

[#] Nominated w.e.f. 09.01.2013.

INTRODUCTION

I, the Chairman, Standing Committee on Water Resources (2012-13) having been

authorised by the Committee to submit the report on their behalf, do present this Seventeenth

Report on Demands for Grants (2013-14) of the Ministry of Water Resources.

2. The Demands for Grants have been examined by the Committee under Rule 331E(1)(a)

of the Rules of Procedure and Conduct of Business in Lok Sabha.

3. The Committee took evidence of the representatives of the Ministry of Water Resources

on 04 April, 2013.

4. The Report was considered and adopted by the Committee at their sitting held on

17 April, 2013.

5. The Committee wish to express their thanks to the representatives of the Ministry of

Water Resources for providing them the requisite written material, and for oral depositions in

connection with the examination of the subject.

6. The Committee would also like to place on record their sense of deep appreciation for the

assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the

Committee.

NEW DELHI

23 April, 2013

3 Vaisakha, 1935 (Saka)

DIP GOGOI, Chairman,

Standing Committee on Water Resources

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CHAPTER I

BUDGETARY ALLOCATIONS

- 1.1 All living beings alongwith entire spectrum of flora and fauna on the globe are fully dependent on water for their life and sustenance. Being such a vital element for existence and survival of all forms of life on earth, water, the elixir of life, needs to be conserved and managed effectively and efficiently. India, as a fast developing economy with growing industrialization and urbanization, faces new challenges in management of water due to its increasing usage in various areas coupled with its almost static supply level. The growing population and increasing level of impurities in the water on account of contaminants and pollutants have made the problem much complex.
- 1.2 Ministry of Water Resources, Government of India is responsible for development, conservation and management of water as a national resource; overall national perspective of water planning and coordination in relation to diverse uses of water; general policy, technical assistance, research and development, training and matters relating to irrigation and multi-purpose projects, ground water management; conjunctive use of surface and ground water, command area development, flood management including drainage, flood-proofing, water logging, sea erosion and dam safety. The Ministry is also responsible for regulation and development of inter-State rivers and river valleys, implementation of awards, water laws, water quality assessment, international

water law, matters pertaining to rivers common to India and neighbouring countries, bilateral and external assistance and cooperation programmes in the field of water resource development. The above functions of the Ministry are carried out through its two attached offices, seven subordinate offices, seven statutory bodies, two autonomous bodies and two public sector enterprises.

Analysis of Demands for Grants (2013-14)

1.3 The detailed Demands for Grants in Demand No.104 of the Ministry of Water Resources was laid on the Table of Lok Sabha on 19 March, 2013. A total budgetary provision of Rs.2,102.65 crore has been made for the year 2013-14. The following table shows the allocation of Budget for the Ministry of Water Resources:-

Table – 1 : Demands for Grants (2013-14) (Demand No. 104)

(Rs. in crore)

	Revenue	Capital	Total
Charged	_	4.00	4.00
Voted	1902.10	196.55	2098.65
Total	1902.10	200.55	2102.65

1.4 The detailed Demands for Grants shows that Demand (Voted) is Rs 2098.65 crore, which comprises Rs 1902.10 crore on Revenue section and Rs 196.55 crore on Capital section. There is a decrease of Rs 35.20 crore on the Revenue section and an increase of Rs 70.25 crore on the Capital section in comparison to the previous year. However, as a

whole, the total Demands for Grants has shown an increase of Rs 35.05 crore which according to the Ministry is due to increase in salary and enhanced D.A.

1.5 The details of allocation of funds under Plan and Non-Plan sections pertaining to the Ministry of Water Resources for the year 2010-11 onwards are given below:-

Table – 2: Plan and Non-Plan Allocations during 2009-10 to 2013-14

(Rs. in crores/gross)

Year	Plan	Non-Plan	Total
2009-10 (BE)	612.00	417.54	1029.54
2009-10 (Actual)	502.39	466.85	969.24
2010-11 (BE)	712.00	419.52	1131.52
2010-11 (Actual)	530.71	462.08	992.79
2011-12 (BE)	732.00	517.33	1249.33
2011-12 (RE)	632.00	517.33	1149.33
2011-12 (Actual)	586.41	479.56	1065.97
2012-13 (BE)	1512.00	555.60	2067.60
2012-13 (RE)	662.00	574.45	1236.45
2012-13 (Actual	405.14	433.61	838.75
upto Dec. 2012)			
2013-14 (BE)	1512.00	590.65	2102.65

1.6

Against budgetary allocation (BE) of Rs.1,249.33 crore in 2011-12, the budgetary allocation (BE) of Rs.2,067.60 crore was made for 2012-13 which was an increase of 65.49%. The budgetary allocation of Rs.2,102 crore in 2013-14 represents only 1.7% increase over the previous year. On being asked whether this nominal increase

represents pruning or staggering of the various Schemes of the Government, the Ministry replied in the negative.

1.7 The total Budget Allocation (both Plan and Non-Plan) for 2012-13 was Rs.2067.60 crore, which was reduced to Rs.1236.45 crore at Revised Estimate (RE) stage. When asked about the reasons for reduction of allocation at RE stage by Rs.831.15 crore during 2012-13, the Ministry in a written reply submitted as under:-

"Due to non-approval of EFC (Expenditure Finance Committee) in respect of the new Plan schemes and new components in the ongoing schemes, the allocated funds were not expended upto to September, 2012. Ministry of Finance has reduced funds at RE stage."

- 1.8 When the Committee asked whether the reduction led to pruning of some schemes/projects of the Ministry, the Ministry replied in the negative. When further enquired about the steps taken/are being proposed by the Ministry to avoid reduction at RE stage, the Ministry in a written reply stated that all efforts are being made to obtain EFC and Cabinet approval in time.
- 1.9 The Committee asked whether any study has been conducted to avoid reduction in BE at RE stage in overall Budgetary allocation of funds and also in different Heads of expenditure and if so, whether any proposal has been formulated in this regard, the Ministry informed the Committee in a written reply as under:-

"Half yearly review of physical and financial progress is being carried out by the Planning Commission. In addition, the Secretary (WR) also holds regular meetings

with senior officers of the Ministry and its organisations and review of expenditure performance is a mandatory point in the said meetings. Various measures to overcome the constraint, if any, in implementation of the schemes are discussed in these meetings and appropriate actions are being taken by the Ministry in this regard."

- 1.10 The allocations for Plan expenditures for the year BE 2013-14 have been fixed at Rs. 1,512 crore, which is equivalent to the BE of 2012-13. When asked about the reasons for stagnation in allocation for Plan expenditures for 2013-14, the Ministry stated that the Planning Commission is allocating Gross Budgetary Support for various Ministries/Departments after taking into consideration the availability of resources.
- 1.11 The Committee desired to know the quarter-wise actual expenditure for the year 2012-13 (upto December 2012). In reply thereto, the Ministry furnished the statement showing the requisite information in this regard which is given below:-

Table – 3 : Review of Expenditure Trends for Plan Expenditure

(Rs. in crore)

	Plan							
BE (2012- 13)	Exp upto 1st Qtr	% of BE 2012-13	Exp upto 2nd Qtr	% of BE 2012- 13	Exp upto 3rd Qtr	% of BE 2012- 13	Exp upto Feb 10	% of BE 2012-13
1512.00	114.61	7.58	285.00	18.85	405.14	26.79	478.52	31.65

Table – 4 : Review of Expenditure Trends for Non-Plan Expenditure

(Rs. in crore)

Non-Plan

BE (2012- 13)	Exp upto 1st Qtr	% of BE 2012- 13	Exp upto 2nd Qtr	% of BE 2012-13	Exp upto 3rd Qtr	% of BE 2012- 13	Exp upto Feb 10	% of BE 2012-13
555.60	168.06	30.25	293.11	52.76	433.61	78.04	511.34	92.03

1.12 When asked about the corrective measures being proposed to avoid March rush in the expenditure, the Ministry mentioned that the instruction of Ministry of Finance viz: (a) to incur expenditure upto 15% of B.E. during the month of March (b) the restriction of expenditure in the last quarter upto 33% of B.E. and (c) the adjustment of advances drawn during the year by March are also being watched.

Outcome Budget

1.13 The Ministry submitted before the Committee a document titled as "Outcome Budget 2013-14" which contained performances of the Ministry in the year 2012-13. The Committee enquired whether the Ministry is proposing to prepare an annual document indicating the work performed, targets fixed, results achieved, funds allocated and expenses incurred on each Scheme/Projects of the Ministry during that year. The Ministry replied that "these are reflected in outcome budget and result framework documents."

River Basin Management

1.14 The Ministry informed that it had formulated a newly named scheme called 'River Basin Management' (RBM) by merging two ongoing schemes, <u>viz</u>. River Basin Organisation (RBO) and Investigation of Water Resources Development Scheme. The

Scheme also includes restructuring of the Central Water Commission (CWC) and activities of Brahmaputra Board. The Budget allocations for River Basin Management are given below:-

Table – 5 : Budget allocations for River Basin Management

(Rs. in crore)

	2012-13					
Budget	Revised	Expenditure upto	Budget Estimate			
Estimate	Estimate	December 2012				

1.15 The budgetary allocation for River Basin Management for 2012-13 was Rs.200.00 crore which was reduced to Rs.134.08 crore at the RE stage. The actual expenditure (till December 2012) was however only Rs.109.22 crore. When asked to furnish the reasons for reduction at RE stage by Rs.65.92 crore, The Ministry replied as under :-

"Due to pending approval of EFC in respect of the Plan Scheme with new components in the ongoing schemes."

1.16 When asked to state the reasons for keeping budgetary allocation at Rs.200.00 crore in BE 2013-14 equivalent to the BE 2012-13, the Ministry replied that the Planning Commission is allocating Gross Budgetary Support for various Ministries/Departments after taking into consideration of the availability of resources. The Ministry also stated that new components/projects could not be initiated/undertaken due to pending approval of EFC resulting into reduction at RE stage in 2012-13.

- 1.17 The Committee in their 14th Report on Demands for Grants (2012-13) had also urged to speed up finalization of the Report of the Doabia Committee which was set up for studying necessary amendments to the River Board Act 1956, as also to intensify efforts for building consensus among co-basin States through meetings, seminars and regular interaction with State Governments to accelerate the pace of formation of River Basin Organisations (RBOs).
- 1.18 On being asked about the updated status of finalization of Doabia Committee Report and the outcome of efforts made by the Ministry to build consensus among cobasin States for formation of RBOs during 2012-13, the Ministry submitted as under :-
 - "Ministry of Water Resources has set up a Committee under the chairmanship of Justice T.S. Doabia, former Judge, MP/J&K High Court, to study the activities required for optimal development of a river basin and changes required in the existing River Boards Act, 1956, for achievement of the same. The Committee had submitted its report on 6.11.2012. Further, the consultation with the State Governments on the said report is being initiated."
- 1.19 The Committee in their 14th Report on Demands for Grants (2012-13) had recommended that the restructuring of Central Water Commission (CWC) be completed within the XII Plan period as stipulated. The Committee, therefore, wanted to know whether the restructuring of Central Water Commission would be completed within the stipulated XII Plan. The Ministry replied that the proposal for restructuring of CWC is under the process of approval and would be implemented during XII Plan, after necessary approvals.

1.20 On being asked about the changes proposed in the restructured Central Water Commission (CWC), the Ministry replied as under:

"Restructuring of Central Water Commission has been proposed to expand its activities in the field and reorient the setup at Headquarters to address the emerging challenges in the water sector like:

- Need to address likely impact of climate change;
- Need for holistic planning and development of water resources considering river basin as a unit;
- Effective co-ordination among planners at one hand and stakeholders at the other hand; and
- Strengthening of CWC to meet increased responsibilities."

Bharat Nirman

- 1.21 Irrigation is one of the six component for development of rural infrastructure under Bharat Nirman. The irrigation component of Bharat Nirman aimed at creation of irrigation potential of 10 million ha. (Mha.) during four years, i.e. from 2005-06 to 2008-09.
- 1.22 The Ministry informed that the target for creation of irrigation potential under Bharat Nirman was proposed to be met through completion of ongoing major and medium Irrigation projects, Extension, Renovation and Modernization (ERM) of major and medium Irrigation projects, surface water minor Irrigation projects and ground water minor Irrigation projects. Emphasis was also laid on repair, renovation and restoration of water bodies. The year-wise achievement of the irrigation component of Bharat Nirman is given in the following table:

Table - 6: Achievement of irrigation component of Bharat Nirman

		(in million na.)
Year	Target	Achievement

2005-06	1.90	1.69
2006-07	2.40	1.96
2007-08	2.85	1.73
2008-09	2.85	1.93
Total	10.00	7.31

- 1.23 On being asked about the next target fixed under Bharat Nirman, the Ministry informed that creation of 3.5 million hectare of irrigation potential has been targeted in the next two years, i.e. 1.75 million hectare each during 2009-10 and 2010-11 and as per the information received from the State Governments, an irrigation potential of 1.85 million hectare in 2009-10 and 1.56 million hectare in 2010-11 had been created. The Ministry further informed that there is no target fixed by the Planning Commission from 2011-12 onwards.
- 1.24 When asked about the amounts incurred on the Bharat Nirman from its inception till December 2012, the Ministry informed the Committee in a written reply as under :-

"The State Governments have been requested to provide the details of expenditure incurred on their scheme from its inception till December 2012."

1.25 When the Committee enquired why the actual irrigation potential created under Bharat Nirman consistently lagged behind targets set, the Ministry stated that the States have been requested to provide the project-wise gap between actual irrigation potential created against the targets set under 'Bharat Nirman'. Asked further about the steps

taken/being proposed by the Ministry to bridge the gap between targets set and actual achievement in this regard, the Ministry in a written reply stated as under:-

"The policy decision of this Ministry in consultation with Ministry of Finance and other State projects are being evolved and the same is being projected in the note for seeking approval of the Cabinet. The draft Cabinet Note is under finalization."

Accelerated Irrigation Benefits Programme (AIBP)

- 1.26 The Accelerated Irrigation Benefits Programme (AIBP) was launched in 1996-97 to provide loan assistance to the States to help them complete some of the incomplete major/medium Irrigation projects which were in an advanced stage of completion with a view to creating additional irrigation potential in the country. A Budget allocation of Rs.14,242.00 crore was made by the Ministry of Finance for AIBP for 2012-13. The Ministry also informed that Budget allocation for AIBP for the year 2013-14 has been pegged at Rs.16,580 crore. Regarding performance (outlays vis-à-vis expenditure) of the Scheme, it was informed that the outlay for AIBP during XI Plan was fixed at Rs.39,850.00 crore out of which the actual Plan expenditure was Rs.32,610.61 crore. The XII Plan outlay for AIBP has been fixed at Rs.47,050.00 crore.
- 1.27 When asked to state the reasons for shortfall in actual expenditure vis-a-vis Plan outlay during XI Plan, the Ministry submitted as under :-

"The State Governments assign priority to the projects keeping in view the budget allotment, ceiling fixed by the Planning Commission. The Plan outlay was

proposed considering ongoing spilled over projects of X Plan and new projects taken up in XI Plan under AIBP. However, the proposals received in this Ministry from the State Governments during XI Plan were processed as per the guidelines of AIBP and the Central assistance was released to eligible projects."

1.28 During examination of 14th Report on Demands for Grants (2012-13), the Committee had pointed out that as per the relevant guidelines, a comprehensive physical and financial monitoring of major/medium projects is to be carried out by CWC/MoWR and Ministry of Statistics and Programme Implementation. When asked whether the Ministry/CWC associated agencies have carried out physical and financial monitoring of major/medium projects as per AIBP guidelines since 1996-97 till date, the Ministry in a written reply submitted as under:-

"CWC has already carried out physical and financial monitoring of major and medium projects as per AIBP guidelines since 1996-97. However, there may be some shortfall towards the number of visits depending upon the availability of funds under domestic travel head."

1.29 On being asked to furnish the broad findings of such monitoring works by MoWR/CWC for the same period, the Ministry submitted as under :-

"Shortcomings in the implementation of AIBP are generally addressed during monitoring visits by Central Water Commission (CWC) field offices. Various bottle necks which affect the implementation of AIBP are brought to the notice of implementing agencies and others concerned. State Governments are supposed to submit action taken report resolving bottle necks reported by CWC. Broad findings of Monitoring team are reported in the form of monitoring reports wherein they have been reporting bottlenecks and remedial measures for timely completion of projects."

- 1.30 When asked to furnish what new measures have been devised in view of the bottlenecks stated above and to what outcome, the Ministry submitted as under :-
 - "A condition has been added in the MoU to be signed by the State Government to ensure that operation and maintenance of the project shall be made for ten years after the completion of the project under AIBP and adequate funds shall be provided on this account. This condition has been incorporated in the MoU during 2011-12 and its impact is being assessed on the operation and maintenance of the projects under AIBP."
- 1.31 On being asked about the action taken/being proposed to be taken to achieve optimum utilization of Plan outlay during XII Plan in respect of AIBP, the Ministry informed as below:-

"To achieve optimum utilization of Plan outlays for AIBP/CAD Schemes during XII Plan period, certain reforms measures have been suggested for XII Plan."

1.32 When asked about the steps taken by the Government to avoid issuing of sanctions for release of funds at the fag end of the financial year (last quarter/March), the Ministry further informed as under :-

"Various measures like processing of AIBP proposal by inter-Ministerial committee has been proposed to avoid the release of funds in the fag end of financial year. From 2013-14, it is being considered to receive proposals by the end of May with financial commitment from State Governments and to release the funds in the first quarter. The Utilisation Certificate for the entire release of money will be considered at the time of release of second instalment."

Repair, Renovation and Restoration (RRR) of Water Bodies

1.33 During examination of Demands for Grants of the Ministry, it was pointed out that earlier the Ministry had planned to propose allocation of Rs.30,000 crore for RRR but it

was observed that the allocation was reduced to Rs.6235 crore. During evidence, the Committee was informed as under:

"Actually, as you have observed, the idea was to get the enhanced allocation, outlay on this particular topic subject. The Planning Commission reduced our request and brought it to Rs.6235 crore because of resources crunch."

XX XX XX XX

"We had requested Rs.30,000 crore for the RRR but ultimately because of resource crunch, the Planning Commission has reduced it to Rs.6235 crore."

1.34 When asked to state the reasons for clubbing some components of RRR with

MNREGA and also to indicate if the major activities of RRR will not be affected by shifting

some components to MNREGA scheme, the Ministry replied as under:

"In the XII Plan, it is proposed to converge all RRR projects with Integrated Water Shed Management Programme in such a way that the treatment of catchment of water bodies to be restored happens pari-pasu with the Repair, Renovation and Restoration of water bodies. The tentative allocation for catchment area treatment has been considered as 15-20% of the estimated cost. The tentative requirement for catchment area treatment works is estimated as Rs 750 crore. The labour component can be considered as Rs 375 crore i.e. 50% of tentative requirement for catchment area treatment works. This amount will be met from MNREGA scheme in view of proposed convergence with the scheme."

1.35 The Committee desired to know the reasons advanced by the Planning Commission for reduction of allocation in RRR scheme. To this the Ministry furnished the following reply:

"Considering the overall cut in budget by the Union Government, the Planning Commission has kept an outlay of Rs 6235 crore under the scheme of RRR during XII Plan."

1.36 When asked to elaborate the efforts made by the Ministry of Water Resources for higher allocation under RRR scheme, the Ministry replied as under:

"Considering the performance of states under the scheme of RRR, the Planning Commission will be approached for higher allocation under RRR during Mid-term Appraisal of the scheme to be carried out by Planning Commission."

Utilization Certificates

- 1.37 The Committee's examination of Demands for Grants (2011-12) had revealed that as on 01.10.2010, there were 139 and 17 outstanding Utilisation Certificates (UCs) for the Grants/Loans released upto 31.03.2008 in respect of Institutions and Autonomous bodies and State Governments respectively. According to the Ministry, the position as on 01.10.2012 was 196 for Institutions and Autonomous Bodies and 11 for State Governments.
- 1.38 When asked to furnish the details of outstanding Utilisation Certificates in respect of Institutions and Autonomous Bodies as on 31.12.2012, indicating the number of UCs outstanding as well as amounts involved, the Ministry furnished the information as given under:-

Table – 7 : Details of outstanding Utilisation Certificates

(Rs. in lakhs)

Name of SMD/ Autonomous Bodies	No of UC outstanding	Amount involved
States		
M.I.	3	28.66
CAD	17	21485.89

Ganga Wing	Information not received	Information not received	
	No of UC outstanding	Amount involved	
Autonomous Bodies	285	4666.67	
Grand Total	305	26181.22	

- 1.39 On being asked whether any monitoring of the position regarding UCs is being done by the Ministry, the Ministry replied that this monitoring of pending UCs is being done by the Ministry by organising 'periodical review meetings with SMDs/ institutions and other grantees. They have also stated that to obtain all Utilization Certificate in time, all concerned sections have been asked to furnish the UCs.
- 1.40 The Committee in their 8th Report on Demands for Grants (2012-13) had recommended for the MoWR to consider the feasibility of imposing some penalty on the authorities showing lackadaisical approach towards fund management and utilization, and also to keep strict vigil on the implementation of Scheme and timely submission of UCs by way of inspection, periodic reviews etc. The Committee, therefore, asked the Ministry as to what action has been taken along the line suggested by the Committee in respect of outstanding UCs. To this query, the Ministry submitted as under:-

"The Ministry has not imposed any penalty till date on any institutions/ organizations. However periodical reviews are being done to ensure timely submission of UCs."

