

**STANDING COMMITTEE ON WATER RESOURCES  
(2011-12)**

FIFTEENTH LOK SABHA

MINISTRY OF WATER RESOURCES

DEMANDS FOR GRANTS (2012-13)

FOURTEENTH REPORT



**LOK SABHA SECRETARIAT  
*NEW DELHI***

May, 2012/Vaisakha, 1934 (Saka)

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(2011-12)

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DEMANDS FOR GRANTS  
(2012-13)

*Presented to Lok Sabha on 03.05.2012  
Laid on the Table of Rajya Sabha on 03.05.2012*



*LOK SABHA SECRETARIAT  
NEW DELHI*

*May, 2012/Vaisakha, 1934 (Saka)*

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**COMPOSITION OF THE STANDING COMMITTEE  
ON WATER RESOURCES (2011-2012)**

Shri Dip Gogoi - Chairman

**LOK SABHA**

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4. Shri Badri Ram Jakhar
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30. Smt. Bimla Kashyap Sood

**SECRETARIAT**

1. Shri Devender Singh - Joint Secretary
2. Shri B.S. Dahiya - Director
3. Shri G. Guite - Committee Officer

## INTRODUCTION

I, the Chairman, Standing Committee on Water Resources (2011-12) having been authorised by the Committee to submit the report on their behalf, do present this Fourteenth Report on Demands for Grants (2012-13) 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 2012.

4. The Report was considered and adopted by the Committee at their sitting held on 20 April 2012.

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**  
**25 April, 2012**  
**05 Vaisakha, 1934 (Saka)**

**DIP GOGOI,**  
**Chairman,**  
***Standing Committee on Water Resources***

## CHAPTER I

### BUDGETARY ALLOCATIONS

1.1 Water is one of the most precious natural resources, without which it is impossible to sustain life. India has 4% of water resources of the world, while it has to support 16% of world population and 15% of livestock. The annual precipitation including snowfall, which is the main source of water in the country, is estimated to be of the order of 4000 Billion Cubic Metres(BCM). The estimated precipitation during the monsoon season (June to September) is of the order of 3000 BCM. The effect of global warming on hydrological cycle could result in further intensification of temporal and spatial variations in precipitation, snowmelt and water availability. The resources potential of the country, which occurs as natural run off in the rivers is about 1869 BCM, considering both surface and ground water as one system.

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, waterlogging, sea erosion and dam safety.

1.3 The above functions of the Ministry are carried out through its two attached offices (Central Water Commission and Central Soil and Materials Research Station), seven



subordinate offices(Central Ground Water Board, Central Water and Power Research Station, Ganga Flood Control Commission, Farakka Barrage Project, Sardar Sarovar Construction Advisory Committee, Banasagar Control Board and Upper Yamuna River Board), seven statutory bodies(Brahmaputra Board, Narmada Control Authority, Betwa River Board, Tungabhadra Board, Ravi and Beas Water Tribunal, Cauvery Water Disputes Tribunal and Krishna Water Disputes Tribunal), two autonomous bodies (societies) (National Water Development Agency and National Institute of Hydrology) and two public sector enterprises (Water and Power Consultancy Services(India) Limited and National Projects Construction Corporation Limited).

#### **Analysis of Demands for Grants (2012-13)**

1.4 The following table shows the allocation of Budget for the Ministry of Water Resources:-

**Table – 1 : Demands for Grants (2012-13)**

	<b>Revenue</b>	<b>Capital</b>	<b>(Rs. in crore) Total</b>
Charged	–	4.00	4.00
Voted	1937.30	126.30	2063.60
<b>Total</b>	<b>1937.30</b>	<b>130.30</b>	<b>2067.60</b>

1.5 Table 1 shows that a provision of Rs. 2067.60 crore has been made for 2012-13 in respect of the Ministry of Water Resources in Demand No. 104. The detailed Demands for Grants of the Ministry of Water Resources was laid on the Table of Lok Sabha on 16 March, 2012.

1.6 The Detailed Demands for Grants shows that Demand (Voted) is Rs. 2063.60 crore which comprises Rs. 1937.30 crore on Revenue Section and Rs. 126.30 crore on Capital Section. There is an increase of Rs. 787.27 crore on Revenue Section and increase of Rs.31 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.818.27 crore.

1.7 The details of allocation of funds(Plan and Non Plan) for the last three years pertaining to the Ministry of Water Resources are given below:-

**Table – 2 : Plan and Non-Plan Allocation between 2010-11 to 2012-13**

<b>(Rs. in crores)</b>			
<b>Year</b>	<b>Plan</b>	<b>Non-Plan</b>	<b>Total</b>
2010-11 (BE)	712.00	419.52	1131.52
2010-11 (Actual)	520.48	451.13	971.61
2011-12 (BE)	732.00	517.33	1249.33
2011-12 (RE)	632.00	517.33	1149.33
2012-13 (BE)	1512.00	555.60	2067.60

1.8 The total Budget Estimate (BE) for the year 2011-12 and 2012-13 of the Ministry of Water Resources have been earmarked at Rs.1249.33 crore and Rs.2067.60 crore, respectively excluding the allocations for AIBP and other water resources programmes.

Regarding the reasons for increased allocations by Rs.818.27 crore in BE 2012-13 over BE 2011-12, the Ministry, in a written reply, stated as follows:-

"Three new schemes viz. National Water Mission, Irrigation Management Programme and Dam Rehabilitation & Improvement Programme(DRIP) have been taken up during the year 2012-13."

1.9 Asked further whether the increased allocation by Rs.818.27 crore in BE 2012-13 would be sufficient to meet the overall demand during the current financial year, the Ministry replied as under:-

"Yes, the increased allocation would be sufficient to meet the overall demand during the year 2012-13."

1.10 The Committee wanted to know the reasons behind the substantial hike in Plan allocation by Rs.780.00 crore over that of 2011-12 in spite of reduction to Rs. 632.00 crore at Revised Estimate (RE) stage in 2011-12. To this query, the Ministry replied as follows:-

"The substantial hike is due to introduction of three new schemes viz. National Water Mission, Irrigation Management Programme and Dam Rehabilitation & Improvement Programme (DRIP) and introducing new components in the ongoing schemes during the year 2012-13. These introduction of the schemes/Components are based on recommendations of various working Groups of XII Plan."

1.11 When the Committee asked whether any study has been conducted to avoid reduction at RE stage for both Plan and Non Plan allocation during the last five years, the Ministry in a written reply stated as follows:-

"Half yearly review of physical and financial progress is being carried out by the Planning Commission. In addition the Secretary, Ministry of Water Resources also holds regular periodic meetings with the senior officers of the Ministry and its organizations, and review of expenditure performance is a mandatory point of 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."

### **Annual Plan 2012-13**

1.12 The Ministry has informed that it submitted a proposal for Rs.2063.00 crore for Annual Plan (Central Sector Schemes) 2012-13 but only Rs.1500.00 core has been allocated to the Ministry of Water Resources. The corresponding figures for the preceding Financial Years are as follows:

**Table – 3 : Allocation for Annual Plans**

<b>Annual Plan 2008-09</b>		<b>Annual Plan 2009-10</b>		<b>Annual Plan 2010-11</b>		<b>(Rs.in crore) Annual Plan 2011-12</b>	
Proposed	Allocated	Proposed	Allocated	Proposed	Allocated	Proposed	Allocated
688.00	600.00	793.08	600.00	895.30	700.00	720.00	720.00

1.13 When the Committee enquired the reasons behind reductions in allocations for Annual Plans during the successive years, viz. 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13 by Planning Commission, the Ministry in a written reply stated that the Planning Commission is allocating the Gross Budgetary Support (GBS) for various Ministries / Departments after taking into consideration of the resources availability.

1.14 When the Committee asked whether these reductions/shortfalls led to pruning or staggering of the various schemes, the Ministry in a written reply stated as under:-

"Yes, the reduction due to inadequate funding would be affected the new initiatives/ activities proposed by the Ministry."

### **Bharat Nirman**

1.15 The Committee were informed that irrigation is one of the six components of development of rural infrastructure envisaged under Bharat Nirman programme. The irrigation component of Bharat Nirman aimed at creating irrigation potential of 10 million hectares (Mha) during 2005-06 to 2008-09. It was estimated that 7.2 Mha of irrigation potential had been created during the said period.