Budgetary Allocation

1.41 The Committee observe that water is a scarce natural resource and the Ministry of Water Resources is responsible for overall management of water in the

country. The total Budget Estimates (BE) of the Ministry for the year 2013-14 is Rs.2105.65 crore comprising Plan allocation of Rs.1512 crore and Non-Plan allocation of Rs.590.65 crore. The Committee's examination of the budgetary proposals of the Ministry reveals that, there is a marginal increase of only 1.7% in the allocation for current financial year over the BE of previous year 2012-13 while there was an increase of 65.49% in the BE of year 2012-13 over the BE of 2011-12. This marginal increase too is to meet the expenses towards increase in salary and enhanced DA of the employees and not for any additional expenditure in Plan section. Surprisingly, the plan allocation of Rs. Rs.1500 crore for 2013-14 is exactly at the level of BE of the previous year 2012-13 which indicates that the Ministry has not planned for enhanced capital outlay during the current financial year. The reason advanced by the Ministry for static allocation in Plan section is that such allocation is done by the Planning Commission after taking into consideration the availability of resources. The Committee apprehend that static allocation in Plan section may affect the important projects in infrastructure development, capacity building and sectoral projects of water resources and, therefore, urge the Ministry to take up the matter with Planning Commission for enhancement of allocation at mid-term appraisal stage. Further, from the analysis of actual expenditure incurred in the Plan section by the Ministry during the past years, the Committee observe that the actual expenditure has been consistently much less than the BE projected in the budgetary proposals in the Demand for Grants. Continuous trend of unspent balances in the Plan section during the past years clearly demonstrate unrealistic budgetary projections by the Ministry in each subsequent year ignoring the vital inputs of actual requirement of funds under different heads of the Plan section. The Committee also feel that huge unspent balances in the Plan section is a clear indication that the Ministry had not been able to mobilize their resources and mechanism to complete the works in different projects/schemes in time for which

budgetary allocations were demanded in the Demand for Grants and thus the desired results in the areas of capacity building, infrastructure development, execution of projects and implementation of schemes remained a distant dream. The Committee express their displeasure over this trend and recommend that every effort should be made for realistic projection of budgetary proposals under different heads in the Plan section taking into account not only the past trend of expenditure but also all other factors affecting the actual disbursement of funds under different heads which would not only avoid unutilisation of substantial funds but also help completion of projects in time. The Committee hope that the budgetary allocations under Plan section of the grant will be fully utilized by the Ministry at least during the year 2013-14 with vigorous monitoring and even disbursement of funds throughout during the year.

1.42 The Committee observe that the total budget allocation for 2012-13 was Rs.2067.60 crore which was substantially reduced by Rs. 831.15 crore to the level of Rs.1236.45 crore at RE stage. According to the Ministry, the reason for this reduction at RE stage was due to non-approval of EFC (Expenditure Finance Committee) in respect of the new plan schemes and new components in the ongoing scheme. The Committee are not convinced with the explanation given by the Ministry for substantial reduction of Budget Estimates (BE) at RE stage as it reflects that the Ministry was either too unrealistic while making budgetary projections or too idle to make all out efforts to persuade the authorities for obtaining all requisite approvals in time for completion of the projects for which budgetary allocations were initially made and thus it is a serious reflection on the functioning of the Ministry. The Committee feel that the Ministry, in either case, has to revamp its budget making processes and fine-tune its style of functioning so that the budgetary projections are made on realistic and sound considerations and the funds allocated are fully utilized during the year. The Committee desire the Ministry

to initiate necessary steps in this regard and also to ensure that at least now the matter should be processed with all seriousness to obtain EFC approval well in time in respect of all projects where such approval is necessary. The Committee would like to be apprised of the steps taken by the Ministry in this regard.

1.43 Committee's examination further reveals that the Ministry of Finance has issued instructions to be complied with by all Ministries / Departments for avoiding March rush in expenditure. The Committee observe that half yearly review of physical and financial progress regarding review of expenditure performance is being carried out by the Planning Commission and that regular meetings with Senior Officers of the Ministry and concerned organizations are being held by the Secretary (WR) in the matter. The Committee desire that the frequency of such meetings should be increased so that the better outcome is achieved in this regard and also even flow of expenditure is maintained throughout the year. The Committee, while insisting that the expenditure should be incurred strictly in conformity with the instructions of the Ministry of Finance, would urge the Ministry to streamline its procedure to achieve the desired results in this regard.

Outcome Budget

1.44 The Committee's examination of the Outcome Budget 2013-14 of the Ministry reveals that this document contains, among other things, the performance of the Ministry in different areas / projects / schemes during the previous year 2012-13. As the name suggests, this document is basically meant to indicate the overall performance including results achieved vis-a-vis the physical and financial targets set in various areas of the Department during the previous year. The Committee are, therefore, of the opinion that being a document indicating the performance of the previous year, it would be appropriate to correctly title it by indicating the previous year in its title instead of the current year, e.g., Outcome Budget 2012-13

with reference to the budgetary proposals of the year 2013-14. The Committee, therefore, recommend that the Ministry, should take necessary step, if necessary, in consultation with the Ministry of Finance to title this document appropriately in future to avoid any misunderstanding.

1.45 The Committee further observe that the "Outcome Budget" document of the Ministry contains only sketchy picture and does not contain the full details of the projects. The Committee, therefore, recommend that the Outcome Budget, in future, should be prepared as a comprehensive annual document indicating clearly all the work executed, physical, as well as, financial targets fixed, results achieved, funds allocated and expenses incurred on each Project/Scheme of the Ministry during the year.

River Basin Management

1.46 The Committee observe that a newly named scheme called 'River Basin Management (RBM)' has been formulated by merging two new ongoing schemes, namely, River Basin Organisation (RBO) and Investigation of Water Resources Development Scheme. The Committee's examination of the budgetary proposals reveals that Budgetary provision for Rs.200.00 crore has been made for the River Basin Management Scheme for the year 2013-14. The budget estimate for 2012-13 had also been kept at Rs.200.00 crore which was, however, subsequently reduced to Rs.134.08 crore at RE stage and the actual expenditure till December, 2012 was only Rs.109.22 crore. The reasons behind reduction of Budget allocation at RE stage by Rs.65.92 crore, as stated by the Ministry, was the pendency of approval of Expenditure Finance Committee (EFC), Ministry of Finance in respect of the plan scheme with new components in the ongoing schemes. The Committee are pained to note that the reduction of allocation of RE stage in 2012-13 under this head has occurred due to pendency of approval of EFC. The Committee feel that it reflects

the slackness on the part of the Ministry with regard to execution of important water projects of the country which could not be undertaken only because some formalities were not completed in time. The Committee are of the considered view that the Ministry should have pursued more vigorously with the concerned authorities for seeking requisite approvals in time which could have resulted in timely start / completion of the projects as well as full utilisation of the funds. The Committee desire that sincere efforts be made by the Ministry for getting requisite approvals from the concerned authorities in time in the year 2013-14 and also furnish the full details in this regard to the Committee.

- 1.47 The Committee observe that the Ministry of Water Resources had set up a Committee under the Chairmanship of Justice T.S. Doabia to study the activities required for optimal development of a river basin and changes required in the existing River Boards Act, 1956 for achievement of the same and the report was submitted in this regard on 06.11.2012. As informed, the consultation with the State Governments on the said Report is being initiated. The Committee would like to be apprised of the details of the Doabia Committee Report and also urge the Ministry to speedily complete the process of consultation with the State Governments on the subject with a view to implementing the recommendations given in the Report at the earliest so that the issues and problems related to water basin management and development could be addressed in a result-oriented manner within a fixed time frame.
- 1.48 The Committee observe that restructuring of Central Water Commission has been proposed to expand its activities in the field and reorient the setup at Headquarters to address the emerging challenges in the water sector like, need to address the likely impact of climate change, need for holistic planning and development of water resources considering river basin as a unit, effective co-

ordination among planners at one hand and stakeholders at the other and strengthening of CWC to meet increased responsibilities. The Committee, in their 14th Report on Demands for Grants (2012-13), had recommended for the restructuring of Central Water Commission (CWC) to be accomplished within XII Plan period as stipulated. The Committee have been informed that the proposal for restructuring of CWC is under process of approval and would be implemented during XII Plan. The Committee hope that the changes proposed in the restructured CWC will address the issues in a more comprehensive and integrated manner and the new setup will effectively deal with the activities related to water resources development & management, data collection, preparation of integrated basin plans, techno-economic appraisal of water resources projects, looking after water management and flood management aspects, dam safety monitoring and inter-State issues, etc. The Committee hope that all the processes and formalities involved in the restructuring of CWC will be completed by the Ministry at the earliest and a new revamped setup of CWC will come into existence very soon which would become a catalyst for effective and efficient management of river basin and water resources.

Bharat Nirman

1.49 The Committee observe that irrigation is one of the six components for development of rural infrastructure under Bharat Nirman. The irrigation component of Bharat Nirman aimed at creation of irrigation potential of 10 million hectare (Mha.) during four years <u>i.e.</u> from 2005-06 to 2008-09. The target for achieving this objectives was proposed to be met through completion of ongoing Major and Medium Irrigation projects, Extension, Renovation and Modernization (ERM) of Major and Medium Irrigation projects, surface water minor Irrigation projects and ground water minor Irrigation projects. Emphasis was also laid on repair,

renovation and restoration of water bodies. The Committee's examination of yearwise achievements vis-à-vis the targets fixed reveals that actual irrigation potential created consistently lagged behind the targets set in each year during 2005-06 to 2008-09. The actual achievement under Bharat Nirman was only 1.69 Mha. against the target of 1.90 Mha. during 2005-06. The figures in respect of the years 2006-07, 2007-08, 2008-09 are 1.96 Mha. against 2.40 Mha., 1.73 Mha. against 2.85 Mha., and 1.93 Mha. against 2.85 Mha. respectively. The total irrigation potential created from 2005-06 to 2008-09 was 7.31 Mha. against the target of 10.00 Mha. leaving a shortfall of 2.69 Mha. during the period. Taking a serious view of the consistently less achievement than the target fixed in each year from the year 2005-06 to 2008-09, the Committee recommend the Ministry to evaluate the scheme to find out the reasons for such shortfall so that these findings could be used by the Ministry for formulation of better policies and effective execution of other projects. The Committee also desire to know the total expenditure incurred on Bharat Nirman from its inception and the response received from the States about projectwise gap between the actual irrigation potential created and the target set for each year.

Accelerated Irrigation Benefits Programme

1.50 The Committee observe that the Accelerated Irrigation Benefits Programme (AIBP) was launched in 1996-97 to provide loan assistance to the States to help them complete some of the incomplete major/medium Irrigation projects which were in an advanced stage of completion with a view to creating additional irrigation potential in the country. A Budget allocation of Rs.14,242.00 crore was made by the Ministry of Finance for AIBP for 2012-13. The Committee has been informed that Budget allocation for AIBP for the year 2013-14 has been kept at Rs.16,580 crore. The Committee observe that outlay for AIBP during XI Plan was fixed at Rs.39,850.00 crore out of which the actual Plan expenditure was

Rs.32,610.61 crore and the XII Plan outlay for AIBP has been fixed at Rs.47,050.00 The Committee note that as per the guidelines, a comprehensive physical and financial monitoring of Major and Medium projects is to be carried out by CWC/MoWR and Ministry of Statistic and Programme Implementation. The Committee were informed that CWC had already carried out physical and financial monitoring of Major and Medium Projects as per AIBP guidelines since 1996-97 but there may be some shortfall towards the number of visits depending upon the availability of funds. The Committee reiterate the necessity of comprehensive physical and financial monitoring of the projects under AIBP and urge the Ministry to use latest techniques of monitoring including remote sensing to monitor the progress of work. The Committee desire that the Ministry should keep a strict vigil on fund utilization by the States on AIBP projects and rigorously insist on timely submission of Utilisation Certificates (UCs) on funds released for AIBP Projects as prescribed in the relevant guidelines in order to ensure that funds allocated for the Scheme are optimally utilised by the States narrowing the gap between the targets set and result achieved and also between the actual expenditure vis-à-vis Plan outlay during XII Plan.

1.51 The Committee note that shortcomings in the implementation of AIBP are generally addressed during monitoring visits by CWC field offices, and various bottlenecks which affect the implementation of AIBP are brought to the notice of implementing agencies and others concerned. State Governments are supposed to submit Action Taken Report resolving bottlenecks reported by CWC. As regards new measures devised to clear the bottlenecks, the Committee have been informed that a condition has been added in the MoU to be signed by the State Government to ensure that operation and maintenance of the project shall be made for ten years after completion of the project under AIBP and adequate funds shall be provided on this count. This condition has been incorporated in the MoU during 2011-12 and its

impact is being assessed on the operation and maintenance of the projects under AIBP. The Committee appreciate the initiative taken in this regard and would like to be apprised of the outcome of the new measures devised by the Ministry.

Repair, Renovation and Restoration of Water Bodies

1.52 The Committee observe that the Planning Commission allocated Rs.6235 crore for RRR which was much less than Rs.30,000 crore proposed by the Ministry. The reason for such substantially reduced allocation is stated to be the resource crunch and the overall cut in the Budget by the Union Government. The Ministry has, however, informed the Committee that considering the performance of States under the schme of RRR, the Planning Commission will be approached for higher allocation under RRR during mid-term appraisal of the Scheme to be carried out by Planning Commission. The Committee observe that Repair, Renovation and Restoration (RRR) of Water Bodies is a critically important area and substantial reduction in the Budgetary allocation will adversely affect the different activities under this scheme. The Committee, therefore, desire the Ministry to persuade the Planning Commission with a well-conceived proposal for enhancement of allocation under RRR.

Utilisation Certificate

1.53 The Committee's examination has revealed that outstanding Utilisation Certificate in respect of institutions and autonomous bodies as on 31.12.2012 were 305 with the amount involved Rs.26181.22 lakh. The Committee were apprised that monitoring of pending Utilisation Certificates was being done by the Ministry by

organising periodical review meetings with SMDs/institutions and other grantees. The Committee had recommended in their 8th Report on Demand for Grants (2012-13) to the Ministry to consider the feasibility of imposing some penalties on the authorities showing lackadiasical approach towards fund management and utilisation and also to keep strict vigil on the implementation of scheme and timely submission of UCs by way of inspection, periodic reviews, etc. The Committee take serious view of the pendency of large number of Utilisation Certificates and reitérate their recommendation for obtaining UCs from the concerned organisations/departments with constant monitoring and also exploring the desirability of imposing penalties on defaulters. The Committee would like to be apprised of the action taken in this regard.

CHAPTER II

MAJOR AND MEDIUM IRRIGATION

- 2.1 Irrigation projects with a Cultivable Command Area (CCA) between 2000 hectares and 10000 hectares are classified as Medium Irrigation projects. On the other hand, those irrigation projects with CCA of more than 10000 hectares are classified as Major Irrigation projects.
- 2.2 It is stated that the planning, formulation and execution of all Major and Medium Irrigation (MMI) are carried out by the concerned State Governments and the required funds are allocated out of their State Plan. The Ministry of Water Resources provides technical know-how to the State Governments through its subsidiary organizations and statutory bodies like Central Water Commission (CWC), Central Soil and Materials Research Station (CSMRS), Central Water and Power Research Station (CWPRS), National Water Development Agency (NWDA) etc.
- 2.3 The Budget allocations (Plan and Non- Plan) for MMI for the year 2011-12, 2012-13 and 2013-14 are given below:-

Table – 8 : Budget allocations (Plan and Non-Plan) for Major and Medium Irrigation (Rs in crore/net)

BE 2011-12			BE 2-13		RE 12-13		BE 13-14
Plan	Non- Plan	Plan	Non- Plan	Plan	Non-Plan	Plan	Non- Plan
277.13	220.39	773.19	232.53	206.82	227.54	643.53	244.65

2.4 The Budget allocation (Plan) for MMI for the year 2012-13 was Rs 777.19 crore, which was reduced to Rs 210.82 crore at the Revised estimate stage. When asked to furnish the reasons for reducing the allocation drastically by Rs 566.37 crore at RE stage, the Ministry submitted as under :-

"Ministry of Finance, Department of Expenditure curtailed the amount due to low expenditure up to Sept 2012 due to non-approval of EFC."

- 2.5 On being asked whether some schemes/projects of the Ministry have been adversely affected due to reduced allocation at RE stage, the Ministry replied in the negative. Regarding the efforts being made by the Ministry to fully utilize the allocation under the schemes/projects to accelerate the rate of implementation during this financial year 2013-14, it was informed that the Ministry regularly monitors the progress month-wise of the various schemes to ensure the utilisation of the allocated funds in 2013-14.
- 2.6 Plan allocation for the year 2013-14 has been earmarked at Rs 643.53 crore, i.e., Rs 133.66 crore less as compared to the Budget allocation of the previous financial year 2012-13. When asked to give reasons for reduced allocation for the year 2013-14, the Ministry stated that this was due to the increased allocation for Farakka Barrage Project, considering its critical nature.

Command Area Development and Water Management

2.7 The Command Area Development (CAD) Programme was started as a Centrally Sponsored Scheme in 1974-75 with the objective to bridge the gap between irrigation potential created and that 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. The Programme was restructured and renamed as Command Area Development and Water Management (CAD&WM) with effect from 01.04.2004. Under the CAD&WM Programme, financial

assistance is being provided to the State Governments on 50:50 basis for construction activities and 75:25 basis for carrying out training programmes for field functionaries/farmers, monitoring, evaluation, adaptive trials and demonstrations. When the Committee enquired about the Budget allocations and actual utilization in respect of CAD&WM during 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14, the Ministry submitted the information as under:-

Table – 9 : Budget allocations and actual utilization for Command Area Development and Management

Period	Outlays by Planning Commission (Rs. in crore)	BE allocation (Rs. in crore)	Release to States (Rs. in crore)
2009-10	400	400	413.70
2010-11	499	499	456.40
2011-12	584	584	485.73
2012-13	811	811	485.73
2013-14	2140	-	-

2.8 The Ministry also informed the Committee regarding the details of physical targets and achievements made in respect of CAD&WM from the year 2009-10 onwards as under:-

Table –10: Physical targets and achievements made in respect of Command Area Development and Management

Duration	Targets (million hectare)	Achievements (million hectare)
2009-10	0.35	0.384
2010-11	0.35	0.413
2011-12	0.35	0.459
2012-13	0.45	0.185
2013-14	1.15	-

- 2.9 Asked about shortfall in achievement of physical as well as financial targets, the Ministry stated that physical targets set during XI Plan period have been achieved. The performance during the 2012-13 is likely to be adversely affected due to lack of Cabinet approval of continuation of the Scheme.
- 2.10 On being asked to what extent CAD&WM has been able to achieve its targeted objectives, <u>viz.</u> targets fixed under the Scheme so far, the Ministry informed the Committee that implementation of the scheme has resulted in better utilization of irrigation potential, better efficiency of water use, increase in irrigation intensity, increase in farmers' income etc.
- 2.11 The Ministry informed that initially, 60 Major and Medium Irrigation projects were taken up under the then CAD Programme, covering a CCA of about 15.00 million hectares. The Scheme was implemented as a State Sector Scheme during XI Plan (2008-09 to 2011-12). When asked to provide the number of completed and ongoing CAD&WM projects till date, the Ministry informed that 211 projects have been completed and there are 150 on-going projects. The Ministry further informed that an area of 20.149 million hectare has been covered since inception till March, 2012.
- 2.12 Asked as to what difference the Ministry has noticed in the execution of the Scheme after its transfer to State Sector Scheme, the Ministry furnished as under:-

"After transfer of the Scheme to State Sector Scheme, the Central assistance is released by the Ministry of Finance on recommendation of the Ministry of Water Resources (MoWR) without any Central component of budget for capacity building and other soft activities related with the programme. Quantum of Central assistance is decided on the basis of physical targets set by States and corresponding achievements made."

2.13 When enquired about the mechanism put in place for effective monitoring and evaluation of CAD&WM, the Ministry submitted as under :-

"Monitoring of the projects under CAD&WM Programme is primarily the responsibility of the State Governments. However, MoWR and Central Water Commission (CWC) also monitor through quarterly progress reports, field visits, meetings etc."

2.14 On being asked as to whether effective monitoring has been carried out in respect of CAD&WM, the ministry further informed as below :-

"Monitoring has been carried out through quarterly progress reports, field visits of officers of MoWR and CWC, release proposals of States and meetings etc. However, paucity of staff and lack of funds are constraints in conducting field visits. Technological advances in communications are used to address the deficiency."

2.15 The Committee also wanted to know whether any change in the implementation and monitoring work of CAD&WM is being envisaged. To this query, the Ministry replied as under:-

"On line Web-based monitoring of CAD&WM Project for sending status of progress by State Governments is being envisaged. Use of mobile tracking and GIS techniques to monitor progress and access impact of the Programme are also being explored."