1.16 The Ministry also furnished the physical and financial achievements made under XI plan as per details given below :

**Table – 4 : Physical and financial achievements made during XI Plan period**

Year	(Physical in Mha)		(Financial in crores)	
	Physical (mha)	Financial (crore)	Physical (Cumulative)	Financial (Cumulative)
2007-08	1.73	5445.71	1.73	5445.71
2008-09	1.93	7598.22	3.66	13043.93
2009-10	1.85	6945.59	5.51	19989.52
2010-11	1.56	6837.20	7.07	26826.72
2011-12	0.08	4966.03	7.15	31792.75

1.17 The targets of irrigation potential and its creation from 2005-06 to 2011-12 are also given below:-

**Table – 5 : Irrigation targets and potential created**

<b>Year</b>	<b>Target</b>	<b>(Million hectare) Irrigation Potential Created</b>
2005-06	1.90	1.69
2006-07	2.40	1.96
2007-08	2.85	1.73
2008-09	2.85	1.93
2009-10	1.75	1.85
2010-11	1.75	1.22
2011-12	--	0.079( <u>upto September, 2011</u> )

1.18 The Ministry informed the Committee that a total of irrigation potential of 10.8 MHa has been created from 2005-06 to till date under Bharat Nirman. However, the complete information is yet to be received from a few State Governments during the year 2011-12.

1.19 On being further asked whether there is a proposal to carry forward Bharat Nirman programme into XII Plan, the Ministry stated as follows :-

"Yes, the target set for the XII Plan is 10 Mha"

## Hydrology Project - II

1.20 The Committee were informed that Hydrology Project-II is being implemented with the assistance of World Bank in 13 States, viz. Andhra Pradesh, Chhattisgarh, Gujarat, Goa, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Punjab and Tamil Nadu and 8 Central Agencies viz. Central Water Commission (CWC), Central Ground Water Board (CGWB), National Institute of Hydrology (NIH), Central Water & Power Research Station (CWPRS), Central Pollution Control Board (CPCB), Bhakra Beas Management Board (BBMB), India Meteorological Department (IMD) and Ministry of Water Resources (MoWR). The estimated cost of the Project is Rs.631.83 crore. The funding from World Bank is in the form of loan of US\$ 104.98 million from International Bank for Reconstruction and Development (IBRD). The loan agreement was signed on 19 January 2006. The Project was started in April 2006 and the stipulated date of completion is June 2012.

1.21 When inquired about the performance of the Hydrology Project – II in terms of physical achievements since its inception in 2006, the Ministry informed the Committee in a written reply as follows:

"Physical achievements in respect of central organisations which are the part of Demands for Grants of Ministry of Water Resources are given below:

**Table – 6 : Physical achievements under Hydrology Project - II**

Activity	Achievement
Decision Support System-Planning (DSS-P)	Development of Generic Software for Decision Support System-Planning (DSS-P) completed and its customisation in 9 States (1. Andhra Pradesh, 2. Chhattisgarh, 3. Gujarat 4. Kerala, 5. Karnataka, 6.

	Madhya Pradesh, 7. Maharashtra, 8. Odisha and 9. Tamil Nadu) is in progress.
Decision Support System-Real Time (DSS -RT)	Development of Software for Decision Support System-Real Time (DSS -RT) in BBMB is nearing completion and contract has been awarded recently for installation of Real Time- Data Acquisition System (RT-DAS) at various identified sites.
Hydrological Design Aids-Surface Water (HDA-SW)	Hydrological Design Aids-Surface Water (HDA-SW) software are being developed by the consultant for three modules i.e. 1. Assessment of Water Resource Potential-Availability/ Yield Assessment, 2. Estimation of Design Flood, and 3. Sedimentation Rate Estimation.
Construction of Classrooms and Hostel at National water Academy (NWA), CWC, Pune	Construction of Classrooms and Hostel is under progress.
Modernisation of Library Building by CWPRS, Pune	Nearing completion.
Procurement of Acoustic Doppler Current Profiler (ADCP)	CWC has procured 4 Acoustic Doppler Current Profiler (ADCP) for Discharge measurements at various G&D Sites and contract has been awarded for procurement of remaining 11 ADCP.
Construction of Data Centre by CPCB	Completed
Establishment of Automatic Water Quality Monitoring Stations	For establishment of 10 Automatic Water Quality Monitoring Stations, CPCB has submitted Bid Evaluation Report to the World Bank for 'No Objection'. In addition, CWC has also floated tenders for establishment of 3 Online Real Time Water Quality Monitoring Stations.