Development of Water Resources Information System

2.16 The management of water resources is a highly complex task that involved multidisciplinary domains including data acquisition, numerical modeling, data warehousing, and the analysis of socio-economic, environmental and legal issues. The Government approved the Scheme of Development of Water Resources Information System (DWRIS) in June, 2008 for implementation during the XI Plan with a total outlay of

Rs.234.50 crore. The objective of the Scheme is to develop a water resources information system and make it fully operational at the earliest.

- 2.17 About achievements made under DWRIS since 2008, the Ministry of Water Resources informed that MoU for "Development of digital database and web-enabled Water Resources Information System" had been signed between CWC and ISRO in 2008-09 and the advance payment of Rs. 16.59 crore was released. The web site www.india-wris.nrsc.gov.in/webgis.php# was launched on 07 Dec' 2010. Second version of India WRIS was launched by Chairman, CWC on World Water Day i.e. 22 March, 2012.
- 2.18 During the Study-visit of the Committee to Bangalore in January-February, 2013, the Chairman, ISRO had given a presentation before the Committee about the functioning of the website www.india-wris.nrsc.gov.in indicating the data base available in the website and also its updattion process. The Committee was also apprised that INDIA-WRIS WebGIS aims as a 'Single Window' solution for comprehensive, authoritative and consistent data & information of India's water resources along with allied natural resources in a standardized national GIS framework tools to search, access, visualize, understand and analyse the data for assessment, monitoring, planning, development and finally Integrated Water Resources Management (IWRM). The data collection, generation and presentation into the portal are continuous activities. Further updating the attribute data and presentation are being done by the INDIA-WRIS Project Team. These data have been collected from concerned State Government departments, CWC offices and Government of India departments and are organized in this portal. The INDIA-WRIS portal has been designed looking at the variety of users and their requirements.

- 2.19 On being asked about operationalisation of DWRIS, the Ministry informed that further development of Information System is under progress and all attempts are being made to complete the Project within the scheduled time i.e. December 2012. However, project database being too large, it is anticipated that the full version with complete database of the Project would be launched by October 2013."
- 2.20 When asked to furnish Budgetary allocations (BE and RE) for DWRIS and their actual utilization year-wise since 2008 till date, the Ministry furnished the information as given in the table below:-

Table – 11 : Year-wise budgetary provision and expenditure for Development of Water Resources Information System

(Rs in crore)

Year	BE	RE	Actual Expenditure
2007-08	28.50	19.99	19.07
2008-09	46.00	42.50	45.58
2009-10	70.00	70.00	63.07
2010-11	66.00	41.49	38.81
2011-12	59.00	59.00	53.56
2012-13	85.00	40.00	35.36
			(upto Feb. 2013)

2.21 The Committee's examination revealed that hydrological observations including Snow Hydrology, Water Quality and Monitoring of Glacial Lakes have been made during XI Plan under DWRIS. The work of 'Monitoring of Glacial Lakes and Water Bodies' had started in the XI Plan and it was proposed to continue its monitoring in the XII Plan also. Asked to furnish the updated achievements made in this regard, the Ministry replied as under:-

"Work of 'Inventory & Monitoring of Glacial Lakes / Water Bodies in the Himalayan Region of Indian River Basins' a component under Development of Water

Resources Information System (India-WRIS) was assigned to NRSC, Department of Space, Hyderabad, during the XI Plan period at an estimated cost of 472.02 lakh.

Report on 'Inventory of Glacial Lakes/Water Bodies in the Himalayan Region of Indian River Basins' has already been prepared covering Indus, Ganga and Brahmaputra basin and report submitted. NRSC has submitted the final report on the 'Inventory of Glacial Lakes/Water Bodies in the Himalayan Region of Indian River Basins'. Evaluation and Monitoring Committee for 'Inventory & Monitoring of Glacial Lakes/Water Bodies in the Himalayan Region of Indian River Basins' met on 29.06.2011 and accepted the report.

Monitoring of Glacial Lakes/Water Bodies has started thereafter on monthly basis. Monthly report on 'Monitoring of Glacial Lakes/Water Bodies in the Himalayan Region of Indian River Basins' for the months June- October, 2011, were already submitted by NRSC, Hyderabad.

A requisition received from NRSC, Hyderabad on 28 October 2011 for the revalidation of balance fund for the completion of the ongoing monitoring work."

2.22 Regarding steps being proposed during the XII Plan in respect of DWRIS, the Ministry further informed as follows:-

"This proposal has been considered for continuing in XII Five Year Plan and an amount of Rs.6.5 crore has been kept for the purpose. The requirement for 2012-13 has been projected as Rs.1.27 crore."

Hydrological Observation Sites

2.23 The Committee were informed that collection of hydrological data of various river basins in the country is pre-requisite for an accurate assessment of water resources, planning their optimum utilization for the comprehensive development of the basins/forecasting flood events and for settling inter-State water disputes. Due to inadequacy of Hydrological Observation (HO) sites, there is need to strengthen the network of HO sites as per World Meteorological Organisation (WMO) guidelines.

2.24 When asked to furnish the features of WMO guidelines regarding HO sites, the Ministry in a written reply furnished the information as given in the following table:-

Table – 12 : WMO recommendations - maximum recommended areas in sq.km. per Station

Physiography Hydrological variable	Polar/Arid	Coastal	Hilly	Interior Plains	Mountain
Precipitation (non-recording gauge)	10000	900	575	575	250
Precipitation (recording gauge)	100000	9000	5750	5750	2500
Evaporation	100000	50000	50000	50000	50000
Discharge	20000	2750	1875	1875	1000
Water quality	200000	55000	47500	37500	20000

2.25 The Committee wanted to know the steps taken or being proposed to strengthen the network of HO sites as per WMO guidelines. To this query, the Ministry in a written reply submitted that the network of HO stations for XII Plan will be expanded from the existing 933 sites to 2850, 1917 new sites would be set up and 386 existing sites would be upgraded.

Water Quality Monitoring

2.26 The Ministry has informed that presently a number of agencies are operating Water Quality Monitoring networks in the country. There is no uniform procedure for sampling, analysis, data storage and reporting. Also, among these agencies involved in Water Quality Monitoring, one agency does not draw upon the experience of the other, which

may lead to wastage of large amount of resources (both manpower and money) which are often scarce. Asked whether the Ministry has undertaken any study to address to this problem, the Ministry replied as under:-

"Water Quality Assessment Authority (WQAA) was constituted by the Central Government vide Order No. S.O. 583 (E) dated the 29th May, 2001 under Environment (Protection) Act, 1986. The Uniform Protocol on Water Quality Monitoring Order (UPWQM), 2005 was notified by the Central Government as per the directions of WQAA with an objective to bring in uniformity in the field of water quality monitoring, both for surface and ground water. The Order specifies selection of monitoring station, frequency of sampling, analytical procedure, parameters to be analysed, procedure for sample collection, its preservation and transportation, maintenance of sample records, storage and dissemination of data and other aspects related to water quality monitoring. The Order has been circulated to all concerned Central and State Government agencies for implementation.

The existing Uniform Protocol on Water Quality Monitoring Order (UPWQM) is proposed for revision during the current financial year 2013-14 in view of the present pollution aspects/parameters and their distribution in surface and ground water."

2.27 Asked whether necessary steps have been taken/are being proposed for securing convergence of efforts among agencies involved and sharing the data and experience, the Ministry further informed as under :-

"The Uniform Protocol on Water Quality Monitoring Order (UPWQM) stipulates that "each monitoring agency shall process the analytical data, and report the data after validation to the data centre at the Central Pollution Control Board (CPCB). The CPCB shall store the data and disseminate through website or electronic mail to various user on demand". Another option for sharing of data generated by various agencies is giving link to different organizations from WQAA website. This issue is going to be put up to the next meeting of WQAA for final decision.

National Water Mission

2.28 The Committee were given to understand that with a view to address the possible threats posed by climate change, the National Action Plan on Climate Change (NAPCC)

was announced by the Hon'ble Prime Minister on 30 June 2008. The National Action Plan on Climate Change envisages eight National Missions which <u>inter-alia</u> includes National Water Mission (NWM). Ministry of Water Resources has been assigned to take up the work for the institutionalization of the National Water Mission.

2.29 The Budget allocations for National Water Mission are given below:-

Table – 13 : Budget allocations for National Water Mission (Rs in crore/gross)

	\1.0 m 0.0.0/g.000/						
	ctuals 111-12	BE 2012-13			RE 12-13		BE 13-14
Plan	Non- Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non- Plan
		200.00		0.25		110.0 0	

- 2.30 The Budget allocation (Plan) for National Water Mission in 2012-13 was earmarked at Rs 200.00 crore but it was reduced to Rs.0.25 crore at Revised estimate stage. The Budget allocation for BE 2013-14 has however been kept at Rs.110.00 crore. Giving the reasons for reducing Budget allocation of 2012-13 at RE stage by a staggering Rs. 199.75 crore, the Ministry stated that the EFC for NWM is not yet approved.
- 2.31 The Committee further asked whether this reduction mean that works had not started for institutionalization of the NWM. The Ministry in a written reply stated as under:-

"The Union Cabinet approved the NWM document on 6 April 2011. The NWM document, *inter-alia*, envisages setting up of Advisory Board, High Level Steering Committee (HLSC), Inter-Sectoral Advisory Groups and Technical Committees for review of policies, progress made and implementation of programmes of NWM under MoWR. Accordingly, High Level Steering Committee Meeting (HLSC) was held and meeting of Advisory Board is going to be held shortly."

2.32 When asked to state the rationale for keeping Budget allocation at Rs.110.00 crore for BE 2013-14 even while a allocation had to be reduced at RE stage during 2012-13 by Rs. 199.75 crore, the Ministry submitted as under :-

"The EFC for NWM is under process. NWM, in anticipation of approval of EFC has taken action for State Action Plans, EOI has been floated, number of Downscaling studies of Climate Change Models to assess the impact of Climate Change on Water Resources in major river basins have been initiated, National Bureau of Water Use Efficiency is envisaged to be established in 2013-14. Studies with ADB aiming at strengthening of resilience of the communities against floods has been initiated. One flood prone area will be taken under this Technical Assistance to evolve an Action Plan comprising of both structural and non-structural measures. This Action Plan would be implemented as pilot project for coping with floods."

2.33 The main objective of the National Water Mission is "conservation of water minimizing wastage and encouraging its more equitable distribution both across and within States through integrated water resources development and management." When asked to state how this objective of the National Water Mission is to be achieved by the Government, the Ministry in a written reply stated as under:-

"A comprehensive Mission Document was approved by the Cabinet which identifies the strategies for achieving the goals of (a) Comprehensive water data base in public domain and assessment of the impact of climate change on water resources, (b) Promotion of citizen and state actions for water conservation, augmentation and preservation, (c) Focused attention to vulnerable areas including over-exploited areas, (d) Increasing water use efficiency by 20%, and (e) Promotion of basin level integrated water resources management. The above goals are designed to achieve the objectives of National Water Mission."

2.34 When asked whether any target date has been set for realizing the objective of National Water Mission, the Ministry replied in the affirmative, and further stated that increase in water use efficiency by 20% has been targeted to be achieved by 2017.

National Water Policy

- 2.35 The Committee in their 1st Report on Demands for Grants (2009-10) had urged the Ministry to review the National Water Policy taking into consideration the various suggestions given by the State Governments, and other stakeholders and eminent climatologists keeping in view the looming threat of climate change and the grave scarcity of water in future.
- 2.36 When asked to give updated status of the reviewing of National Water Policy and the main highlights of the revised NWP, the Ministry submitted that the National Water Policy (NWP), 2012 has been adopted by the National Water Resources Council on 28 December, 2012. The main highlights of the revised NWP, 2012 are given at **Annexure-I**.
- 2.37 When the Committee enquired whether the provisions of the revised NWP reflect the suggestions received from State Governments/climatologists/other stakeholders as recommended by the Committee in their 1st Report, the Ministry informed as under:-

"Yes. A series of consultation meetings were held with Members of Parliament, Academia, Experts and Professionals, Non-Governmental Organizations, representatives of the Corporate Sector, and representatives of Panchayati Raj Institutions. The National Water Board, comprising of Chief Secretaries of all States/UTs and related Union Secretaries, considered the revised draft National Water Policy (2012) at its 14th meeting held on 7 June, 2012. The draft policy was also discussed with the Consultative Committee of Parliament attached to the Ministry of Water Resources on 11 July, 2012.

The draft National Water Policy (2012) was deliberated by the National Water Resources Council (NWRC) headed by Hon'ble Prime Minister with Chief Ministers of all States/UTs and related Union Ministers as Members, at its 6th meeting on 28 December, 2012 in New Delhi, wherein the National Water Policy (2012) was adopted as per deliberations."

2.38 On being specifically asked during evidence whether the National Water Policy, 2012 is going to be presented in Parliament, Secretary, MoWR replied as under :-

"The National Water Policy has been adopted in the meeting of the National Water Resources Council chaired by the Hon'ble Prime Minister. I think that is the final shape."

National Bureau of Water Use Efficiency

- 2.39 The Committee's examination revealed that the Ministry of Water Resources proposed to constitute a National Bureau of Water Use Efficiency (NBWUE) as an Authority under Section 3(3) of Environment (Protection) Act 1986 for the purpose of promotion, regulation and control of efficient use of water in irrigation, municipal and/or industrial uses. The proposed Bureau will have the overall responsibility of improving water use efficiency across various sectors, namely, irrigation, drinking water supply, power generation and industry in the whole country. Asked about when NBWUE is proposed to be constituted, the Ministry replied that it is envisaged to be operational in 2013-14, subject to approval of EFC.
- 2.40 The Committee wanted to know the mandate/extent of authority or powers to be entrusted of the NBWUE. To this query, the Ministry in a written reply submitted as under:-

"The NBWUE will function as an autonomous authority under the administrative control of MoWR. A detailed Plan of Action will be prepared by the NBWUE once it is set up. The proposed activities would include:

- (a) Preparation of detailed project reports for taking up benchmarking and/or demonstrative projects for water use efficiency;
- (b) Implementation of benchmarking and/or demonstrative projects for water use efficiency in other measures;
- (c) Publicity/promotion of water use efficiency measures, conjunctive use of water, etc.:
- (d) Incentivization of industries, farmers, local bodies, etc.;

- (e) Action Plan for coping with flood.; and
- (f) Baseline studies for water use efficiency."

Dam Safety

- 2.41 As per the National Register of Large Dams (NRLD) maintained by Central Water Commission, presently there are 5,125 large dams in India. Out of these, 4,728 are completed and 397 dams are under construction. About 10.11% of these dams are more than 50 years old and 2.66% are more than 100 years old.
- 2.42 On being asked about the measures taken for renovation of the 10.11% of large dams which are over 50 years old and for rehabilitation of the 2.66% of large dams which are over 100 years old, the Ministry replied that "Water being State subject and dams, constituting a major component of water resources projects, are planned, executed, operated and maintained by respective State Governments as per their own resources and priorities. There is no specific scheme to ensure renovation of large dams over 50/100 years old.
- 2.43 When asked further whether the Ministry is keeping a similar National Register of Medium and Minor dams as in case of large dams and to furnish the updated data in this regard, the Ministry informed the Committee as under:-

"There is no classification as Medium and Minor dams similar to Large dams. Only Irrigation projects are categorized as Major, Medium and Minor. Major and Medium Irrigation projects may have large dams as one component. As per the National Register of Large Dams maintained by Central Water Commission (CWC), there are 4,816 nos. completed large dams in the country and 371 nos. large dams under construction which caters not only to irrigation but also for hydropower, navigation and drinking water supply."

2.44 When asked to furnish a list of large dams in India having the risks of dam failure, the Ministry statated that no study has been conducted to quantify the risk of dams. All

dams carry a certain risk to its failure due to unpredictable nature of floods, seismicity and gradual deterioration due to normal wear & tear and weathering overtime.

2.45 When asked about the steps taken/being proposed to be taken for preventing dam failure in the country, the Ministry replied as under :-

"The responsibility for proper maintenance of dams lies with dam owners, who are generally State Governments or public sector undertakings. However, a high level committee, namely, National Committee on Dam Safety has been constituted by the Government of India, which advises the State Governments and dam owners on various aspects of dam maintenance and safety. Necessary guidelines in respect of regular safety inspection of dams have also been issued by Central Water Commission. Further, for improving the conditions of distressed dams, Government of India is implementing Dam Rehabilitation and Improvement project (DRIP) with World Bank assistance at an estimated cost of Rs.2100.00 crore."

2.46 The Committee enquired about the updated position regarding the safety of Mullaperiyar Dam, Kerala including the steps taken to ensure its safe functioning. To this query, the Ministry submitted as under:-

"An Empowered Committee on Mullaperiyar Dam headed by Justice Dr. A.S. Anand, former Chief Justice of India was formed to examine various issues including the updated position regarding the safety of Mullaperiyar Dam, Kerala among other issues. As per Supreme Court orders dated 18.02.2010 and 29.03.2010 this has been notified in the Gazette of India. The Empowered Committee has submitted its Report dated 23 April, 2012 and the matter is subjudice. Hon'ble Supreme Court of India, vide Order dated 23.7.2012 has constituted a Committee for carrying out routine works on Mullaperiyar Dam by the Government of Tamil Nadu. Some of the works listed in the aforesaid Order of Supreme Court have been carried out by the State Government of Tamil Nadu."

2.47 The Committee were also given to understand that dam break analysis is being carried out by the Central Water Commission on consultancy basis using the one

dimensional Mathematical Model "MIKE". It is carried out to prepare the inundation map and disaster management plan for a hypothetical case of dam failure. It estimates the maximum water level at the downstream locations of the dam in the event of its failure. Glacial Lake Outburst Flood (GLOF) studies are carried out to account for the flood, resulting from the breach of moraine dams in the design of the projects, and the GLOF study reports in respect of Kalai-I H.E. Project, Hutong-II H.E. Project, Attuni H.E. Project and Etalin H.E. Project of Arunachal Pradesh were examined and cleared. Asked to provide the details of the findings of dam risk analysis being carried out by the CWC till date, the Ministry in a written reply stated as under:-

"No quantitative risk analysis is being carried out by CWC. A subjective analysis of GLOF and DAM BREAK studies are being carried out for Techno-economic clearance of projects in order to ensure better safety of dams and of downstream area."

2.48 Asked further whether contingency measures/plans have been put in place to prepare for any eventuality of dam break catastrophe in the country by the Government, the Ministry submitted as under :-

"State governments have been advised to prepare emergency action plan on the basis of the results of GLOF and dam break study. Govt. of India keeps the follow up with the states through National Committee of Dam Safety (NCDS)."

2.49 The Committee were informed that under the Scheme of Dam Safety Studies and Planning, a six year project called 'Dam Rehabilitation and Improvement Project' (DRIP) was launched in 2011 with the assistance from the World Bank. It is also stated that Dam Safety Studies and Planning scheme was taken up as forerunner scheme to DRIP in the XI Plan and DRIP scheme has been envisaged in XII Plan and the project has become effective from 18 April, 2012.

- 2.50 The Budgetary allocations (BE) for Dam Rehabilitation and Improvement Project in 2013-14 is Rs.36.00 crore while BE for the year 2012-13 was Rs.24.00 crore.
- 2.51 The Ministry also informed that the DRIP would be implemented in 4 States, namely, Kerala, Madhya Pradesh, Odisha and Tamil Nadu. About 223 large dams in the four participating States with substantial need for rehabilitation and improvements would be included in the Project.
- 2.52 Asked to furnish the details about the funding pattern of DRIP including the shares of Central Government participating States and the World Bank, the Ministry further replied as under:-

"The total estimated cost of DRIP is Rs. 2100.00 crore. Out of the total project cost, Rs. 1487.23 crore is for four states and Rs. 132.00 crore is for Central Water Commission (Central component). In addition, a provision of Rs. 480.24 crore has been included in the total project cost as unallocated resources that can be used during implementation for similar works in additional States which may join the project at a later date. Out of the total project cost, 80% (i.e. Rs.1680.00 crore) will be funded by the World Bank loan/credit, while the remaining 20% (i.e. Rs. 420.00 crore) will be borne by respective State governments and Central Water Commission."

2.53 Regarding the criteria for inclusion of a dam under DRIP, the Ministry also informed as under :-

"The selection of 223 dams for DRIP has been made by the States concerned. The States have done a review of the status of their dams and have determined those dams that are most in need of rehabilitation and improvement in order to guarantee their future safety and operational capacity."

2.54 When asked whether there is any proposal to include more dams from the remaining other States/UTs under DRIP, the Ministry in a written reply stated as under :-

"Out of the total project cost of DRIP which is Rs. 2100.00 crore, a provision of Rs.480.24 crore has been kept as unallocated component for the additional states which may desire to join the project at a later date. Five new States/Organizations (i.e. Karnataka, Uttar Pradesh, Punjab, 'Uttarakhand Jal Vidut Nigam Ltd', and 'DVC Ltd') have shown interest for participating in DRIP."

2.55 The Dam Safety Bill, 2010 was introduced in the Parliament on 30.08.2010 and was referred to the Parliamentary Standing Committee on Water Resources for examination. The Report of the Committee has been forwarded by the Parliament to the Government for further action. The Committee wanted to know the updated status of the Dam Safety Bill, 2010. The representatives of the Ministry replied during evidence as under:-

"The Dam Safety Bill, 2010 was presented to the Lok Sabha. After that it was given to the Standing Committee. The Standing Committee has given comprehensive recommendations and the Ministry has worked out on these recommendations. They have revised the Draft. Now, it is going to the Cabinet."