Installation of Video Conferencing facility at 7 places by CWC	Completed
Construction of Piezometers by CGWB	Total 149 piezometers constructed (35 in Chennai, 49 in Goa and 65 in Punjab).
Up-gradation of Water Information System Data Online Management (WISDOM) software	Bids opened for awarding the work of up-gradation of WISDOM software.
Aquifer Mapping in Pilot study areas	Procurement of consultancy, software and equipments required for Aquifer Mapping in 6 Pilot Study Areas is in progress.
Procurement of requisite equipment by NIH	Completed
Procurement of GIS software, computers, IT Hardware & software	Completed by almost all Implementing Agencies.
Capacity Building and Awareness Raising	Under progress through workshops/trainings thereby creating cross-learning opportunities.

1.22 Regarding the amounts allocated and incurred since 2006 till date on Hydrology Project – II, the Ministry in a written reply informed the Committee as follows :

**Table – 7 : Expenditure on Hydrology Project - II**

(Rs. in crore)

Financial Year	BE	RE	Expenditure incurred
2006-07	13.61	13.61	2.07
2007-08	33.00	13.60	3.63
2008-09	44.00	25.51	8.04

2009-10	38.10	25.10	19.00
2010-11	53.00	31.00	27.22
2011-12 (upto Feb., 2012)	80.00	50.00	18.06
<b>Total</b>	<b>261.71</b>	<b>158.82</b>	<b>78.02</b>

1.23 Asked whether any evaluation has been carried out on physical and financial achievements of Hydrology Project - I and Hydrology Project – II, the Ministry replied as under :

"The evaluation of World Bank funded Projects is done by the World Bank through Independent Evaluation Group (IEG) as per their set procedure after completion of the projects. Since Hydrology Project - II is still continuing, the physical and financial evaluation of Hydrology Project - I & Hydrology Project - II, both will be done by the World Bank after completion of Hydrology Project - II".

1.24 It is stated that several implementing agencies had requested for an extension of the Hydrology Project – II by 1 to 2 years. When asked what action has been taken/proposed by the Government for extension of Hydrology Project – II into XII Plan, the Ministry in a written reply stated as under :

"Keeping in view the Project Development Objectives of HP-II, the status of implementation of various major activities envisaged under HP-II and request of implementing agencies for extension of project by 1 to 2 years, MoWR has requested the Department of Economic Affairs, Ministry of Finance for extension of the Project by two years beyond stipulated closing date (June, 2012), i.e. up to June, 2014. The Department of Economic Affairs, Ministry of Finance has further requested the World Bank for extension of the project by 2 years. The Task Team Leader of World Bank during Wrap-up Meeting held on 25.01.2012 in Delhi has also indicated that the World Bank is also considering the request for extension of time for 2 more years i.e. upto June, 2014. Accordingly, the proposal has been submitted to the Planning Commission by MOWR for continuation of Hydrology Project-II in XII Plan."

1.25 The Ministry further stated in a written reply that Rs.70.00 crore has been allocated to Hydrology Project – II for the financial year 2012-13, which is adequate for the needs of the Project. If required, depending on the progress made by the implementing agencies, request for additional demand for budget allocation will be made accordingly.

According to the Ministry, the major thrust areas identified for XII Plan is as under :

"(i) Development of Hydrological Design Aids-Surface Water (HDA-SW) software and its utilization by all the States.

(ii) Customization of Decision Support System- Planning (DSS-P) in 9 states.

(iii) Development of Decision Support System- Real Time (DSS-RT) in BBMB including installation of Real Time Data Acquisition System (RTDAS).

(iv) Establishment of Automatic Water Quality Monitoring Stations (AWQMS) by CPCB and CWC.

(v) Establishment of GIS-Based Web Portal and Water Quality Criteria by Central Pollution Control Board (CPCB).

(vi) Up-gradation of Water Information System Data Online Management (WISDOM) software.

(vii) Up-gradation of Ground Water Estimation and Management System (GEMS) software to e-GEMS.

(viii) Aquifer Mapping in 6 Pilot Study Areas by Central Ground Water Board (CGWB).

(ix) Completion of Purpose Driven Studies being implemented by various implementing agencies."