2.56 On being further asked as to how long it will take, the representative replied that "It will be going very soon".

Budgetary Allocation

2.57 The Committee observe that Irrigation projects with a Cultivable Command Area (CCA) between 2000 hectares and 10000 hectares are classified as Medium Irrigation projects and those irrigation projects with CCA of more than 10000 hectares are classified as Major Irrigation projects. The planning, formulation and execution of all Major and Medium Irrigation (MMI) are carried out by the concerned State Governments and the required funds are allocated out of their State Plan. The Ministry of Water Resources provides technical know-how to the State

Governments through its subsidiary organizations and statutory bodies like Central Water Commission (CWC), Central Soil and Materials Research Station (CSMRS), Central Water and Power Research Station (CWPRS), National Water Development Agency (NWDA) etc. The Committee's examination of the budgetary proposals reveal that the budgetary allocation in Plan section for 2012-13 was Rs.777.19 crore and which was reduced to Rs.210.82 crore at RE stage. The budget allocation (Plan) for 2013-14 has been kept at Rs.643.53 crore. The Committee are unhappy to note that the reason for reduction at BE 2012-13 has been stated to be the curtailment of amount by the Ministry of Finance due to low expenditure upto September, 2012 on account of non approval of EFC. The Committee are pained to observe that it was sheer failure of the Ministry to get approval of EFC in time in such important areas which ultimately resulted in curtailment of funds. Surprisingly, the Ministry has denied any adverse impact on schemes and projects of the Ministry due to reduced allocation at RE stage. The Committee are need to be explained as to how all the activities for which budgetary projections of Rs.777.19 crore was made at BE stage could be completed by the Ministry with the reduced allocation of Rs.210.82 crore. The Committee further observe that reduction of allocation at RE stage in respect of MMI projects shows lack of effective pre-planning, poor monitoring and control and, therefore, recommend the Ministry to strictly assess the requirements of all projects/schemes before projecting the budgetary requirements at BE stage and also minutely monitor the flow of expenditure throughout the year with a well defined systematic monitoring mechanism for effective utilization of the allocated funds. The Committee expect that the allocation made for 2013-14 will be utilized fully by the Ministry by constant monitoring and control.

Command Area Development and Water Management

2.58 The Committee observe that under Command Area Development and Water Management (CAD&WM) programme, financial assistance is being provided to the State Governments on 50:50 basis for construction activities and 75:25 basis for carrying out training programmes for field functionaries/farmers, monitoring, evaluation, adaptive trials and demonstrations. The Committee note that initially 60 Major and Medium Irrigation projects were taken up under the then CAD programme covering CCA of about 15.00 million hectares and as of now 211 projects have been completed and 150 projects are ongoing. An area of 20.149 million hectares have been covered since inception of the Scheme till March, 2012. The physical target set during the XI Plan has been achieved but the performance during the 2012-13 is likely to be adversely affected due to lack of Cabinet approval of continuation of the Scheme. The Committee appreciate the performance and the results achieved in CAD&WM Programme and urge the Ministry to take up the matter expeditiously for getting Cabinet approval to avoid any adverse impact on the programme. With regard to the effective monitoring and evaluation, the Committee would recommend the Ministry to use latest technologies such as mobile tracking, GIS techniques, online web based monitoring, etc. to achieve the desired result.

Development of Water Resources Information System

2.59 The Committee note that the Government approved the Scheme of Development of Water Resources Information System (DWRIS) in June, 2008 for implementation during the XI Plan with a total outlay of Rs.234.50 crore. The objective of the Scheme is to develop a water resources information system and make it fully operational at the earliest. The Committee observe that a MoU for development of digital database and web enabled water resources information system had been signed between CWC and ISRO in 2008-09. The website

www.india-wris.nrsc.gov.in was launched on 07.12.2010 and the second version was launched on 22.03.2012. The Committee have been informed that full version with complete database of the project is likely to be launched by October, 2013. The Committee while appreciating the efforts made for creating such a comprehensive databank, recommend that the availability of vital information in the databank should be popularized through electronic and print media to make the public aware of existence of such database so that the inputs available in the database could be gainfully utilised by all concerned. The Committee also recommend for realistic budgetary planning for this project so that neither the activities are held up due to lack of funds nor additional funds are unnecessarily locked in the project. The Committee also desire that monitoring of glacial lakes / water bodies started on the basis of the report submitted by NRSC on the "Inventory of Glacial Lakes/Water Bodies in the Himalayan Region of Indian River Basins" should be effectively continued and analysed for its beneficial use in the programmes/objectives to be undertaken in future.

Hydrological Observation Site

2.60 The Committee note that collection of hydrological data of various river basins in the country is a pre-requisite for an accurate assessment of water resources, planning of their optimum utilization for their comprehensive development of the basins/forecasting flood events and for settling inter-State water disputes. They also note that due to inadequacy of Hydrological Observations (HO) sites/stations, there is need to strengthen the network of HO sites as per World Meteorological Organisation (WMO) guidelines. As informed to the Committee, the Ministry is planning to strengthen the network of HO sites by expansion from the existing 933 sites to 2850, setting up 917 new sites and

upgrading 386 existing sites during XII Plan. The Committee, taking into account the fact that collection of hydrological data is vital for accurate assessment of water resources and its planning, urge the Ministry to complete the process of strengthening the network of Hydrological Observation sites within the scheduled timeframe.

Water Quality Monitoring

2.61 The Committee observe that presently a number of agencies are operating Water Quality Monitoring networks in the country and there is no uniform procedure for sampling, analysis, data storage and reporting. To address this problem, Water Quality Assessment Authority (WQAA) was constituted in May 2001 and Uniform Protocol on Water Quality Monitoring (UPWQM) order was notified in 2005. The UPWQM stipulates that its monitoring agencies shall process the analytical data and report the data after validation to the data centre at the Central Pollution Control Board (CPCB) which shall store the data and disseminate through website or electronic mail to various users on demand. The Committee desire the Ministry to ensure that the monitoring agencies and CPCB work in close coordination so that efforts made by them for water quality monitoring in the country produces desired results for the end users. Taking into account the fact that the UPWQM is being proposed to be revised during 2013-14, in view of the present pollution aspects/parameters and their distribution in surface and ground water, the Committee recommend the Ministry to keep constant monitoring in the matter and ensure speedy completion of revision of UPWQM. They would like to be apprised of action taken in the matter.

National Water Mission

2.62 The Committee observe that the Union Cabinet on 06 April, 2011 approved the National Water Mission (NWM) document. The main objective of the National Water Mission is conservation of water minimizing wastage and encouraging its more equitable distribution both across and within States through integrated water resources development and management. The Committee was surprised to note that BE of Rs.200.00 crore allocated for National Water Mission in 2012-13 was reduced to the bare minimum of Rs.0.25 crore at Revised stage for the sole reason that the EFC for National Water Mission was not approved. The Committee express their serious concern over such state of affairs and trust at least from now onwards the ministry will be vigilant in obtaining the necessary approvals in time. The Committee observe that the allocation for BE 2013-14 has been kept at Rs.110.00 crore. The Committee trust that the budgetary allocations made for 2013-14 will be fully utilized by the Ministry by getting all requisite approvals in time which would facilitate achieving the goals of National Water Mission successfully.

National Water Policy

2.63 The Committee in their first report on Demand for Grants (2009-10) had urged the Ministry to review the National Water Policy taking into consideration various suggestions given by the State Governments and other stakeholders and also eminent climatologists keeping in view the looming threat of climate change and the grave scarcity of water in future. The Committee were informed that the National Water Policy 2012 has been adopted by the National Water Council on 28.12.2012. The Committee while appreciating the efforts made by the ministry for bringing out the National Water Policy 2012, would recommend that the National Water Policy 2012 should be presented in Parliament so that it could get a broader

perspective of dissemination of policy details among lawmakers, academicians, scientists, intellectuals and other stakeholders.

National Bureau of Water Use Efficiency

2.64 The Committee observe that the Ministry of Water Resources has proposed to establish National Bureau of Water Use Efficiency (NBWUE) under Section 3 (3) of Environment (Protection) Act 1986 which will have the overall responsibility of water use efficiency across various sectors, namely, irrigation, drinking water supply, power generation and industry in the whole country. The NBWUE will function as an autonomous authority under the administrative control of MoWR whose proposed activity would include preparation of detailed project reports for taking up benchmarking and/or demonstrative projects for water use efficiency, publicity/promotion of water use efficiency measures, conjunctive use of water, etc., incentivization of industries, farmers, local bodies, etc., action plan for coping with flood and baseline studies for water use efficiency. It is also informed that the NBWUE is envisaged to be operational in 2013-14 subject to approval of EFC. The Committee hope that the National Bureau of Water Use Efficiency will be operationalised in 2013-14 and will bring qualitative changes by bringing high degree of efficiency in water use.

Dam Safety

2.65 The Committee note that as per the National Register of Large Dams maintained by Central Water Commission, presently there are 5125 large dams in India and out of these 4728 are completed and 397 dams are under construction. About 10.11% of these dams are said to be more than 50 years old and 2.66% are more than 100 years old. Surprisingly, the Ministry has no specific scheme to ensure renovation of large dams over 50/100 years old, as all dams carry a certain

risk to its failure due to unpredicatable nature of floods, seismicity and gradual deterioration due to normal wear and tear and weathering overtime. The Committee were apprised that while the responsibility for maintenance of dams lies with dam owners, a high level Committee namely, National Committee on Dam Safety has been constituted by the Government of India, which advises the State Governments and Dam Owners on various aspects of dam maintenance and safety. The Committee desire that apart from the power to issue advisory to State Governments and Dam Owners on various aspects of dam maintenance and safety, the National Committee on Dam Safety be entrusted with adequate authority and supervisory power including regular monitoring of large dams which are over 50 year old or have been assessed to be carrying the risk of failure. The Committee are further surprised that no study has been conducted to quantify the risk of dams in India. The Committee are of the firm opinion that a proper assessment about the safety standards of dams in the country is a pre-requisite before undertaking any activities on dam improvement, maintenance and safety. The Committee, therefore, urge the Ministry to undertake this task at the earliest to ensure that the dams in the country are protected from possible dam break or failure.

2.66 The Committee further observe that a six year project called 'Dam Rehabilitation and Improvement Project' (DRIP) was launched in 2011 with the assistance from the World Bank. The Project became effective from 18 April, 2012 and would be implemented in 4 States, namely, Kerala, Madhya Pradesh, Odisha and Tamil Nadu. About 223 large dams in the four participating States with substantial need for rehabilitation and improvements would be included in the Project. The Committee observe that the total estimated cost of DRIP is Rs.2,100.00 crore out of which Rs.1,487.23 crore is for the four participating States and Rs.132.00 crore for Central Water Commission and a provision of Rs.480.24 crore

has been kept as an unallocated resources for similar work for additional States which may join the project at later on. The Committee expect that dam safety measures will be taken up seriously by all concerned and the National Commission on Dam Safety will play an effective role in this regard. Further, the Committee note that on the basis of the observation and recommendations of the Parliamentary Standing Committee on Water Resources on The Dam Safety Bill, 2010 tabled before the Parliament on 30 August, 2010, a modified Dam Safety Bill is ready and will be placed before the Parliament shortly. The Committee desired that all the pending issues /concerns raised by the States be addressed and thereafter, the Dam Safety Bill may be introduced in the Parliament for enactment expeditiously.

CHAPTER III

MINOR IRRIGATION

- 3.1 Minor Irrigation (MI) schemes are those ground and surface water schemes which have a Cultivable Command Area (CCA) upto 2,000 hectare individually. Surface water minor irrigation schemes are generally funded from the public sector outlay.
- 3.2 The Budget allocations for Minor Irrigation are given below:

Table – 14 : Budget allocations for Minor Irrigation
(Rs. in crore/gross)

BE 2011-12				RE 2012-13		BE 2013-14	
Plan	Non- Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
146.46	105.02	384.81	105.98	207.9	123.18	324.02	134.31

3.3 The Budget allocation for BE 2012-13 was Rs.384.81 crore which was reduced by Rs.177 crore at RE stage. When asked for the reason for reducing the allocation at RE stage and whether some schemes/projects suffered due to reduction of allocation at RE stage, the Ministry submitted as under :-

"The BE of Rs. 384.81 crore pertains to the three schemes of Central Ground Water Board i.e. a) Ground Water Management & Regulation (GWM&R), b) Rajiv Gandhi Training and Research Institute (RGI) and c) Infrastructure Development. Total budget of all the three plan schemes was reduced to Rs207.93 crore at RE stage during 2012-13. In case of Ground Water Management & Regulation scheme, the Budget allocation was reduced to Rs192 crore at RE stage from Rs 330 crores allocated during BE due to the fact that all the planned activities under the Scheme could not be taken up. Further, the appraisal of EFC has not been completed and hence only the ongoing activities of XI Plan period were continued with 'in-house' manpower and available machinery and equipment. The activities envisaged through Outsourcing under National Aquifer Mapping could also not be

initiated because of non-appraisal of EFC. Procurement of rigs at an estimated cost of Rs.52 crore was initiated by placing indent to DGS&D. However, the supply could not be completed. Similarly, Budget allocation was reduced in other Schemes, namely Rajiv Gandhi Training & Research Institute and Infrastructure Development at RE stage as the Plan activities under these schemes could not be taken up. As the appraisal of EFC has not been completed, only activities under the on going scheme of XI Plan have been continued."

- 3.4 On being enquired, the reasons for increase in the Non-Plan allocation from Rs.105.98 crore in 2012-13 to Rs.134.31 crore in BE 2013-14, the Ministry informed that in order to meet the committed expenditure on account of Salary including increased DA, increments, filling up of vacant posts etc for Non-Plan posts, Rs134.31 crore in BE for year 2013-14 has been proposed.
- 3.5 The Committee asked the Ministry to indicate the physical targets fixed for creation of irrigation potential under Minor Irrigation for XI Plan ending March, 2012 and also the achievements made in this regard. The Ministry has not furnished any reply to this query. The Committee also desired to know whether there are schemes/projects with external assistance being proposed under MI during XII Plan period, to which also there was no reply from the Ministry.
- 3.6 On being asked whether the Ministry had examined the issue of exploring the minor irrigation schemes for the areas which are beyond the reach of canals, the Ministry replied that water being a State subject, all Minor Irrigation schemes as a whole are formulated, investigated, funded and implemented by the State Governments as per their own priorities. Government of India provides financial and technical support which is catalytic and promotional in nature.
- 3.7 When asked to elaborate the steps taken for creation of potential for Minor Irrigation (MI) in the country, the Ministry replied as under :-

"With a view to encourage the completion of ongoing projects and help States in creation of irrigation potential, Government of India provides financial assistance under Accelerated Irrigation Benefits Programme (AIBP). In case of MI schemes, the Central assistance (grant) to States is provided to the projects in the States of North-Eastern Region, hilly states namely Himachal Pradesh, Jammu & Kashmir, Uttarakhand, undivided Koraput, Bolangir and Kalahandi (KBK) districts of Odisha and projects benefitting tribal areas and drought prone areas."

Ground Water Management and Regulation

3.8 The Scheme of Ground Water Management and Regulation (GWM&R) was launched with the merger of some X Plan scheme at a cost of Rs.460.00 crore for implementation by the Central Ground Water Board during XI Plan. The Budget allocation for the GWM&R is given below:-

Table – 15 : Budget allocation for Ground Water Management and Regulation (Rs. in crore/gross)

	(1101 111 01010/91000)								
Actuals 2011-12		BE 2012-13		RE 2012-13		BE 2013-14			
Plan	Non- Plan	Plan	Non- Plan	Plan	Non- Plan	Plan	Non- Plan		
130.75		318.00		180.00		275.00			

3.9 The Budget allocation for the scheme of Ground Water Management and Regulation for 2012-13 was Rs.318.00 crore, which was reduced to Rs.180.00 crore at Revised estimate stage. The allocation for BE 2013-14 is Rs.275.00 crore. When asked for the reasons for reduction of Budget allocation to Rs.180.00 crore during 2012-13 at Revised estimate stage, the Ministry submitted that it was due to the fact that all the planned activities under the Scheme of Ground Water Management and Regulation could not be taken up. The appraisal of EFC has not been completed and hence only the ongoing activities of XI plan period were continued.

- 3.10 Answering to a query about BE of Rs.275.00 crore for 2013-14, the Ministry replied that it is envisaged that EFC proposal will be approved by Ministry of Finance soon.
- 3.11 About the evaluation of the scheme of Ground Water Management and Regulation during XI Plan, the Ministry stated that it was given to an independent agency and the study has pointed out that remote sensing, GIS & Ground Water modeling and isotope studies have not been fully utilized and report has further recommended that the ground water management studies should be enhanced and groundwater quality and its change over a period of time and space should be monitored more frequently.

Aquifer Mapping

3.12 The Committee noted that among the major activities proposed during XII Plan under Ground Water Management and Regulation, Aquifer Mapping is one programme. The outcome of the Aquifer Mapping would include identification of areas feasible for ground water development, ground water regulation, rainwater harvesting and artificial recharge, yield potential, depth & design of wells, water logged areas and quality problem areas etc. Asked to give the status of Aquifer Mapping Programme initiated in the country under GWM&R, the Ministry in a written reply stated as under:-

"Under XII Plan, the protocol for various activities envisaged has been prepared and the concept plan of aquifer mapping process, preparation of aquifer management plan and implementation mechanism with participatory approach has also been prepared and deliberated with States and other institutions by organizing a workshop and State level meetings. The priority areas for mapping have been identified. As a part of above plan, 9.25 lakh sq.km area has been proposed to be covered under Aquifer Mapping in XII Plan period, which will involve activities like data collection, compilation, data gap analysis and preparation of aquifer maps and management plan."

3.13 When asked whether any time-frame has been set for it to be made available to associated Departments/end-users, the Ministry in a written reply stated as under :-

"Aquifer mapping with latest scientific inputs is to be taken up on 1:50000 scale and the mappable area of about 23.4 lakh sq.km in the country is likely to be completed by the end of XIII Plan. The aquifer wise water management plan, likely to be completed by the end of XIII Plan period, will incorporate participatory approach in which the end-users like farmers, various other stakeholders will be involved in the programme."

Central Ground Water Authority

- 3.14 The Committee were informed that the Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country. The CGWA is regulating ground water withdrawal through notification of Over-exploited/Critical areas. It has notified 82 Over-exploited/Critical areas in the country. Further, for the enforcement of the regulatory directions issued under Section 5 of the Environment (Protection) Act, 1986, concerned Deputy Commissioners/District Collectors have been authorized to take necessary action in case of violation of directives of CGWA in the notified areas.
- 3.15 When asked to give the updated list of areas/blocks notified by CGWA, the Ministry replied that as on date, a total of 162 areas have been notified by Central Ground Water Authority in the country.
- 3.16 The Committee desired to know the number of cases/complaints received pertaining to violation of directions of CGWA in notified areas till date. To this, the Ministry informed that CGWA had received 60 complaints of violation of its directives in notified areas during the last 5 years. In addition, 851 violations had been found by enforcement

teams constituted by Deputy Commissioner of Gurgaon, Haryana. In these cases, action like sealing of tube wells, seizure of drilling equipment etc. had been done by the authorized officer."

Central Ground Water Board

3.17 The Central Ground Water Board (CGWB), under the Ministry of Water Resources, is a multi-disciplinary scientific organization with a mandate to "develop and disseminate technologies, monitor and implement national policies for the scientific and sustainable development and management of India's ground water resources, including their exploration, assessment, conservation, augmentation, protection from pollution and distribution, based on principles of economic and ecological efficiency and equity."

3.18 The Budget allocations for Central Ground Water Board are given below:-

Table - 16: Budget allocations for Central Ground Water Board

(Rs. in crore)

	Actuals 2011-12		BE 2012-13		RE 2012-13		E 3-14
Plan	Non- Plan	Plan	Non- Plan	Plan	Non- Plan	Plan	Non- Plan
130.75	103.36	318.00	105.98	180.00	123.18	275.00	134.31

3.19 The Budget allocation (Non-Plan) for CGWB for 2012-13 was Rs.105.98 crore. It was hiked to Rs.123.18 crore at RE stage, with an increase of Rs.17.20 crore. The allocation for the financial year 2013-14 has been kept at Rs.134.31 crore, which represents an increase of Rs.28.33 crore over BE 2012-13. According to the Ministry, the increase was to meet the committed expenditure on account of Salary including increased DA, increments, filling up of vacant posts etc.

- 3.20 The Ministry did not furnish any reasons for reducing the Plan allocation in BE 2013-14 (Rs.275.00 crore) over the BE previous year 2012-13 (Rs.318.00 crore).
- 3.21 On being asked whether the Ministry has assessed the availability of ground water State-wise, the Ministry replied as under :-

"The assessment of ground water resources is carried out jointly by Central Ground Water Board and respective State Governments. The latest assessment was carried out in the year 2009. As per this assessment, the annual replenishable ground water resources have been estimated to be 431 billion cubic meter (BCM) and the stage of ground water development is 61%."