### **Utilisation Certificates**

1.26 The Committee observed that regarding the position of Utilisation Certificates (UCs) as for grants released upto March, 2009 shows a large number of Utilisation Certificates

pending with Institutions & Autonomous Bodies and State Governments. The following table indicates the position of Utilisation Certificates along with the amount involved therein :

**Table – 8 : Position of Utilisation Certificates**

(Rs. in crores)						
State/UT	No. of UCs outstanding in r/o grants released upto March, 2009	Amount involved	No. of UCs received	Amount involved in r/o UCs received	No. of UCs outstanding as on 01.10.2011	Amount involved on outstanding UCs
Institutions & Autonomous Bodies	202	7417.67	2	4131	200	3286.67
State Govt.	14	48.41	6	28.92	8	19.49

1.27 The above table reveals that the number of Utilisation Certificates outstanding in respect of Grants released upto March, 2009 is 202 from Institutions & Autonomous Bodies and 14 pertaining to State Governments involving a total amount of Rs.7417.67 crore and Rs.48.41 crore respectively. As on 01.10.2011, 200 nos. of UCs from Institutions and Autonomous Bodies and 8 was of UCs were found to be outstanding, involving total amount of Rs.3286.67 crore and Rs.19.49 crore respectively.

1.28 When the Committee asked the reasons for such a high number of pending Utilisation Certificates and the corrective steps being taken to expedite the submission of these Certificates, the Ministry informed the Committee during the evidence as follows:-

"This is the point which the C&AG has always brought out. We find difficulty in obtaining the Utilisation Certificates from institutions, autonomous bodies and States.

It seems to be a general sort of inertia. I am sure they utilise the money. We are writing to them and trying to improve the situation. We have a Committee which goes through the outstanding Utilisation Certificates and see how we can get these people to give us the UC but it is an uphill battle."

## **River Basin Management**

1.29 The Committee were informed that the River Basin Management(RBM) is a newly named scheme formulated by merging two ongoing schemes, viz. River Basin Organisation(RBO) and Investigation of Water Resources Development Scheme. The scheme also includes restructuring of Central Water Commission (CWC) and activities of Brahamaputra Board under specific schemes.

1.30 The Committee wanted to know specific Budget allocation for River Basin Management. The Ministry in a written reply stated as under:-

"Rs.200 crore has been allocated for the scheme of RBM during financial year 2012-13. Component wise allocation is given below:

- Investigation of Water Resources Development Scheme – Rs.100 crore
- Restructuring of CWC – Rs.10 crore
- Brahamaputra Board – Rs.90 crore."

1.31 Asked about the present status of the formation of RBOs by the States, the Ministry informed as under:-

"MoWR has proposed to establish two RBOs for river basins namely Mahanadi and Godavari during XI Plan under River Boards Act, 1956.As per River Board Act, 1956 the RBOs' are to be established in consultation with the interested States. Their establishment would depend upon consensus and co-operation of the co-basin States. The Ministry has made efforts at various levels to get the

concurrence/comments of all the co-basin states of Mahanadi and Godavari basins for establishment of River Basin Organisations. However, all the co-basin States have not concurred for establishment of River Basin Organisation of Mahanadi and Godavari River Basins. Ministry has set up a Committee under the Chairmanship of Sh. T. S. Doabia (Retd.) High Court Judge, MP and J&K High Court to study the activities that are required for optimal development of a river basin and changes required in the existing River Board Act, 1956 for the achievement of the same. The Committee has held its first meeting on 29<sup>th</sup> March, 2012."

1.32 Regarding the details about the restructuring of CWC, the Ministry also stated as follows:-

"Restructuring of Central Water Commission basically aims at horizontal expansion of field activities at basin level so as to address the basin level issues in more comprehensive and integrated manner and to take up the responsibilities assigned to MoWR/ CWC under National Water Mission (NWM) to address climate change issues and other emerging challenges.

Expansion of activities and new activities envisaged to be performed by restructured set-up includes the following:

#### **Expansion of activities**

- Expansion of Hydrological Data Network
- Modernisation of Flood forecasting network & Expansion of inflow forecasting for major reservoirs in the country
- Development of water resources information system
- Appraisal, monitoring and finance related services for water resources projects & flood management schemes at basin level
- Issues related to Dam Safety at basin level
- Coastal Management
- AIBP, CAD&WM, RRR of Water Bodies, Ground water recharge, Integrated watershed development programme, etc.

#### **New activities**

- Preparation of basin wise integrated water resources development and management plans (20 major basins)
- Ensuring convergence among various water resources programmes.
- Focused attention on Research related to activities identified under National Water Mission(NWM)
- To encourage PIM and promote participation of NGOs

- Guidelines for efficient irrigation practices

During the first year preliminary works relating to establishment/ expansion of field offices will be taken up, after the approval of scheme."

1.33 The Committee were further informed that for the restructuring of CWC, Rs.10 crore had been kept. The amount proposed is to be utilised for initiation of activities envisaged under Restructuring CWC and mobilization of resources. The provision has been kept mainly for meeting office expenses, travelling expenses and minor works for setting up of infrastructure of new offices and is adequate for the first year activities.

1.34 When the Committee asked about target set for completion of restructuring of CWC, the Ministry stated as follows:-

"Restructuring of CWC is proposed to be implemented in a phased manner in a span of five years during XII Five Year Plan."

### **Budgetary Allocation**

1.35 **The Committee note that the Budget provision in the Demands for Grants of the Ministry of Water Resources(MoWR) for the year 2012-13 is Rs.2067.60 crore. This figure is exclusive of the funds earmarked for Accelerated Irrigation Benefits Programme and other water resources programmes. There is an increase of Rs.918.27 crore in BE 2012-13 over RE 2011-12. According to the Ministry, the increase in total Budget allocation by Rs.918.27 crore was necessitated by the three new schemes, viz. National Water Mission, Irrigation Management Programme and Dam Rehabilitation & Improvement Programme(DRIP) taken up during the year 2012-13. The Committee**

wonder whether the Ministry would be able to spend the increased allocation of Rs. 918.27 crore during 2012-13 given the fact the RE for 2011-12 had to be reduced by Rs.100.00 crore i.e. for BE of Rs.1,249.33 to Rs.1,149.33 crore. The reductions in the allocation at RE stage during 2011-12 occurred despite the Committee having cautioned them in their earlier report to evolve a rational and sound system of budgeting to avoid reduction in allocations at RE stage. The Committee find such reduction as indicative of poor pre-Budget planning, lack of effective coordination, monitoring and supervision over the subordinate/field offices, organizations, institutes etc. The Committee, therefore, recommend that the Ministry identify the causes responsible for higher estimation at BE stage and reduction at RE stage and also to ensure that funds allocated are utilized for the approved purposes within the financial year. The Committee are optimistic that if the funds allocated are fully spent, there would be adequate justification for seeking higher allocations. The Committee would like to be apprised of the new measures devised in this behalf.

#### **Bharat Nirman**

1.36 The Committee note that irrigation is one of the six components of development of rural infrastructure envisaged under Bharat Nirman Programme. There is a proposal to carry the Programme into XII Plan, and the target set is reportedly 10 Mha for XII Plan. Regarding its achievements, the Ministry stated at one place that a total irrigation potential of 10.8 Mha has been created from 2005-06 till date under Bharat Nirman. The Committee also note that since 2007-08 an expenditure



of Rs.31792.75 crore has been incurred on achieving the targets of irrigation potential. The Committee also note that starting from 2005-06 to 2011-12, the Ministry has been unable to achieve the targets fixed for creation of irrigation potential. The Committee feel that there is an urgent need to delve deeper into the reasons for not achieving the targets and desire that the Ministry set realistic and achievable targets in future. The Committee also desire to know the expenditure incurred in creating irrigation potential per million hectare(Mha) so far.

#### Hydrology Project - II

1.37 The Committee note that the Hydrology Project Phase – II is being implemented with the assistance of World Bank in 13 States, viz. Andhra Pradesh, Chhatisgarh, Gujarat, Goa, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Punjab and Tamil Nadu and 8 Central Agencies viz. Central Water Commission (CWC), Central Ground Water Board (CGWB), National Institute of Hydrology (NIH), Central Water & Power Research Station (CWPRS), Central Pollution Control Board (CPCB), Bhakra Beas Management Board (BBMB), India Meteorological Department (IMD) and Ministry of Water Resources. The estimated cost of the Project is Rs.631.83 crore with a loan component of US\$ 104.98 million from the International Bank for Reconstruction and Development (IBRD) for which the agreement was signed on 19 January 2006. It is further noted that the MoWR is seeking an extension of the Project till June 2014, i.e. 2 years after the stipulated date of closing, for which the Ministry has submitted a proposal to the Planning Commission. It is also further