3.22 On being further enquired whether the Ministry is contemplating any scheme which will earmark the usable quantity of groundwater by each State, the Ministry replied as under:-

"While estimating the ground water resources for each State, which is done on a block/mandal wise basis, projection of demand of ground water for drinking and industrial uses for the year 2025 is estimated and only the balance potential is earmarked for use by the irrigation sector. As per the latest assessment carried out in 2009, the projected demand for domestic and industrial use for the year 2025 has been estimated as 30.71 billion cubic meter (BCM) for the country and ground water availability for future irrigation use has been estimated as 153.66 BCM."

3.23 Asked to what extent the CGWB has achieved mandate, the Ministry informed as under:-

"The mandate of CGWB is mainly to assess the ground water resources in the Country, both in terms of quantity and quality for sustainable development and facilitate the States to adopt suitable development strategies. This was undertaken through various scientific studies like ground water management studies, ground water exploration, hydro-chemical and geophysical studies, ground water monitoring etc. Results of all the studies were brought out in the form of reports and atlases and also shared through workshops and seminars. These were disseminated to the user agencies and the State Governments and also put in public domain on the website of CGWB."

3.24 The Ministry informed that CGWB needs to be adequately reinforced with additional scientific, engineering and administrative manpower. Accordingly, a proposal for the restructuring and strengthening of the Board was prepared and submitted earlier which included creation of new posts, increasing the number of posts at various levels, upgradation of existing posts etc. On being asked about the updated status of the proposed restructuring of CGWB, the Ministry replied that benchmarking study of CGWB is under process and based on the recommendations of benchmarking study, the proposal of restructuring of CGWB will be reframed. The Ministry also informed that the Benchmarking report is under review by an Expert Committee and recommendations for implementation of identified practices is likely to be finalized by end of June, 2013. The manpower requirement is also linked with the tasks and practices to be adopted in coming years. The actual restructuring proposal will also consider the same and will be revised suitably. The final restructuring proposal is likely to be submitted by end of July, 2013.

Budgetary allocation

3.25 The Committee observe that Minor Irrigation (MI) schemes are those ground and surface water schemes which have a Cultivable Command Area (CCA) up to 2000 hectares individually. The budgetary allocations for Minor Irrigation at BE stage for the year 2013-14 have been kept at Rs.324.02 crore in Plan section and Rs.134.31 crore in non-Plan section. The Committee note that the Plan allocation of Rs.384.81 crore for Minor Irrigation during 2012-13 was reduced to Rs.207.93 crore at RE stage. The reasons stated by the Ministry for this reduction was that the all the planned activities under the Scheme could not be taken up and the appraisal of EFC, Ministry of Finance had also not been completed. The Committee observe that the fact that non approval of EFC has led to substantial reduction in Budgetary allocation at RE stage is really deplorable as it adversely affects many sectoral schemes. The Committee, therefore, recommend that the Ministry must take

concrete steps at the earliest to obviate this problem which affect fund allocation and utilization for many sectors of water resource schemes/projects. The Committee also desire the Ministry to furnish the detailed information indicating the physical targets fixed for creation of irrigation potential under minor irrigation for 11th Plan ending March, 2012 and also the achievements made in this regard during that period. Considering the relative importance of Minor Irrigation Projects, the Committee desire to know the particulars of the schemes and projects with external assistance being proposed under minor irrigation during 12th Plan period.

Ground Water Management and Regulation

3.26 The Committee note that the Scheme of Ground Water Management and Regulation (GWM&R) was launched with the merger of some Xth Plan schemes at a cost of Rs.460.00 crore for implementation by the Central Ground Water Board during XIth Plan. The Committee's examination reveal that a Budgetary allocation of Rs.318.00 crore was made for 2012-13 which was reduced to Rs.180.00 crore at Revised estimate stage. The Committee are surprised to find that the reason for such reduction in this head also is the non-completion of EFC appraisal. While expressing their displeasure for failure of the Ministry in getting the EFC appraisal completed in time, the Committee recommend that all necessary steps must be immediately initiated by the Ministry to get such appraisal completed in time to avoid recurrence of such events in future. The Committee further observe that the Budget allocation for BE 2013-14 has been kept at Rs.275.00 crore with the expectation that early approval of EFC proposal would be made by Ministry of Finance. The Committee hope that the Ministry will make its endeavour to get the EFC appraisal completed early so that all activities are undertaken in time and funds are also utilized optimally during the year.

Acquifer Mapping

3.27 The Committee observe that Aguifer Mapping is one programme among the major activities proposed during XII Plan under Ground Water Management and Regulation. The outcome of the Aguifer Mapping would include identification of areas feasible for ground water development, ground water regulation, rainwater harvesting and artificial recharge, yield potential, depth & design of wells, water logged areas and quality problem areas etc. 9.25 lakh sq.km area has been proposed to be covered under Aquifer Mapping in XII Plan period which will involve activities like data collection, compilation, data gap analysis and preparation of aquifer maps and management plan. Aquifer mapping with latest scientific inputs is to be taken up on 1:50000 scale and the mappable area of about 23.4 lakh sq.km in the country is likely to be completed by the end of XIII Plan. The aguifer-wise water management plan, likely to be completed by the end of XIII Plan period, will incorporate participatory approach in which the end-users like farmers, various other stakeholders will be involved in the programme. The Committee hope that the target fixed for the Acquifer Mapping will be successfully achieved by the Ministry and its benefit will reach to all the stakeholders. The results of such survey, Statewise, must be given wide publicity for the benefit of the people.

Central Ground Water Authority

3.28 The Committee observe that the Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country. The CGWA is regulating ground water withdrawal through notification of over-exploited/critical areas. It has notified 82 over-exploited/critical areas in the country. Further, for the enforcement of the regulatory directions issued under Section 5 of the Environment (Protection) Act, 1986, concerned Deputy

Commissioners/District Collectors have been authorized to take necessary action in case of violation of directives of CGWA in the notified areas. As informed to Committee, the authority had received 60 complaints of violation of its directive in notified areas during the last 5 years while 851 violations had been found by the enforcement teams constituted by Deputy Commissioner of Gurgaon, Haryana and in these cases, action like sealing of tube wells, seizure of drilling equipments had been done by the authorized officers. The Committee recommend that in view of the trend of alarming depletion of ground water level in the country, the CGWA should take vigorous steps for enforcement of regulatory directions issued in the matter.

Central Ground Water Board

3.29 The Committee observe that the Central Ground Water Board (CGWB), under the Ministry of Water Resources is a multi-disciplinary, scientific organisation whose mandate is mainly related to sustainable development and management of India's ground water resources. The Committee's examination of the budgetary proposals reveal that a budget allocation of Rs.275.00 crore in the Plan section for Central Ground Water Board (CGWB) for 2013-14 has been made which is less than the BE of Rs.318 crore of the previous year 2012-13. The Committee would like to know the reasons for reduction of budgetary allocation in Plan section for the current financial year compared to BE of previous year 2012-13 and also the details of the projects / schemes, which could be adversely affected due to reduced allocation. The assessment of groundwater resources is carried out jointly by Central Ground Water Board and respective State governments. The Committee recommend that after making actual assessment of availability of groundwater, Statewise, the Central Ground Water Board should frame a broad parameter on scientific lines which could earmark the usable quantity of groundwater by each

stakeholders. The Committee have been informed that a proposal prepared for restructuring and strengthening the CGWB is under benchmarking study and the final restructuring proposal is likely to be submitted by the end of July, 2013. The Committee expect that the restructuring process of Central Ground Water Board will be completed within the prescribed time limit which will in turn strengthen the Board to carry out its activities in a more efficient and effective manner.

CHAPTER IV

FLOOD CONTROL

- 4.1 Every year, some part or the other of the country gets flooded. To control/manage the floods, a multi-pronged approach consisting of measures of prevention, protection, management, forecasting and early warning are needed.
- 4.2 The Budget allocations for Flood Control are given below:

Table – 17 : Budget allocations for Flood Control (Rs. in crore/gross)

Year	Plan	Non-Plan	Total
2011-12 (BE)	238.01	78.35	316.36
2012-13 (BE)	277.00	78.62	355.62
2012-13 (RE)	147.25	78.11	225.36
2013-14 (BE)	394.45	81.96	476.41

4.3 The Plan allocation for Flood Control for the year 2012-13 was earmarked at Rs.275.00 crore which was reduced to Rs.143.25 crore at the RE stage. When asked to furnish the reasons for such reduction, the Ministry in a written reply stated as under :-

"During 2012-13, the Plan allocation was reduced due to non taking up of new components of the schemes pending their approval."

4.4 When asked to state the reasons for increase in Plan allocation by Rs.119.45 crore in BE 2013-14 over BE 2012-13, the Ministry informed that the approval of the schemes is expected in financial year 2013-14 and new activities are proposed to be undertaken.

4.5 The Committee wanted to know the Budget allocation under Flood Control for each of the Schemes for 2011-12 (BE), 2012-13 (BE), 2012-13 (RE) and 2013-14 (BE). The Ministry in a written reply furnished the information showing the scheme-wise Budget allocation during the years 2011-12, 2012-13 and 2013-14 which is reproduced below:

Table – 18: Budget allocation for Flood Forecasting and River Management Activities and Works related to Border Areas during the years 2011-12, 2012-13 and 2013-14

(Rs. in crore)

SI. No.	Name of Scheme	BE 2011-12	BE 2012-13	RE 201-13	BE 2013-14
1	Flood Forecasting	36.00	48.00	30.00	150.00
2	River Management Activities and Works related to Border Areas	74.00	125.00	30.00	125.00

4.6 The outlay (Plan) on Flood Forecasting for the year 2013-14 has been increased to Rs.150.00 crore as compared to Rs.48.00 crore allocated in BE 2012-13. The Committee wanted to know the reasons for hike in Plan allocation for BE 2013-14 to Rs.150.00 crore. To this query, the Ministry submitted as under :-

"The approval of the scheme Flood Forecasting could not be accorded in the year 2012-13 and the same is expected in 2013-14. In order to undertake the Planned activities, the allocation for the scheme has been increased from Rs.48 crore in financial year 2012-13 to Rs.150 crore in financial year 2013-14."

Master Plans for flood prone areas

4.7 When asked to state the losses resulted in the country during the XI Plan period due to floods in terms human life, property, cattle, agricultural land etc, the Ministry

informed that as compiled by CWC, the losses due to floods in the country during the year 2011 are as follows:-

Table - 19: Losses due to floods in the country during the year 2011

Year	Area affected (mha.)	Population affected (million)	Damage to crops (Value in Rs. crore)	Damage to houses (Value in Rs. crore)	Cattle lost (Nos.)	Human Lives lost (Nos.)	Damage to public utilities (Rs. crore)
2011	1.895	15.973	1393.847	410.475	35982	1761	6053.570

4.8 When asked to indicate the flood prone basins of the country, the Ministry submitted as under:-

"The heavy losses due to floods have been reported in the basins of Brahmaputra, Ganga, Mahanadi and Krishna. A Committee under Chairman, GFCC had, in 2006, identified 39 districts in five States as flood prone but basin-wise identification was not made by this Committee. The MoWR has in July 2012 constituted an Expert Committee headed by Chairman, CWC for scientific assessment of flood prone area in the country. The work of Committee is in progress."

- 4.9 Asked to state the main trust of the National Water Policy 2012 with regard to Flood Control, the Ministry further stated that the National Water Policy 2012 emphasis integrated flood management approach and a paradigm shift for adopting an optimum combination of structural as well as non-structural measures.
- 4.10 Accordingly to National Water Policy 2002, out of 40 million ha. of the flood prone area in the country, on an average, flood affect an area of around 7.5 million ha. per year. It also has envisaged that there should be a master plan for flood control and management for each flood prone basin.

4.11 When asked whether Master Plans for flood management have been prepared in pursuance of National Water Policy 2002 for each flood prone basins, the Ministry stated as under:-

"Brahmaputra Board has prepared 57 Master Plans for NE States and GFCC has prepared 23 Master Plans for Ganga basin States. These Master Plans are being updated to incorporate the aspects emphasised in National Water Policy 2002."

4.12 On being asked about the details of the works/schemes which are being covered under the Flood Forecasting scheme, the Ministry stated as under :-

"The following works are covered under Flood Forecasting scheme:

- (a) Continuation of flood forecasting services in the country.
- (b) Modernisation of flood forecasting network along with its expansion.
- (c) River/Bathymetric Surveys and preparation of DEMs by Survey of India required for assessing the likely inundation."
- 4.13 The Ministry also informed that there are 175 Flood Forecasting stations in the country as of February 2013. Asked about the accuracy achieved by the Ministry/allied agencies in flood forecast and how our position compare vis-à-vis international standards, the Ministry stated that on an average the accuracy of more than 96% has been achieved in Flood Forecasting performed by CWC; which is comparable with the best international practices.
- 4.14 Further elaborating on the advancement made by India to strengthen and improve the flood forecasting in the last few years, the Ministry stated that CWC has installed a system of automatic data collection using sensor based equipment, expeditious data transmission through satellite & VSAT systems and quick dissemination of the forecasts to local administration as well as issuing flood alerts through SMS on designated mobile phones during high and unprecedented flood situations.

Border River Management

- 4.15 The floods occur in some parts of the country from the rivers flowing from Nepal. The rivers flowing from Bhutan also have substantial impact on NE region. During evidence, the Committee expressed concern on this issue and desired to know the steps being taken in this regard.
- 4.16 When asked to give an updated position of the flood control works in Nepal being undertaken by the Government including Sapta-Kosi Project and Pancheshwar Dam Project, the Ministry submitted as under:-

"Government of India is funding the maintenance of flood protection works of Kosi and Gandak Projects on Nepal side; which are undertaken every year by Bihar and UP. It has been decided to set up a Pancheshwar Development Authority (PDA) at the earliest to resolve the outstanding bilateral issues related to Pancheshwar Multipurpose Project and undertake its construction. A Cabinet Note in this regard is under finalisation in MoWR. The field investigations for Sapta Kosi High Dam are in progress."

4.17 On being further asked whether regular monitoring and evaluation is being carried out by the Ministry in this regard, the Ministry stated as under :-

"Yes, a Joint team of Experts (JTE) of which Indian side is headed by Member (RM), CWC, regularly monitors the progress of filed investigations of Sapta Kosi High Dam."

4.18 On being asked about the efforts made by the Ministry to contain havoc created by the rivers flowing from Bhutan into India, the representatives of the Ministry replied during evidence, as under:-

"Regarding Bhutan water, a Joint Group of Experts is there between the two countries – the Government of India and the Government of Bhutan. Under this, there is a Committee which is looking after this aspect. They are looking after flood management aspect related to the waters coming from Bhutan in the downstream areas."

Flood Management Programme

- 4.19 The Government of India launched a Flood Management Programme (FMP) under State Sector of Central Plan during XI Plan for providing Central Assistance (CA) to the State Governments for taking up works related to river management, flood control, antierosion, drainage development, flood proofing works, restoration of damaged flood management works and anti-sea erosion.
- 4.20 Giving the basic components of the Flood Management Programme, the Ministry submitted as under:-

"During XI Plan, the works of river management, flood control, anti-erosion, drainage development, flood proofing works, restoration of damaged flood management works and anti-sea erosion were included under Flood Management Programme. The funding pattern was 75:25 for General Category States and 90:10 for Special Category States."

4.21 When asked to furnish the achievements made under FMP both in terms of funds released to States, Works/Schemes completed and areas protected during XI Plan, the Ministry stated that during XI Plan, a total of 420 works were approved out of 252 works had been completed till March, 2012 and central assistance of Rs.3,566 crore (including Rs..89.79 crore for spilled over works of X Plan), was released. The completed works resulted in restoration of 17.004 lakh ha. of the old and 2.589 lakh ha. of the new flood affected area. The Ministry further stated that during XII Plan, efforts are being made for early approval of the scheme. However, central assistance of Rs.138.21 crore has so far been released during 2012-13 till 20.03.2013 for on-going works only.

Flood Plain Zoning

4.22 The Committee noted in their 8th Report that for implementation of the Flood Plain Zoning approach in the country, a model draft bill for flood plain zoning legislation was circulated by the Union Government in 1975 to all the States. However, only the States

of Manipur and Rajasthan have enacted the legislation, but the demarcation of flood zones/enforcement is yet to be done.

4.23 When asked to provide the updated position regarding enactment of Flood Plain Zoning in the country, the Ministry informed as under :-

"The legislation on Flood Plain Zoning has been enacted only by the States of Manipur and Rajasthan. The State of Bihar has expressed inability in flood plain zoning."

4.24 When asked to state the steps taken by the Government during XI and XII Plans in this regard, the Ministry in a written reply stated as under:-

"The Government of India has been making continuous efforts and pursuing the States for implementation of Flood Plain Zoning Bill. The Government of India had included a provision in the Flood Management Programme for according priority to the projects of States who implemented Flood Plain Zoning Bill."

Project for Sunderban and adjoining areas

4.25 The Committee noted during their examination of Demands for Grants (2011-12) that a Scheme titled 'Project for Reconstruction, Remodelling and Improvement of Embankments in Sunderban and adjoining areas in the districts of North and South Parganas damaged by severe cyclone AILA' formulated by Irrigation and Waterways Directorate (I&WD) Government of West Bengal, was cleared at an estimated cost of Rs.5,032.00 crore by the Ganga Flood Control Commission on 21.01.2010 and approved by the Advisory Committee of MoWR. First Phase of the Scheme with an estimated cost of Rs.1,339.50 crore has been included for providing Central Assistance under the State Sector Scheme 'Flood Management Programme'. This phase involves acquisition of 5,996 acres of land, which was then still in progress.

4.26 When asked as to whether the land acquisition process for First Phase of the Scheme been completed, the Ministry stated as that the State Government of West Bengal has informed that the land acquisition under phase-I has been completed. The works have been awarded and commenced in November, 2012. The Ministry further informed that the Government of India has already released the Central assistance of Rs. 525.75 crore to the Government of West Bengal for above project out of which an expenditure of Rs. 370 crore has been reported.

Flood Control

The Committee observe that under Flood Control, a Budget allocation of Rs.275.00 crore was made during 2012-13 which was reduced to Rs.143.25 crore at RE stage. Citing the reason for reduction of allocation at RE stage, the Ministry has informed that during 2012-13, the Plan allocation was reduced due to non-taking up of new components of the schemes pending their approval. The Committee are dismayed to see the apathy of the Ministry in getting the Scheme approved before seeking financial allocation for 2012-13. Surprisingly, the Plan allocation in BE 2013-14 has been increased by Rs.119.45 crore over BE 2012-13 not on the basis of concrete approval of the Scheme beforehand but only on the expectations of subsequent approval of the Scheme. The Committee would like the Ministry to exercise judicious and effective pre-budget planning so that unutilisation of funds is avoided in future. It hardly needs any emphasis that timely approval of the Scheme will help execution/completion of the projects/Scheme in time. Committee observe that Flood Forecasting is a very vital input for timely and effective disaster management to save precious human lives, livestocks and The Committee, therefore, desire that all activities under flood property. forecasting should be effectively undertaken by prudent utilization of the allocated funds during the year 2013-14.

Master Plans for flood prone areas

4.28 According to National Water Policy 2002, out of 40 million ha. of the flood prone area in the country, on an average floods affect an area around 7.5 million ha. per year. The Committee observe that during the year 2011, floods affected an area of 1.895 Mha., a population of 15.973 million, caused damage to crops worth Rs.1,393.847 crore, damaged houses worth Rs.410.475 crore and damaged the public utilities worth Rs.6,053.570 crore besides causing loss of 1761 human lives and 35,982 cattle. The Committee also note that the heavy losses due to floods have been reported in the basins of Brahmaputra, Ganga, Mahanadi and Krishna rivers. A Committee under the chairmanship of Ganga Flood Control Commission (GFCC) had in 2006 identified 39 districts in five States as flood prone but basinwise identification was not made by this Committee. The Ministry had in July 2012 constituted an Expert Committee headed by Chairman, CWC for scientific assessment of flood prone area in the country and the work is stated to be in progress. The Committee further note that the National Water Policy 2002 had envisaged that there should a Master Plan for flood control and management of its flood prone basin. Accordingly, Brahmaputra Board has prepared 57 Master Plans for NE States and GFCC has prepared 23 Master Plans for Ganga basin States but surprisingly similar Master Plans have not been prepared in respect of Mahanadi and Krishna basins which are also flood prone basins of the country. The Committee desire the Ministry to undertake works for preparing Master Plans in the remaining basins also at the earliest and inform them about the progress made in this regard. Taking cognizance of the fact that floods cause havoc leading to loss of precious human lives and property, the Committee feel that it is imperative that multipronged strategy including flood forecasting and flood management programme is devised to protect the life and property in vulnerable areas. The Committee would like to know the steps taken by the Ministry in this regard.

Border River Management

4.29 The Committee observe that the floods occur in some parts of the country from the rivers flowing from Nepal and the rivers flowing from Bhutan also have substantial effect on the region. As informed by the Ministry, the Government of India is funding the maintenance of flood protections works of Kosi and Gandak projects on Nepal side which are undertaken every year by Bihar and UP and it has been decided to set up a Pancheshwar Development Authority to sort out the outstanding bilateral issues related to Pancheshwar Multi-purpose Project and undertake its construction. The field investigations for Sapta Kosi High Dam are in progress. With regard to Bhutan, the Committee were apprised that a Joint Group of Experts between the two countries is looking after flood management aspect related to the waters coming from Bhutan in the downstream areas. The Committee observe that the efforts to contain the probability of floods from the rivers flowing from Nepal and Bhutan need to be strengthened by taking all necessary measures in this regard. The Committee would like to know the further steps taken by the Ministry in the matter.