noted that the World Bank is considering the request made by Department of Economic Affairs, Ministry of Finance at the behest of MoWR in this regard, and further that several major thrust areas have been identified for XII Plan, viz. (i) Development of Hydrological Design Aids-Surface Water (HDA-SW) software and its utilization by all the States (ii) Customization of Decision Support System- Planning (DSS-P) in 9 states (iii) Development of Decision Support System- Real Time (DSS-RT) in BBMB including installation of Real Time Data Acquisition System (RTDAS) (iv) Establishment of Automatic Water Quality Monitoring Stations (AWQMS) by CPCB and CWC (v) Establishment of GIS-Based Web Portal and Water Quality Criteria by Central Pollution Control Board (CPCB) (vi) Up-gradation of Water Information System Data Online Management (WISDOM) software (vii) Up-gradation of Ground Water Estimation and Management System (GEMS) software to e-GEMS (viii) Aquifer Mapping in 6 Pilot Study Areas by Central Ground Water Board (CGWB) and (ix) Completion of Purpose Driven Studies being implemented by various implementing agencies. The Committee urge the Ministry to pursue the matter vigorously with the concerned agencies/departments/organizations to secure extension of Hydrology Project – II at least till June 2014 so that the pending works of XI Plan period may be fully executed. They desire to be apprised of the outcome of the efforts made in this regard. The Committee also desire the Ministry to furnish the findings of the evaluation of Hydrology Project to be made by the World Bank after completion of Phase – II of the Project. They also desire that the coverage of the Hydrology Project be extended beyond 13 States and 8 Central Organisations during XII Plan period.

1.38 The Committee note that Hydrology Project-II was started in the year 2006. A glance at the BE, RE and expenditure incurred since its inception shows that during 2006-07 against BE of Rs.13.61 crore, the expenditure incurred was Rs.2.07 crore only. During 2007-08 against the BE of Rs.33 crore, the RE was reduced to Rs.13.60 crore and the expenditure incurred was Rs.3.63 crore. Similarly, the corresponding figures for the years, 2008-09,2009-10, 2010-11 were discouraging. Overall, against aggregate BE from 2006-07 to 2011-12 of Rs.261.71 crore, the actual expenditure was merely Rs.78.02 crore constituting 29.81% of the BE. The Committee are perturbed at the dismal performance as there is reduction at RE stage every year. The Committee, therefore, desire the Ministry to evolve sound programmes and monitoring mechanism to oversee the implementation of the projects and the pace of expenditure.

#### Utilisation Certificates

1.39 The Committee note that as on 01.10.2011, there were a large number of Utilisation Certificates (UCs) pending pertaining to the Grants released to Institutions (200), Autonomous Bodies (8) as well as the State Governments. The amounts involved in respect of such outstanding UCs as on 1.10.2011 were Rs. 3286.67 crore in case of Institutions and Autonomous Bodies and Rs.19.49 crore in case of State Governments. The Committee also note the reply of the Ministry attributing this problem to the difficulty being faced in obtaining the UCs from Institutions, Autonomous Bodies and the States. The Committee observe that despite the existence of a Committee to examine and monitor the outstanding UCs, a large

number of UCs involving a huge amount are pending. The Committee, therefore, recommend the Ministry to strictly ensure that there is no further release of grants to Institutions, Autonomous Bodies and States in case of failure to get the UCs for grants released for the preceding year. They would like to be apprised of the particulars of the States who failed to furnish the UCs and the amount of funds released to each of them for which the UCs are outstanding. The Committee also recommend the Ministry to keep strict vigil on implementation of schemes/projects and submission of UCs on time by conducting periodic inspections, reviews and strengthening the Committee entrusted with monitoring the submission of Utilisation Certificates.

#### River Basin Management

1.40 The Committee observe that the Ministry has formulated a new scheme called River Basin Management(RBM) by merging two ongoing schemes, viz. River Basin Organisation (RBO) and Investigation of Water Resources Development Scheme. The Scheme also includes as its component the restructuring of the Central Water Commission (CWC) and activities of the Brahmaputra Board under specific schemes. The Committee note that out of the total allocation of Rs.200.00 crore for the scheme of RBM for the financial year 2012-13, Rs.100.00 crore stands allocated for Investigation of Water Resources Development Scheme, Rs.10.00 crore for Restructuring of CWC and Rs.90.00 crore for Brahmaputra Board. The Committee note that MoWR had proposed to establish two RBOs for river basins, namely Mahanadi and Godavari during XI Plan under the River Boards Act, 1956 after arriving