Flood Management Programme

4.30 The Committee observe that the Government of India launched a Flood Management Programme (FMP) under State Sector of Central Plan during XI Plan for providing Central Assistance (CA) to the State Governments for taking up works related to river management, flood control, anti-erosion, drainage development, flood proofing works, restoration of damaged flood management works and anti-sea erosion.

4.31 The Committee observe that during XI Plan, a total of 420 works were approved out of which 252 works had been completed till March, 2012 and central assistance of Rs.3,566 crore (including Rs..89.79 crore for spilled over works of X Plan) was released. The completed works resulted in restoration of 17.004 lakh ha. of the old and 2.589 lakh ha. of the new flood affected area. Further, central assistance of Rs.138.21 crore has so far been released during 2012-13 till 20.03.2013 for on-going works only. The Committee desire that all activities under flood management programmes should be taken with right earnest and adequate budgetary provisions should be made in this regard.

Flood Plain Zoning

4.32 The Committee observe that for implementation of the Flood Plain Zoning approach in the country, a model draft bill for flood plain zoning legislation was circulated by the Union Government in 1975 to all the States. However, only the States of Manipur and Rajasthan have enacted the legislation but the demarcation of flood zones/enforcement is yet to be done. The Committee are pleased to note informed that the Government of India have included a provision in the Flood Management Programme for according priority to the projects of States who implement Flood Plain Zoning Act. The Committee appreciate the initiative taken by the Government for according priority to the projects of those States who implemented the Flood Plain Zoning Bill. The Committee, however, desire the Government to vigorously pursue the matter with all other States to fall in line and enact the necessary legislation at the earliest.

Project for Sunderban and Adjoining Areas

4.33 The Committee observe that a Scheme titled 'Project for Reconstruction, Remodelling and Improvement of Embankments in Sunderban and adjoining areas in the districts of North and South Parganas damaged by severe cyclone AlLA' formulated by Irrigation and Waterways Directorate (I&WD) Government of West Bengal, was cleared at an estimated cost of Rs.5,032.00 crore by the Ganga Flood Control Commission on 21.01.2010 and approved by the Advisory Committee of the Ministry. First Phase of the Scheme with an estimated cost of Rs.1,339.50 crore has been included for providing Central Assistance under the State Sector Scheme 'Flood Management Programme'. This phase involves acquisition of 5,996 acres of land. As informed by the Ministry, the land acquisition under phase-I has been completed and the works have been awarded and commenced in November, 2012. The Government of India has already released the Central assistance of Rs. 525.75 crore to the Government of West Bengal for above project out of which an expenditure of Rs. 370 crore has been reported. The Committee appreciate the efforts made for the reconstruction, remodeling and improvement of embankment of Sunderbans and adjoining areas and desire the Government to continuously monitor the various activities being undertaken under this Project for its timely completion with effective results.

CHAPTER V

OTHER TRANSPORT SERVICES

Farakka Barrage Project

- 5.1 The Farakka Barrage Project (FBP) was commissioned in 1975 for preservation and maintenance of the Kolkata Port and for increasing the navigation depth of the Bhagirathi-Hoogly waterway. The main objective of the Project is operation and maintenance of Farakka Barrage and associated structures including anti-erosion measures for safety of barrage. Besides the special repairs of the barrage gates, project colony, bank protection works are included in the Plan Scheme.
- 5.2 The Ministry informed the Committee that the Farakka Barrage Project is an exclusively Central Govt. Project. There is no direct role of State Govt. of West Bengal in the project as it is an exclusively Central Govt. Project and responsibility of the project is of Farakka Barrage Project, only which is a Central Govt. Department under Ministry of Water Resources. The project is instrumental in meeting out the international obligation of sharing of water in Ganga and also Ministry of Shipping and Transport installation dependent on water in the feeder canal in addition to various power projects, drinking water schemes etc.
- 5.3 The Budget allocations for Farakka Barrage Project are given below:

Table - 20 : Budget allocations for Farakka Barrage Project

(Rs. in crore/gross)

Actual	BE	RE	BE
2011-12	2012-13	2012-13	2013-14
69.46	75.00	100.00	

5.4 The Plan allocation for 2013-14 is Rs.150.00 crore, which represents an increase of Rs.75.00 crore (or 50%) as compared to BE of 2012-13. When asked the reasons for the 50% increase in Plan expenditure for BE 2013-14, the Ministry in a written reply stated as under:-

"In the current financial year 2012-13, requirement of funds was Rs.125 crore, against which only Rs.75.00 crore were allocated in BE; which were not at all sufficient for making payment of works executed with the approval of Ministry of Finance. Hence, liability of more than Rs.40.00 crore created during 2012-13 also needs to be cleared during 2013-14. Further, the gates of Farakka Barrage being more than 40 years old, their replacement is essential for the safety of the barrage. The work of repair of gates has been undertaken and the same is in progress. Accordingly, total requirement in BE for Rs.150 crore is justified."

- 5.5 When asked whether any monitoring/evaluation work been carried out by the Ministry regarding the performance of the Farakka Barrage Project, the Ministry replied in the affirmative and stated that evaluation work has been carried out by independent agency.
- 5.6 When the Committee asked for details of findings of such monitoring/evaluation work carried out regarding the performance of Farakka Barrage Project, the Ministry also informed as under:-

"The evaluation of anti erosion (AE) works carried out by Farakka Barrage Project during X Plan was got done through DJRC, Bhubaneswar (D.J.Research & Consultancy Pvt. Ltd. Bhubaneswa). DJRC concluded that:

- a) AE works of Farakka Barrage Project have been largely successful in reducing erosion.
- b) Socio-economic impact of AE works has been positive.
- c) Technology used is appropriate and cost effective.
- d) Better planning/scheduling and adequate number of site supervisors personnel needs to be taken up, to upkeep for future interventions.

Further, the evaluation of works carried out by Farakka Barrage Project during XI Plan is under progress and outcome would be known little later."

Farakka Barrage Project

The Committee note that Farakka Barrage Project (FBP) was commissioned 5.7 in 1975 for preservation and maintenance of the Kolkata Port and for increasing the navigation depth of the Bhagirathi-Hoogly waterway. The main objective of the Project is operation and maintenance of Farakka Barrage and associated structures including anti-erosion measures for safety of barrage. A total Budget allocation of Rs.75.00 crore was made in 2012-13, which was increased to Rs.100.00 crore at RE stage. The Budget allocation for 2013-14 has been kept at Rs.150.00 crore which represents an increase of 50% for the current financial year as compared to BE 2012-13. Explaining the reason for increasing the Plan allocation for 50% during 2013-14, the Ministry stated that the requirement of funds in 2012-13 was Rs.125.00 crore against which only Rs.75.00 crore were allocated in BE which were not at all sufficient for making payment of works executed with the approval of Ministry of Finance. Hence, liability of more than Rs.40.00 crore created during 2012-13 also needs to be cleared during 2013-14. Further, the gates of Farakka Barrage being more than 40 years old, their replacement is essential for the safety of the barrage. The work of repair of gates has been undertaken and the same is in progress. The Committee also note that the evaluation of anti- erosion (AE) works was carried out by Farakka Barrage Project during X Plan through D.J.Research & Consultancy Pvt. Ltd. (DJRC), Bhubaneswar which concluded that (a) Anti-Erosion works of Farakka Barrage Project have been largely successful in reducing erosion (b) Socioeconomic impact of AE works has been positive (c) Technology used is appropriate and cost effective; and (d) Better planning/scheduling and adequate number of site supervisors personnel needs to be taken up to upkeep for future interventions. The

Farakka Barrage Project is an exclusively Central Govt. Project. The project is instrumental in meeting out the international obligation of sharing of water in Ganga and also Ministry of Shipping and Transport installation dependent on water in the feeder canal in addition to various power projects, drinking water schemes etc. The Committee desire that the Ministry should take necessary steps to ensure full utilization of the increased budget allocation of Rs.150.00 crore made for the Farakka Barrage Project during 2013-14. The Committee appreciate the concern of the Ministry that due to old age, the gates of Farakka Barrage need urgent replacement for which works are in progress and that the Project is instrumental in meeting out the international obligation of sharing of water in Ganga and also Ministry of Shipping and Transport installation dependent on water in the feeder canal in addition to various power projects, drinking water schemes etc. The Committee, therefore, would like the Ministry to carry out necessary works pertaining to maintenance, repair and replacement in regard to the gates and other structures of the Farakka Barrage so as to increase the usefulness and longevity of the Farakka Barrage. They would also expect speedy completion of evaluation of works carried out by the Farakka Barrage Project during XI Plan which is stated to be under progress.

CHAPTER VI

INITIATIVES IN NORTH-EAST

Brahmaputra Board

(a) Flood and Anti-Erosion Works

6.1 The Ministry informed that the Brahmaputra Board was constituted in 1980 with the objective of planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra and for matters connected therewith. Asked to what extent the objective of the Brahmaputra Board has been achieved specially with regard to integrated implementation of measures for control of flood and bank erosion, the Ministry submitted as under:-

"Implementation of flood management schemes falls under the domain of respective State Governments. Brahmaputra Board has so far carried out 'Survey & Investigations' and preparation of Master Plans in respect of 57 rivers - Main Stems of Brahmaputra river and Barak, tributaries of Brahmaputra and Barak rivers and Majuli Island. Out of the above, on obtaining approval of Ministry of Water Resources, Government of India, 49 Master Plans have been circulated among the concerned Water Resources Departments of States and others for implementation of recommendations of Master Plans. Brahmaputra Board, time to time, makes requests to all States of North Eastern Region, Sikkim and West Bengal falling in the Indian catchment of Brahmaputra river for according importance to implementation of recommendations and communicating status on implementation of measures recommended in the Master Plans. Broadly, Master Plans contain ameliorative measures for management of floods and river bank erosion and identification of drainage congestion areas in the catchments of the rivers. Onus of implementation of measures for management of floods, bank erosion and also improvement of drainage congestion lies entirely with the concerned State Governments."

6.2 When asked to state total amounts incurred by the Government of India on Flood Control and bank erosion till date through Brahmaputra Board, the Ministry informed that Rs 234.40 crore has been incurred up-to February 2013 on Flood Control and Anti-erosion

Works. The details regarding expenditure incurred on Flood Control and Anti-Erosion Works are at **Annexure - II**.

- 6.3 The Committee wanted to know the updated position of flood scenario in Assam and other NE States since the last 5 years including the extent of flood damage. To this query, the Ministry in a written reply submitted that extent of flood damage is assessed by respective State Government. However, average and maximum damages caused due to flood during 1953 to 2004 for the States in North Eastern Region including Assam (excluding Sikkim and North Bengal are available with Brahmaputra Board, and the Ministry has forwarded the information which is appended at **Annexure–III.**
- 6.4 Asked how far flood control measures by Brahmaputra Board have achieved amelioration of the Region from flood havoc, the Ministry submitted as under :-

"Flood and erosion protection schemes are planned, formulated and implemented by State Governments. Relief and 'Rehabilitation & Resettlement' measures for dislocated / affected persons on account of flood and erosion are undertaken by the respective State Governments.

As in other States of the country, in the States of NE Region also floods and erosion management measures are conceptualized, formulated and implemented by the State Government. However, Brahmaputra Board, on request of Government of Assam, has successfully completed flood and erosion protection measures at Nagrijuli on river Puthimari, for protection of Rangia town, Mukalmua and Barbhag area in the year 2009-10. Similarly, on request from Government of Nagaland, protection of Kushiabil, Durgajan and Nagarjan at Dimapur, Nagaland from erosion of river Dhansiri (south) was completed during 2005-06 and Antierosion scheme to protect Mao Colony, Kuki village and Assam Rifles Transit Camp Area at Dimapur from flood and erosion of river Dhansiri (south), Nagaland was completed during 2007-08.

Currently, on request of Water Resources Department, Government of Assam and on approval of Ministry of Water Resources, Brahmaputra Board has undertaken measures for (a) Protection of Majuli Island from flood and erosion and (b)

Restoration of original channels of Dibang and Lohit Rivers at Dhola-Hatighuli. Since implementation of measures for protection of Majuli Island from flood and erosion in the year 2004, the trend for loss of land mass of Majuli has not only been arrested but got reversed. Majuli has started regaining land mass. On implementation of measures for protection of Majuli Island from floods and erosion by Brahmaputra Board, since the year 2004, the land mass area of Majuli Island has increased from 502.21 sq km to 522.73 sq km in February 2013. Thus, apparently gain in area of land mass is of the order of 4%.

With regard to restoration of original channels of Dibang and Lohit Rivers at Dhola-Hatighuli, it is stated that one braided channel of Dibang has already been diverted to main river course at Bahbari with construction of Tie-Bund and agricultural activities, in a big way, have started on the countryside of tie-bund, constructed for diversion of braided channel. Similarly, with construction of retirement bund at Hatighuli, 11 villages at Dumduma Revenue Circle, Tinsukiain an area of about 1500 ha have got relief on account of flood and erosion. Currently, construction of Tie-Bund on another braided channel of Dibang is in progress and targeted to be completed well before onset of ensuing Monsoon. With successful completion of above, Dibang river will get diverted to its original channel.

Brahmaputra Board has also taken up preparation of Detailed Project Reports of Drainage Development Schemes in the State of Assam to mitigate flood in some drainage congested areas. Initially, 34 drainage-congested areas were identified in Brahmaputra and Barak basin. Subsequently, 7 more drainage-congested areas have been identified in the Brahmaputra basin. Thus total identified drainagecongested areas come to 41 based upon studies carried out under 49 approved Master Plans. Subsequently, on receipt of 'No objection' from the Government of Assam and on approval of Ministry of Water Resources, Brahmaputra Board has taken up execution of Drainage Development Schemes in the State of Assam. Execution of Harang Drainage Development Scheme has been completed in March, 2011. East of Barpeta Drainage Development Scheme has been completed in June, 2011 and handed over to State Government of Assam on 04.08.2012. Other 4 (four) Drainage Development Schemes- Barbhag, Amjur, Jengrai and Jakaichuk are in progress. The physical achievements attained under these schemes are 49.38%, 33%, 27% and 45.01% respectively. Singla Drainage Development Scheme was also taken up but due to non-availability of required land for execution as per requirement, alternative studies with changed scope of work for the schemes are in progress.

Apart from above, it is to be stated that Ministry of Water Resources, Government of India under Critical Flood Control & Anti-erosion scheme released Rs`146.2032 crore for execution of 74 schemes during X Five Year Plan to the NE states including Sikkim and part of West Bengal falling in Brahmaputra Basin. Similarly, during XI Five Year Plan, under Flood Management Programme (FMP) Rs`1063.580 crore was provided to execute 200 schemes for undertaking measures for management of flood, erosion and drainage congestion.

Brahmaputra Board was entrusted with responsibility of appraisal of schemes under FMP of Government of India, for implementation during 12th Five Year Plan. Out of 151 schemes received, 92 schemes have been cleared/recommended for clearance, 30 schemes were sent to Water Resources Departments for effecting modifications and 29 schemes sent to Chief Engineer, Brahmaputra and Barak Basin Organisation (B&BBO), Central Water Commission, Shillong. In respect of Schemes under FMP of Government of India for Assam, it is stated that 60 schemes were cleared/recommended for clearance, 4 schemes were sent to Water Resources Department, Government of Assam for effecting modifications and 23 schemes were sent to Chief Engineer (B&BBO), CWC for appraisal.

As per letter No 5/6/2012-RMCD/4756-4824 dated 30.11.2012, appraisal of Schemes under FMP of Government of India for North Eastern States is to be carried out by Chief Engineer (B&BBO), CWC, Shillong. Thus this responsibility now does not rest with Brahmaputra Board.

During XII Plan, the following 2 new erosion control schemes are planned to be implemented by Brahmaputra Board on completion of necessary formalities:

- Protection of Mankachar, Kalair-Alga from erosion of river Brahmaputra on international border with Bangladesh.
- Protection of Maslabari area from erosion of river Brahmaputra on International Border with Bangladesh."
- 6.5 The Ministry informed that Anti-erosion works at Dhola-Hatighuli were taken up by Brahmaputra Board in phases in 2003-04 to bring Lohit and Dibang rivers to their original courses. Phase-I, Phase-II and Phase-III of the works were completed by 2007-08 while Phase-IV works are presently under progress.

6.6 When asked to give an updated appraisal of physical and financial progress of antierosion works at Dhola-Hatighuli in Assam, the Ministry informed the Committee as under:-

"Brahmaputra Board took up the following works-

- (a) Phase-I (estimated cost Rs.10.47 crore) was completed in July 2004
- (b) Phase-II (estimated cost Rs. 5.22 crore) was completed in July 2004 at an expenditure of Rs.4.156 crore
- (c) Phase-III (estimated cost Rs.8.474 crore) was completed in July 2007 at an expenditure of Rs.8.58 crore
- (d) Physical progress of 73 % has been achieved under Phase-IV renamed as Restoration of rivers Dibang and Lohit to their original courses at Dhola-Hatighuli upto February 2013 against an expenditure of Rs.29.97 crore.

With regard to restoration of original channels of Dibang and Lohit Rivers at Dhola-Hatighuli, it is stated that one braided channel of Dibang has already been diverted to main river course at Bahbarion construction of Tie-Bund. Agricultural activities, in a big way, have started on the countryside of Tie-Bund, constructed for diversion of braided channel. Similarly, with construction of retirement bund at Hatighuli, 11 villages at Dumduma Revenue Circle in an area of about 1500 ha have got relief on account of flood and erosion."

- 6.7 The Committee were also informed that balance works of Phase-IV are being taken up and the Project is targeted for completion within the year 2013. Further, works are targeted for completion within the current working season.
- 6.8 When asked to comment on whether North Eastern Region can achieve total immunity from flood menace, the Ministry submitted as under :-

"The foremost among recommendations of Master Plan on Brahmaputra River is development of storage projects in the upper reaches. The development of storage projects in the upper reaches of Brahmaputra River cannot be substituted by other measures such as construction of embankments, river bank revetments, dredging of river bed, river training and other such measures. These measures are complementary to creation of storage projects, not substitutes, to manage flood and erosions and development of Water Resources Projects for economic prosperity of the region. Creation of reservoir projects is not getting its due

attention from the States. It is felt that the twin problem of flood and erosion can effectively be dealt with planning of water resources of the region, considering Brahmaputra and Barak Basin as one entity.

It cannot be categorically stated that NE Region can be provided total immunity to flood menace. With regular implementation of flood protection measures, damage on account of floods can be minimized appreciably.

The issues in the way of managing damage on account of flood and erosion are:-

- (i) High degree of uncertainty in meteorological and hydrological cycles as a result of climatic changes.
- (ii) Slow pace of implementation / Non-implementation of storage / reservoir projects in the upper reaches of Brahmaputra River.
- (iii) Indiscreet construction of embankments.
- (iv) Massive deforestation in the catchments.
- (v) Human interference in pursuit of rapid development jeopardising ecological balance."

(b) DPRs for Multipurpose Projects in NE Region

- 6.9 The Committee were informed that the Ministry / Brahmaputra Board has completed DPRs for 5 Multipurpose projects in the North-East region, viz. Siang Single Stage, Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram. The Committee noted that these Projects have been handed over to various organisations/agencies/State Government for execution.
- 6.10 When asked to provide the details of amounts incurred by the Government for each of the 5 Multipurpose projects till date, the Ministry in a written reply submitted as under:-

"The expenditure incurred by Brahmaputra Board on 'Survey & Investigation' and Preparation of Detailed Project Reports of Subansiri, Siang, Tipaimukh, Pagladiya and Bairabi Projects are Rs.10.64 crore, Rs.15.87 crore, Rs.4.88 crore, Rs.1.28 crore and Rs.0.35 crore respectively. NHPC also incurred an expenditure of Rs.1.53 crore on Bairabi Project. In addition, on Pagladiya Dam Project,

Brahmaputra Board has incurred an expenditure of Rs.25.54 crore on preconstruction (mainly creation of assets, organizational infrastructure, development of communication facilities, development of sites for 'Rehabilitation & Resettlement' of affected persons) .At present, Brahmaputra Board has been incurring monthly expenditure of Rs.3.35 lakh for engaging personnel for 'watch and ward' and protection of 956 ha of land acquired for the project, from unauthorized encroachment."

- 6.11 Asked further to give updated status of 5 Multipurpose projects, the Ministry informed the Committee that the Government of Mizoram has allotted the Bairabi dam Project for execution by M/S Sikaria Power Limited Kolkata on 10.08.2012. It has been intimated by Government of Mizoram that the Bairabi Project will be completed within 7 years. The work of Pagladiya dam project under execution in Brahmaputra Board is held up due to non-completion of Zirat survey. The detailed status is given under Point 75. The status of implementation of 4 Multipurpose Projects as received from the Ministry is at Annexure-IV.
- 6.12 When asked whether periodic monitoring is being made by the Government/Brahmaputra Board regarding the progress of work in respect of the above 5 Multipurpose Projects, the Ministry stated that as per advice of Parliamentary Standing Committee on Water Resources tendered in their 14thReport on 'Demands for Grants-2012-13, the concerned State Government/ Executing Agencies are requested to furnish the status periodically. The Ministry also further stated that details on progress of commissioning of 5 (five) projects are awaited from the implementing agencies.

(c) Pagladiya Dam Project

6.13 The Pagladiya Dam Project across Pagladiya River at Thalkuchi in Baska District, Assam was cleared by Central Government for implementation by Brahmaputra Board. The project envisages construction of 25 m high and 21 km long earth dam with concrete

spillway. The Project is planned for flood moderation to benefit an area of 40,000 ha,., irrigation to 54,160 ha. of agricultural land and incidental power generation of 3 MW. The project was taken up by Board in January, 2001 at an estimated cost of Rs.542.90 crore (subsequently in the year 2004 revised to Rs.1,069.40 crore). However, the work is held up due to various factors, and it is stated that the Project has been dropped during XII Plan. No Budget allocation has been made for the Project during financial year 2013-14.

- 6.14 When asked to give the amounts of funds so far released by the Central Government and Government of Assam for Pagladiya Dam Project till date, the Ministry informed that a total amount of Rs 49.17 crore has been released against Pagladiya Dam Project. An amount of Rs.23.63 crore was refunded to MoWR. In addition, an expenditure of Rs 1.28 crore has been incurred on 'Survey & Investigation'.
- 6.15 The Committee desired to know the bottlenecks that led to the Project being dropped during XII Plan when the Government informed the Committee during examination of Demands for Grants (2012-13) during XII Plan that the deadlock on Pagladiya Dam Project could be broken with the joint effort of Brahmaputra Board, State Government of Assam and BTC. To this query, the Ministry in a written reply stated as under:-

"Stalemate in execution of works under the Project is continued since beginning of construction of Pagladiya Dam Project. After completion of all necessary formalities for land acquisition, the District Administration had attempted to carry out the Zirat survey of the affected families with effect from 27.01.2004 in association with Brahmaputra Board. Brahmaputra Board provided all logistic support for the survey. But District Administration had been unable to start the survey due to stiff resistance from the Project Affected People.

The Chief Secretary, Government of Assam took a meeting with Senior Officials of Brahmaputra Board, Principal Secretary, Bodoland Territorial Council and Secretary, Water Resources Department, Government of Assam on 23.10.2009. As per decision taken in the meeting, an alternate site was proposed near Indo-

Bhutan border near Chowki. Reservoir submergence area with the dam site at the proposed location, extends well inside Bhutan territory, affecting the local population of Bhutan. The above (position) was informed to the Ministry of Water Resources, Government of India for taking up the issue with Government of Bhutan. The Ministry of Water Resources, Government of India felt that it would not be possible to justify the proposal for taking up with Ministry of External Affairs, Government of India, due to adverse impacts in Bhutan.

In view of the above, Brahmaputra Board explored the possibility of an alternate site in the upstream of Thalkuchi, confining the submergence within the Indian territory. No suitable alternative site in the upstream of Thalkuchi could be located.

With no immediate solution in sight, Brahmaputra Board in its meeting held on 2nd June 2011 decided to close all field formations, set up under Pagladiya Dam Project and relocated all regular employees under the Project.

During the initial years of implementation of Pagladiya Dam Project, Brahmaputra Board developed certain infrastructure, created assets and took over 956 ha of land from Water Resources Department, Government of Assam. Brahmaputra Board has engaged personnel for 'watch and ward' and protection of 956 ha of land acquired for the project from unauthorized encroachment, at the monthly expenditure of Rs.3.35 lakh.

In the 55th meeting of Brahmaputra Board held at Itanagar on 15 June 2012, Brahmaputra Board was advised to arrange a meeting with Water Resources Department, Government of Assam urgently and decide the issue by the 31 July 2012. In pursuance to above decision, Brahmaputra Board requested Secretary, Water Resources Department, Government of Assam. Water Resources Department, Government of Assam took up the issue vigorously with Bodoland Territorial Council, Kokrajhar.

Recently, Brahmaputra Board has received a Memo No: BTC/FC-14/2004/184 dated 22 November 2012 from Secretary, Bodoland Territorial Council, Kokrajhar. Bodoland Territorial Council has favoured for initiating mitigating measures for control of flood on three upstream tributaries - Pagladiya, Motonga and Kalanadi - in precedence for construction of Dam at Thalkuchi. Further, Bodoland Territorial Council has also observed that construction of Pagladiya Dam Project in Bodoland Territorial Council will not benefit to Bodoland Territorial Council but to Nalbari District."

6.16 Asked further whether no alternative mechanism been explored to revive and kickstart the Pagladiya Dam Project again by the Ministry, the Ministry informed as under :-

"Water Resources Department, Government of Assam, on receipt of above communication from Bodoland Teritorial Council requested Brahmaputra Board to undertake studies for mitigation measures for control of flood on three streams-Pagladiya, Motonga and Kalanadi and formulate a proposal. Formal decision of Government of Assam for abandoning development of Pagladiya is awaited."

(d) Protection of Majuli Island

- 6.17 On acceptance of request of Government of Assam, Ministry of Water Resources assigned protection of Majuli Island from flood and erosion to Brahmaputra Board. Bro Board started measures for protection of Majuli Island from flood and erosion since January, 2004. While Phase-I of the works are nearly complete, the Board is presently executing the Phase-II and Phase-III works combined together. The Committee were informed that the target date of completion of Phase-II and III works is March, 2014.
- 6.18 When asked to give updated status of physical and financial progress of works achieved in this regard till February 2013, the Ministry in a written reply submitted as under:-

"The details of Physical and Financial Progress achieved up to February 2013 is stated here under:

- Immediate measure (estimated cost Rs.6.22 crore) was completed in February 2005 at Rs.5.92 crore
- Phase-I of Majuli protection work for Rs.56.07 crore was completed in April 2011 at an expenditure of Rs. 53.40 crore
- Emergent measure (estimated cost Rs.4.9969 crore) was completed in September 2008 at Rs.4.62 crore
- Phase-II & III with estimated cost of Rs.115.99 crore are under execution
- Physical progress up to February 2013 is 52.34%
- Expenditure up to February 2013 is Rs. 60.71crore
- Overall expenditure till date is Rs.124.65Crore."

6.19 On being asked about the success achieved in protection of Majuli Island, the representatives of the Ministry replied during evidence as under:-

"I would submit that at the time of handing over the job to Brahmaputra Board, the total and mass area was 502 sq. km. Gradually, the land mass area started increasing and today, as per the satellite imagery, it has increased to 522 sq. km. So, we can say that during this period, about 20 sq. km. land mass area has increased."

6.20 The Ministry further informed in a written reply as under :-

"Since the year 2004, with regular implementation of anti-erosion/bank protection measures by Brahmaputra Board, the total area of Majuli Island has increased to 522.73 sq. km. (based on the Satellite Imagery of February, 2013). Thus, not only overall erosion has arrested, but in fact the trend has reversed favourably. Cumulative expenditure, since implementation of measures on protection of Majuli Island from flood and erosion till March, 2013 works out to Rs.129.41 crore."

Ground Water Assessment and Development in NE Region

- 6.21 The Ministry informed that the Central Ground Water Board (CGWB) is conducting scientific and technical studies for ground water assessment, development and management in the North-East (NE) region. Major achievements included in 2012-13 as informed by the Ministry are as under:-
 - Identification of Aquifer and data compilation and data gap assessment in 3550 sq. km. on 1:50,000 scale
 - Ground Water exploration at 14 locations
 - Geophysical studies at 38 locations
 - Water quality analysis: Basic analysis of 117 samples and 113 for heavy metals
 - Ground water regime monitoring of all the stations four times in the year
 - Establishment of additional 238 monitoring stations
 - Technical assistance to State Governments and various other institutions including defence establishments by way of short term investigations for selection of suitable tube well sites at 40 locations
 - Technical guidance for implementation of demonstrative artificial recharge projects in the States of Arunachal Pradesh and Nagaland

- Ground Water Resource assessment (as on 31.3.2011) of all the seven North-Eastern States."
- 6.22 When asked to give the Budget allocation under this head for North Eastern region, the Ministry furnished the information as under:-

Table – 21: Total budget allocation under CGWB for North Eastern Region

(Rs. in crore)

BE 2012-13	RE 2012-13	Exp. Upto Dec. 2012	BE 2013-14
30.00	30.00	06.49	40.00

- 6.23 When asked to furnish the measures being proposed for extension and expansion of works in NE region under CGWB, the Ministry stated that the Aquifer Mapping and Management program has also been taken up in the North Eastern States as part of ongoing scheme with in-house facilities, machinery and equipment. The activities will be enhanced once the EFC proposal on GWM&R scheme of XII Plan is appraised and approved.
- 6.24 Asked further to comment on the response of NE States to the activities of CGWB in NE region, the Ministry submitted as under :-

"CGWB implements various programmes in close coordination with all the seven States. The ground water issues of these States are solved jointly. CGWB has been providing timely technical guidance to the NE States at their request, especially in areas of ground water resource estimation, site selection for tubewell, chemical quality monitoring and artificial recharge projects."

6.25 Regarding the updated status of enactment of roof-top rain water harvesting among NE States, the Ministry further informed that only two States, Nagaland and Tripura, have made roof top rain water harvesting compulsory in the NE region. Nagaland has made provision for roof top rainwater harvesting compulsory for all new Government buildings. In Tripura, rain water harvesting is mandatory in all new buildings having plinth area of more than 300 sq. mtr for all types of uses and in group housing of any size.

North Eastern Water Resources Authority (NEWRA)

- 6.26 The Ministry informed that after declaration made by the Hon'ble Prime Minister regarding formation of North Eastern Water Resources Authority (NEWRA) in November 2004, the guidelines for constitution of NEWRA as a basin level authority for overall development of Water Resources in the North Eastern Region was prepared by Ministry of Water Resources. The main objectives of NEWRA are mentioned as below:
 - i. To establish an autonomous, self-contained entity which will be the instrument for comprehensive development of water resources of the North-Eastern region.
 - ii. Expeditious implementation of projects to enable:
 - a. Effective flood control
 - b. Generate electricity (Hydropower to start with)
 - c. Irrigation development
 - d. Development of other related facilities e.g. navigation, tourism and communication
 - e. Take up problems of the river basin for solutions, e.g. erosion; drainage etc.
 - iii. To serve as an entity to organize quick approvals, and effective coordination with concerned departments and ministries for expeditious development.
 - iv. To be able to pool resources to be invested in the region for equitable development.

- 6.27 When asked about proposed organizational structure of NEWRA, the Ministry replied that NEWRA is envisaged as a developmental and promotional body for comprehensive Water Resources development which will accelerate the economic development of the North East region. Headed by Chairman (of the level of Secretary to Government of India) and members for five wings viz. namely Water, Power, Environment, Navigation and Finance & Administration. For involvement of States and stakeholders in the decision making to guide effective functioning of NEWRA, a three tier system has been proposed as under:-
 - A high powered committee headed by the Prime Minister, Chief Ministers of the concerned states as members, to approve major policy issues.
 - A committee to approve major programmes for execution by NEWRA, which include concerned state Ministers and Chief Secretaries of the NE States.
 - Advisory bodies consisting of senior officers, stakeholders' representatives and experts.
- 6.28 The Ministry also informed that Sub offices would be opened in States where major projects are taken starting with a sub office at Itanagar (Arunachal Pradesh); the hydro power wing of NEWRA can be located at Itanagar. The set up of the authority, therefore, will be representative in character so that ownership of the states is identifiable. The existing Brahmaputra Board may be subsumed within the proposed NEWRA, or can function as a separate unit.
- 6.29 The Ministry also informed that authority is to be an autonomous entity vested with appropriate legislative legitimacy through a central act to enable to function as an effective developmental authority. It will also coordinate the activities of various central, state and other concerned organisations operating in the water resources and related sectors e.g. Agriculture, Industry, Fisheries, Public Health, Tourism etc. which will include (i) empowerment proposed for NEWRA Techno-economic Clearance of projects; (ii)

clearance of projects from environmental and forests angle; (iii) empowerment for hydropower/multipurpose projects; and (iv) to take up promotion and operation of the projects for generation, transmission and distribution of electric energy and accord clearances.

6.30 When asked the reasons for delay in formulation of Guidelines for NEWRA, the Ministry informed as under :-

"The consensus towards constitution of NEWRA has not been arrived amongst North Eastern States due to the reservations of the State of Arunachal Pradesh. The Central Government has taken up the matter with the State Government of Arunachal Pradesh from time to time to expedite their views on NEWRA. During the 6th High Powered Review Board Meeting of Brahmaputra Board under Chairmanship of Minister (Water Resources) held in January, 2012 at Guwahati, the representative of State Government was also requested to expedite the State Government's comments on NEWRA. The State Government of Arunachal Pradesh has been requested in August 2011, November 2012 and March 2013 to expedite their views. However, the response of Government of Arunachal Pradesh is still awaited."

Proposed dams on Brahmaputra River by China

- 6.31 The Minister of Water Resources informed the Parliament on 4.3.2013 that recently released 'Outline of the XII Five Year Plan for National Economic and Social Development of the People's Republic of China' indicates that three more hydropower projects on the main stream of the Brahmaputra River in Tibet Autonomous Region have been approved for implementation by the Chinese authorities.
- 6.32 The Committee desired to know from the Ministry whether this step by China would adversely affect the flow volume of water of Brahmaputra River. To this, the Ministry in a written reply stated as under:-

"Recently released 'Outline of the XII Five Year Plan for National Economic and Social Development of the People's Republic of China' indicates that three more hydropower projects on the main stream of the Brahmaputra River in the Tibet Autonomous Region have been approved for implementation by the Chinese Authorities. As these projects are considered to be Run of the River (RoR) hydroelectric projects, any significant change on the quantity of flow of water of Brahmaputra River is not expected."

6.33 When asked further what action the Government has taken/ proposed to be taken to meet this action by China, the Ministry submitted as under :-

"Government of India keeps a constant watch on all developments in the region having bearing on India's interest and takes necessary measures to protect them.

As a lower riparian States with considerable established user rights to the waters of the river, India has conveyed its views and concerns to the Chinese Authorities, including at the highest levels of the Government of the People's Republic of China. India has urged China to ensure that the interest of downstream States is not harmed by any activities in upstream areas."

- 6.34 When the Committee asked whether the Government has proposed to enter into any bilateral water sharing treaty with China in this regard, the Ministry replied that Government of India has no such proposal to enter into any bilateral water sharing treaty with China at this moment.
- 6.35 When the Committee asked whether the Government is monitoring the volume of flow Brahmaputra river by using satellite imageries, the Ministry in a written reply stated as under:-

"The flow volume of Brahmaputra river using satellite imageries is not presently being monitored. However, Central Water Commission (CWC) maintains Gauge and Discharge (G&D) sites near international border at Tuting and Passighat on River Siang in Arunachal Pradesh to monitor the volume of water flowing from Brahmaputra."

Optimum utilization of Brahmaputra water

6.36 The Committee observed that substantial water of Brahmaputra river flows in the Bay of Bengal without its proper usage. In this context, the Committee desired to know whether any project has been conceived by the Ministry for optimum utilization of the water of Brahmaputra river. The Ministry replied as under:-

"Yes, the approved Master Plan of Brahmaputra Main Stem has identified storage reservoirs on all major tributaries with multiple benefits. These Projects, on implementation, will utilise the water of Brahmaputra to a large extent and accordingly contribute significantly in economic prosperity of the region in particular."

6.37 On a further question whether any study has been undertaken to explore the possibility of utilization of Brahmaputra water in other areas of the country, the Ministry informed as under:-

"National Water Development Agency (NWDA) has conducted studies on 'River Linking Projects'".

Flood and Anti-Erosion Works

6.38 The Committee observe that annual floods have brought untold miseries and damages in the North Eastern Region (NER) which led to losses to the tune of Rs.753.03 crore in Assam (2002), Rs.505.57 crore in Arunachal Pradesh (2004), Rs.210.34 crore in Meghalaya (2004), Rs. 51.81 crore in Manipur (1986), Rs.19.30 crore in Mizoram (1997), Rs.19.55 crore in Nagaland (1993) and Rs.80.05 crore in Tripura (1993). The damages caused in terms of affected area and population and loss of human lives as furnished by the Ministry are also considerable. In this regard, the Committee note that the Brahmaputra Board was constituted in 1980 with the objective of planning and integrated implementation of measures for

control of floods and bank erosion in Brahmaputra and for matters connected therewith. The efforts of Brahmaputra Board resulted in preparation of 57 Master Plans covering main stem of Brahmaputra river and Barak, tributaries of Brahmaputra and Barak rivers and Majuli Island out of which 49 Master Plans have been circulated among the concerned Water Resources Departments of States and others for implementation of recommendations of Master Plans. The Committee also note 105 that a total amount of Rs. 234.40 crore has been incurred up-to February 2013 on Flood Control and Anti-erosion Works by the Brahmaputra Board. The Committee observe that there is no uniformity of coverage of period in the data furnished by the Ministry regarding flood damage in NE Region and, therefore, the Committee urge the Ministry to ensure that the updated year-wise data and information regarding annual floods havoc in different States of the North East Region falling under the jurisdiction of Brahmaputra Board are compiled and submitted to the Committee. The Committee also desire that the balance works pertaining to 4 Drainage Development Schemes (DDS) - Barbhag, Amjur, Jengrai and Jakaichuk should be completed within a specified timeframe. The Committee would like Ministry to vigorously pursue with the Brahmaputra Board for taking up two new erosion control schemes namely, protection of Mankachar, Kalair-Alga and Maslabari area for controlling erosion of river Brahmaputra both of which are located on international border with Bangladesh. Also noting that the North Eastern Region of the country being in downstream of Brahmaputra river, faces a lot of problem, the Committee, therefore, strongly feel that there is an urgent need for scientific assessment of the erosion problem and for devising sutiable mechanism to address the same. The Committee further urge the Ministry to pursue with the States and Brahmaputra river and its tributaries so that amelioration from annual flood and erosion damange may be achieved in the North East Region.

Committee would like to be apprised of further action taken on the above points at the earliest.

DPRs for Multipurpose Projects

6.39 The Committee observe that DPRs for 5 Multipurpose projects in the North-East Region, <u>viz.</u> Siang Single Stage, Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram have been completed and these projects have been handed over to various organisations/agencies/State Governments for execution. The Committee desire for close monitoring of these projects to ensure its completion within the stipulated period of time. The Committee would also like to be apprised of the status of the projects after ascertaining the same from the State governments / executing agencies.

Pagladiya Dam Project

6.40 The Committee observe that the Pagladiya Dam Project (Assam) across Pagladiya River at Thalkuchi in Baska District, Assam was cleared by the Central Government for implementation by Brahmaputra Board. The project was taken up by the Board in January 2001 at an estimated cost of Rs.542.90 crroe. The Committee were apprised that due to various factors the work of the dam has been held up and the project dropped from the XII Plan. The Committee also note that the Brahmaputra Board has been making efforts exploring alternative site but without success. The Committee urge that the Ministry to continue consultation with the Government of Assam, Brahmaputra Board and Bodoland Territorial Council so that the bottlenecks and find out workable solution is found so that the project could see the light of the day in the foreseeable feature.

Protection of Majuli Island

6.41 The Committee observe that the Ministry of Water Resources, on acceptance of the request of the Government of Assam had assigned protection of Majuli Island from flood and erosion to the Brahmaputra Board. The Board initiated major protection since January 2004 and target date of the completion of Phase-II and Phase-III works is March, 2014. The Committee are happy to know that due to the regular implementation of anti-erosion/bank protection measures, the total area of Majuli island has increased to 522.73 sq.km in February, 2013 compared to 502 sq.km in 2004. The total expenditure incurred till March, 2013 works out to Rs.129.41 crore. The Committee would recommend the Ministry to continue to keep a vigil on the protection works being carried out in Majuli Island and ensure that the target set for completion of Phase-II and III works is achieved in March, 2014. The Committee would like to be informed of the progress made in this regard.

Ground Water Assessment and Development

6.42 The Committee observe that the Central Ground Water Board (CGWB) is conducting scientific and technical studies for ground water assessment, development and management in the North-East (NE) region. The Committee note that a Budget allocation of Rs.30.00 crore was made for Central Ground Water Board (CGWB) in 2012-13 for North Eastern Region. However, the actual expenditure of Budget allocation upto December, 2012 was shown to be only Rs.6.49 crore. The Budget allocation for the year 2013-14 has been kept at Rs.40.00 crore. The fact that only Rs.6.49 crore out of a total Budget allocation of Rs.30.00 crore has been incurred by December, 2012 by CGWB reveal that the implementation of Schemes on ground water assessment and development in the

North Eastern Region has been far from satisfactory. Noting that aquifer mapping and management programme has been taken up for implementation during XII Plan and that some progress has been made on rain water harvesting with two States viz. Nagaland and Tripura taking steps for mandatory rain water harvesting in their States, the Committee desire the Ministry and Central Ground Water Board to intensify measures for ground water assessment, development and management in the North Eastern States so that tangible results will be achieved on the ground water front in the near future. They would like to be apprised of further progress achieved in this regard.

North Eastern Water Resources Authority

6.43 The Committee note that the Ministry propose to constitute a basin level authority named North Eastern Water Resources Authority (NEWRA) for overall development of Water Resources in the North Eastern Region. The Authority will be a developmental and promotional body for comprehensive water resources development which will accelerate the economic development of North East Region. The Committee also note that the authority is to be an autonomous entity which will also coordinate the activities of various Central, State and other concerned organisations operating in Water Resources and related sectors. As regards the delay in constitution of NEWRA, the Committee has been informed that the delay is due to the fact that consensus has not been arrived amongst the States of North Eastern Region due to reservations of the State of Arunachal Pradesh for which the Ministry has taken up some measures. The Committee observe that NEWRA once becomes operational will be a great prospect for economic transformation of the entire North Eastern Region especially in Water Resources related spheres viz. to provide effective flood control, generate electricity, provide

irrigation facility and develop infrastructure. The Committee, therefore, recommend that the Ministry should persuade Arunachal Pradesh for arriving at early consensus in the matter to speed up the process of constitution of NEWRA including formulation of guidelines for this authority.

Proposed Dams on Brahmaputra River by China

The Committee note that the Government informed the Parliament on 4 March, 2013 that three more hydropower projects on the mainstream of the Brahmaputra river in the Tibet Autonomous Region have been approved for implementation by the Chinese authority. Dispelling the concern of the Committee about the likely adverse impact due to the proposed dams on the flow volume of water of Brahmaputra river, the Ministry has stated that since these projects are considered to be Run of the River (RoR) hydroelectric projects, any significant change on the quantity of flow of water of Brahmaputra river is not expected. The Committee has also been informed that India has conveyed its views and concerns to the Chinese authorities including at the highest levels of the Government of the People's Republic of China urging China to ensure that the interest of downstream States is not harmed by any activities in upstream areas. The Government also further informed that it is keeping a constant watch on all developments in the region bearing on India's interest and taking necessary measures to protect them while at the same time admitting that the flow volume of Brahmaputra river using satellite imageries is not presently being monitored. Mindful of the paramount need for ensuring the flow volume of the Brahmaputra river for the economic sustainability of entire north east region, the Committee hope that Government would spare no efforts for achieving the same. The Committee therefore urge the

Government to intensify its vigil on the proposed activity of China on the Brahmaputra river. The Committee would like to be apprised of further development in the matter.

Optimum Utilisation of Brahmaputra Water

6.45 The Committee observe that substantial water of Brahmaputra river flows in the Bay of Bengal as it could not be stored due to lack of reservoirs. The Committee note that the approved Master Plan of Brahmaputra Main Stem has identified storage reservoirs on all major tributaries with multiple benefits. These Projects, on implementation, will utilise the water of Brahmaputra to a large extent and accordingly contribute significantly in economic prosperity of the region in particular. The Committee recommend the Ministry to prepare a detailed execution plan for construction of storage reservoirs on the all major tributaries as have been identified by the Brahmaputra Board and ensure its completion in a fixed time frame so that optimal usage of Brahmaputra River water could bring prosperity in the North Eastern Region. The Committee also desire the Ministry to explore the possibility of utilization of Brahmaputra water in other areas of the country through 'River Linking Projects'.

NEW DELHI 23 April, 2013 03 Vaisakha, 1935 (Saka) DIP GOGOI, Chairman, Standing Committee on Water Resources

MAIN HIGHLIGHTS OF THE REVISED NATIONAL WATER POLICY (2012)

- Emphasis on the need for a national water framework law, comprehensive legislation for optimum development of inter-State rivers and river valleys, amendment of Irrigation Acts, Indian Easements Act, 1882, etc.
- 2. Water, after meeting the pre-emptive needs for safe drinking water and sanitation, achieving food security, supporting poor people dependent on agriculture for their livelihood and high priority allocation for minimum eco-system needs, be treated as economic good so as to promote its conservation and efficient use.
- 3. Ecological needs of the river should be determined recognizing that river flows are characterized by low or no flows, small floods (freshets), large floods and flow variability and should accommodate development needs. A portion of river flows should be kept aside to meet ecological needs ensuring that the proportional low and high flow releases correspond in time closely to the natural flow regime.
- 4. Adaptation strategies in view of climate change for designing and management of water resources structures, review of acceptability criteria and increasing water storage have been emphasized.
- 5. A system to evolve benchmarks for water uses for different purposes, i.e., water footprints, and water auditing be developed to ensure efficient use of water. Project financing has been suggested as a tool to incentivize efficient & economic use of water.
- 6. Setting up of Water Regulatory Authority has been recommended. Incentivization of recycle and re-use has been recommended.

- 7. Water Users Associations should be given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and maintain the distribution system in their jurisdiction.
- 8. Removal of large disparity in stipulations for water supply in urban areas and in rural areas has been recommended.
- 9. Water resources projects and services should be managed with community participation. Wherever the State Governments or local governing bodies so decide, the private sector can be encouraged to become a service provider in public private partnership model to meet agreed terms of service delivery, including penalties for failure.
- 10. Adequate grants to the States to update technology, design practices, planning and management practices, preparation of annual water balances and accounts for the site and basin, preparation of hydrologic balances for water systems, and benchmarking and performance evaluation.

EXPENDITURE INCURRED ON FLOOD CONTROL AND ANTI-EROSION WORKS

(Rs. in crore)

		Progressive
Item	Name of the Scheme	Expenditure
No	Name of the Scheme	
INO		upto February'13
72 (ii)	Flood control and Anti-erosion Work	
	A) Protection of Majuli Island	
	a) Immediate measure	5.92
	b) Phase -I	53.40
	c) Emergent work	4.62
	d) Phase - II & III	60.71
	Sub-total	124.65
	B) Avulsion of river Brahmaputra at Dhola	
	a) Phase - I	10.47
	b) Phase -II	4.16
	c) Phase - III	8.58
	d) Phase - IV	29.97
	Sub-total	53.18
	C) Protectin of Nagrijuli, Rangia town etc.	4.29
	D) Kushiabil	2.39
	E)Execution of Drainage Development	
	Schemes	
	a) Harang	30.45
	b) East of Borpeta	2.70
	c) Barbhag	4.58
	d) Amjur	11.80
	e) Others	2.68
	Sub - total	52.21
	Grand Total	234.40

AVERAGE AND MAXIMUM DAMAGES CAUSED DUE TO FLOOD DURING 1953 TO 2004 FOR THE STATES IN NORTH EAST REGION

State	Average/ Maximum/ Year	Area affected (m.ha.)	Population affected (Million)	Human lives lost (Numbers)	Total damages (Rs in crore)
Assam	Average	0.860	2.571	41	80.136
	Maximum	3.82	12.298	251	753.03
	(Year)	(1988)	(2004)	(2004)	(2002)
Arunachal	Average	0.032	0.069	9	36.971
Pradesh	Maximum	0.207	0.510	47	505.57
	(Year)	(2003)	(1993)	(1993)	(2004)
Meghalaya	Average	0.009	0.209	4	9.315
	Maximum	0.095	4.77	25	210.34
	(Year)	(1987)	(1983)	(1985)	(2004)
Manipur	Average	0.017	0.057	2	3.285
	Maximum	0.080	0.730	7	51.81
	(Year)	(1989)	(1989)	(1980)	(1986)
Mizoram	Average	0.006	0.003	15	2.189
	Maximum	0.541	0.053	172	19.30
	(Year)	(1993)	(1976)	(1993)	(1997)
Nagaland	Average	0.001	0.019	10	1.586
	Maximum	0.009	0.176	133	19.55
	(Year)	(1993)	(1993)	(1953)	(1993)
Tripura	Average	0.033	0.128	6	7.211
	Maximum	0.330	0.70	54	80.05
	(Year)	(1963)	(1984)	(1984)	(1993)
Sikkim	Average	0.061	0.017	10	5.075
	Maximum	1.17	0.100	107	28.42
	(Year)	(2000)	(1983)	(1983)	(1988)
West	Average	0.834	3.847	194	293
Bengal	Maximum (Year)	3.080 (1978)	21.80 (2000)	2730 (1968)	5660.00 (1995)

STATUS OF IMPLEMENTATION OF 4 MULTIPURPOSE PROJECTS IN NORTH EAST REGION

SI. No.	Current status of commissioning	Plan ahead to complete commissioning
1	Subansiri Projects (Arunachal Pradesh):	
а	Subansiri Lower:	
	Various organizations of Assam started agitation/protest against the construction of Preoject under apprehension of Downstream Impact of the Dam. Presently, KMSS (Krishak Mukti Sangram Samiti) along with 26 other groups of Assam has launched agitation since 16.12.2011 against the construction of Subansiri Lower HE Project, raising issues of safety of Dam and its downstream impact. The agitation is also being supported by AASU (All Assam Student Union). The activists had blocked all approach roads to the project. The barricades installed were removed and CRPF/Assam Police have been deployed at all vulnerable locations of Dhemaji and North Lakhimpur district all along National Highway and Gogamukh-Gerukamukh project road. Although, construction materials and project components (HM and E&M) have been taken to project under police escort, normalcy at site is still wanting and the conducive atmosphere for execution of the work has not been created. The work is now stand still for more than ten months. The stoppage of works has led to slippage of physical and financial targets of the project.	High level meeting between MoP, Govt. of India and State Govt. of Assam has been requested for resolving the issue. Dialogues with agitating groups are going on for early settlement of the issues. After ongoing agitation is withdrawn, a period of 2-3 months shall be required by the contractors for remobilization of manpower and further hindrance free period of approx. 4 1/2 years shall be required for completion of the balance work.
b	Subansiri Middle :	-
	Handed over to M/s Jindal Power Limited on 04.02.2011	
С	Subansiri Upper :	-
	Handed over to M/s. KSK Energy	

2	Siang (Arunachal Pradesh) :	
а	Siang Middle (Siyom) :	-
	Yet to be allotted.	
b	Siang Lower: Handed over to M/s Jai Prakash Associates Ltd. (JAL) on 31.03.2009	-
С	Siang Upper :	-
	Yet to be allotted.	
3	Dibang Multipurpose Project, 3000 MW, Arunachal Pradesh	
	The project was allocated to NHPC on 08.08.2001, Concurrence to the project was accorded by CEA on 23.01.2008. Defence Clearance to the project has been obtained on 30.12.2010.	NHPC is pursuing the matter with GoAP for early Public Hearing NHPC is pursuing with MoEF Regional Office, Shillong to get the site inspection
	For Environment Clearance, Public Hearing is required to be conducted prior to clearance. However till date State Pollution Control Board has not able to conduct the Public Hearing due to law and order situation in the district. NHPC is pursuing with State Govt. to get the Public Hearing conducted at the earliest.	carried out at the earliest
	Regarding Forest clearance, Application for diversion of 5056.5 ha forest land was forwarded by the State Govt. to MOEF on 18.08.2011. MOEF vide letter dated 14.09.2011 requested the Regional Office (North Eastern Zone) to carry out site inspection of the project area.	
4	Tipaimukh Multipurpose Project, 1500 MW, Manipur	
	Status of formation of JVC:	
	MoU and Promoters Agreement between NHPC, SJVNL and Govt. of Manipur signed on 28.04.2010 & 22.10.2011 respectively of 69%, 26% and 5% by NHPC, SJVNL and GOM respectively.	
	Nomination of Directors and other related information from JV partners, NHPC, SJVNL and Govt. of Manipur sought in connection with registration formalities has been received.	

Draft Memorandum of Association (MoA) & Articles of Association (AoA) have been finalized.

Approval of Ministry of Power has been sought on 30.10.2011 for incorporation of the JV Company under Companies Act, 1956, as the equity participation of NHPC in the JV Company would exceed the investment limit of Rs. 500 crores, being beyond delegated poweres of MiniRatna Category I companies in Joint ventures. Approval awaited.

Concerns raised by Bangladesh

Tiapimukh Hydroelectric Project is being regarded with extreme sensitivity in Bangladesh which could have implications on India Bangladesh relations. Apprehensions regarding Tipaimukh Hydroelectric Project expressed in Bangladesh suggest that the project would be effective in containing floods in Bangladesh only during average/moderate monsoon flows, impact the ecosystem and lead to loss of riverine habitat and species; reduce flow of nutrient rich soil; result in high downstream erosion and thereby increase overall deposition in Surma-Kushiyara river system inside Bangladesh; increase risks of a catastrophe from a possible dam burst for populations in the downstream etc.

On the invitation of MEA, GoI to visit Tipaimukh Project site, Senior Editors/Journalists from Bangladesh had an aerial visit of Tiapaimukh dam site on 06.06.2012. The familiarization visit was aimed at enhancing mutual understanding between India and Bangladesh on the crucial issues of Water and Energy Security.

The first meeting of the Subgroup under India-Bangladesh Joit Rivers Commission for joint study as per agreed Terms of Reference (TOR) on Indian proposed Tipaimukh Hydroelectric (Multipurpose) Project was held in New Delhi on 27-28 August, 2012. The meeting after detailed discussion finalized the Terms of Reference with a view to conducting the joint study.

Status of Environment Clearance

Environment clearance accorded by MoEF vide letter dated 24.10.2008 in favour of NEEPCO. The same is required to be transferred in favour of the JVC after its formulation.

Discussions on the project are being held regularly between Govt. of India & Govt. of Bangladesh to sort out the issues.

Status of Forest clearance

Forest clearance is yet to be accorded by MoEF. The diversion of forest land for Tipaimukh Project involves 24,329.10 ha land having 78,16,931 trees and 27,000 culms.

Manipur

Application for diversion of forest land falling in Manipur was submitted to State Govt. for diversion of 22777.50 ha of forest land falling in Manipur.

Forest proposal was submitted by State Govt. to MoEF on 31.05.2011.

Forest proposal was discussed by FAC on 12.01.2012.

It was decided to form a subcommittee of FAC along with domain experts in the field of ecology, wildlife, hydrology to visit site to make an on the spot assessment of the impacts likely on flora, fauna & socio economic conditions of local residents. The subcommittee is also to suggest appropriate measures including reduction in dam height to minimize requirement of forest land for the project. Further action on the FAC recommendations by MoEF is awaited.

Constitution of sub-committee is under progress by MoEF. After constitution of sub-committee, the same shall visit the site.

Mizoram

Application for diversion of 1551.30 ha of forest land falling in Mizoram was submitted to State Govt. of Mizoram on 14.03.11.

Forest proposal was submitted by State Govt. to MoEF on 07.10.2011. The proposal is pending in MoEF since then.

CCF, North Eastern Regional Office, MoEF, Shillong has proposed to hold discussions on the proposal for diversion of land in Mizoram with Project proponents and concerned forest officials (CF/CCF (Territorial) of the area). The scheduled date

Mop and NHPC is pursuing with MoEF for formation of sub committee of FAC and site inspection by Regional Office.

of discussion is yet to be received.

Concurrence by CEA/PIB recommendation

CEA on 02.07.2003 accorded concurrence to the project.

The proposal for the project was recommended by PIB in its meeting held on 31.01.2006 for consideration of Cabinet Committee on Economic Affairs (CCEA).

However, the proposal for the project would require resubmission for consideration of PIB after receipt of all statutory clearances and transfer of TEC in favor of JV.

Status of approach road to the Tipaimukh Project site

The Project area is quite inaccessible, improvement of existing road from Jiribam to Tipaimukh village around 100 km (Monbahadur road), construction of new approach road to Tipaimukh via Tuirial and construction of bridges is required for the project. All major equipments have to be transported from Guahati-Silchar-Jiribam-Tipaimukh by rail/road.

At present the project site is approachable only through NH-150 from Imphal-Churachandpur-Parbum-Tipaimukh, the distance is approx. 325 kms. The distance between Jiribam and Imphal is approx. 220 kms.

Security

Security is of prime importance. Static deployment of security forces at project site and dedicated escorts for travel and logistical services has to be provided form commencement of any project activity.

MINUTES OF THE SEVENTH SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES (2012-13) HELD ON THURSDAY, 04 APRIL 2013

The Committee sat from 1100 hours to 1300 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Dip Gogoi – Chairman

MEMBERS

LOK SABHA

- 1. Shri Kameshwar Baitha
- Shri Kamlesh Balmiki
- 3. Dr. Mahendrasinh P. Chauhan
- 4. Smt. Shruti Choudhry
- 5. Shri Manikrao Hodlya Gavit
- 6. Shri Haribhau Jawale
- 7. Shri Mangani Lal Mandal
- 8. Shri Abhijit Mukherjee
- 9. Shri Kabindra Purkayastha
- 10. Shri Konakalla Narayana Rao
- 11. Shri S.P.Y. Reddy
- 12. Shri Arjun Roy
- 13. Shri Rakesh Sachan
- 14. Dr P. Venugopal
- 15. Shri Sajjan Verma

RAJYA SABHA

- 16. Shri Balwinder Singh Bhunder
- 17. Smt. Vandana Chavan
- 18. Shri Anil Madhay Dave
- 19. Shri Kumar Deepak Das
- 20. Dr Gyan Prakash Pilania
- 21. Shri A.V. Swamy

SECRETARIAT

1. Shri Devender Singh - Joint Secretary

2. Shri R.C. Tiwari - Director

3. Smt. Rita Jailkhani - Additional Director

REPRESENTATIVES OF THE MINISTRY OF WATER RESOURCES

1. Dr S.K. Sarkar, Secretary, MoWR

- 2. Shri G. Mohan Kumar, Special Secretary (WR)
- 3. Shri N.K. Mathur, Commissioner (Ganga)
- 4. Shri Narender Kumar-II, Commissioner (B&B)

At the outset, the Chairman welcomed the Members to the sitting of the Committee. The Chairman then welcomed the representatives of the Ministry of Water Resources to the sitting of the Committee convened to consider and examine the "Demands for Grants 2013-14" of the Ministry of Water Resources.

- 2. After the introduction, the Secretary, Ministry of Water Resources briefed the Committee on the subject. Thereafter, highlights of the "Demands for Grants 2013-14" were explained to the Members through a power point presentation. The Members sought clarifications on various issues to which the representatives replied. The major concerns raised during discussion included the following:
 - (i) Need for enhancement of allocation in RRR;
 - (ii) Realistic budgetary projections to avoid huge unspent balances particularly in Plan Sectors;
 - (iii) Requirement of early approvals of the Scheme;
 - (iv) Uncertain fate of Pagladia Dam;
 - (v) Protection of Majuli Island;
 - (vi) Flood and erosion management of Brahmaputra Board.
 - (vii) Need effective border rivers management to contain waters flowing from Nepal and Bhutan;
 - (viii) Need for more Minor Irrigation Schemes;
 - (ix) Earmarking of available ground water for different usage;
 - (x) Expenses incurred on creation of irrigation potential under Bharat Nirman; and
 - (xi) Utilisation of funds in AIBP and other projects.

3. The Committee asked the Secretary, Ministry of Water Resources, to furnish written replies to queries raised by Members during the sitting which could not be replied by the representatives orally.

The witnesses then withdrew.

4. A copy of the verbatim proceedings of the sitting was kept for record.

The Committee then adjourned.

MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES HELD ON WEDNESDAY, 17 APRIL, 2013

The Committee sat from 1500 hours to 1545 hours in Private Dining Room (PDR), Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Dip Gogoi – Chairman

MEMBERS

LOK SABHA

- 2. Shri Kamlesh Balmiki
- 3. Dr. Mahendrasinh P. Chauhan
- 4. Shri Haribhau Jawale
- 5. Shri Mangani Lal Mandal
- 6. Shri Kabindra Purkayastha
- 7. Shri S.P.Y. Reddy
- 8. Dr. P. Venugopal

RAJYA SABHA

- 9. Shri Balwinder Singh Bhunder
- 10. Shri Kumar Deepak Das
- 11. Shri B.S. Gnanadesikan
- 12. Dr. Gyan Prakash Pilania
- 13. Shri A.V. Swamy

SECRETARIAT

- 1. Shri Devender Singh Joint Secretary
- 2. Shri R.C. Tiwari Director

At the outset, the Chairman welcomed the Members to the sitting of the Committee convened for consideration and adoption of draft Report on 'Demands for Grants' (2013-14) pertaining to the Ministry of Water Resources and highlighted the gist of the major recommendations contained in the draft Report.

- 2. Thereafter, the Committee took up the draft Report on 'Demands for Grants (2013-14)' pertaining to the Ministry of Water Resources for consideration. During deliberation, Hon'ble Members suggested for inclusion of the following points in the draft Report:
 - (i) All pending issues/concerns raised by the States be addressed and thereafter, the Dam Safety Bill may be introduced in the Parliament for enactment expeditiously (Para No. 2.66); and
 - (ii) Also noting that the North Eastern Region of the country being in downstream of Brahmaputra river, faces a lot of problem, the Committee, therefore, strongly feel that there is an urgent need for scientific assessment of the erosion problem and for devising suitable mechanism to address the same (Para No. 6.38).
- 3. After some discussion, the Committee adopted the Report subject to minor amendments/modifications arising out of factual verifications by the Ministry and incorporating the above points as suggested by Hon'ble Members.

4.	****	****	****	****
5	****	****	****	****

6. The Committee then authorized the Chairman to finalize the Report in view of the consequential changes arising out of factual verification and present the same to both the Houses of Parliament during the second part of the Budget Session - 2013-14.

The Committee then adjourned

^{*****} Minutes in respect of other matters kept separately.