at consensus with the co-basin States. They also note that all the co-basin States of Mahanadi and Godavari have not concurred for establishment of RBOs of the two river basins. In order to expedite the setting up of the said RBOs, and to study the activities required for optimal development of a River Basin and the changes required in the existing River Board Act, 1956, a Committee under the Chairmanship of Sh. T. S. Doabia (Retd.) High Court Judge, MP and J&K has been set up by the Ministry. Further, regarding the restructuring of CWC, it is noted that Rs.10.00 crore has been earmarked in the financial year 2012-13 under which expansion of activities and taking up of new activities have been envisaged to address climate change issues and other emerging challenges during the XII Five Year Plan. The Committee would urge the Ministry to initiate necessary steps to ensure that the restructuring process of the CWC is completed during the stipulated period of five year, i.e. during XII Plan period so that the basin level and climate change issues are addressed in a more comprehensive and integrated manner. The Committee also recommend that the Ministry make vigorous efforts to facilitate speedy finalization of the report of the Doabia Committee set up for studying necessary amendments to the River Board Act, 1956. Besides, efforts be intensified for building consensus among other co-basin States as well to accelerate the pace of formation of other RBOs through meetings, seminars and regular interaction with the State Governments in this regard. The Committee would like to be apprised of the action taken in this regard.

## CHAPTER-II

### MAJOR AND MEDIUM IRRIGATION

2.1 The planning, formulation and execution of all Major and Medium Irrigation (MMI) Projects are carried out by the concerned State Governments and the required funds are allocated out of their State Plan. The Ministry of Water Resources plays a pivotal role by providing 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.

2.2 Irrigation projects with a Culturable Command Area (CCA) between 2,000 hectares and 10,000 hectares are classified as medium projects. Those irrigation projects with CCA of more than 10,000 hectares are classified as major projects.

2.3 The Budget allocations (Plan and Non Plan), for the last two years net of recoveries, are given below :

**Table – 9 : Budget allocations for Major and Medium Irrigation Projects (net of recoveries)**

Name of scheme	Budget Estimates (2011-12)		Revised Estimates (2011-12)		Budget Estimates (2012-13)	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
Major and Medium Irrigation	273.89	206.99	222.85	207.72	745.20	232.53

(Rs. in crore)

2.4 The Budget allocation (Plan) for Major and Medium Irrigation for the year 2011-12 was Rs.273.89 crore. It was reduced to Rs.222.85 crore at the Revised Estimate (RE) stage, i.e. reduction of Rs.51.04 crore. When asked to explain the reasons for reduction in the Plan allocation at RE stage, the Ministry in a written reply stated that the year (2012) being the last financial year of XI Five Year Plan, allocation was reduced by Department of Economic Affairs, Ministry of Finance in consultation with the Ministry of Water Resources, as certain modifications are being envisaged in this Central Sector schemes during the course of XII Plan.

2.5 On being asked whether due to reduced allocation at RE stage, some schemes/projects have been adversely affected, the Ministry replied in the negative. The Ministry has also informed that no slackened pace of work in the schemes/projects under MMI have been noticed due to reduced allocations for plan at Revised Estimate stage. Asked further as to whether special efforts are being made to fully utilize the allocation under the schemes / projects to accelerate the rate of implementation during this financial year 2012-13, the Ministry informed the Committee as under :

"Regular Expenditure Review Meetings are conducted at appropriate levels by competent authorities to accelerate the rate of implementation of various schemes."

2.6 The Non Plan Budget allocation for Major and Medium Irrigation for the financial year 2012-13 has been earmarked at Rs.232.53 crore, i.e. increase of Rs.25.54 crore over Rs.206.99 crore fixed in 2011-12 at the Budget estimate stage. When asked to state the

rationale for enhancing Non Plan allocation by Rs.25.54 crore, the Ministry informed in a written reply as under :

"Primarily, increase under Non Plan scheme (is due to) 'Sutlej Yamuna Link Canal Project' (Rs.15.98 crore) and under Salary component of different Non Plan schemes."

2.7 When the Committee asked about concerted steps taken/proposed to be taken to curb Non Plan expenditure, the Ministry further replied as follows :

"Series of steps were introduced by the Ministry to curb Non Plan expenditure, including sanction of essential items only, curb on unnecessary tours, etc."

2.8 The Ministry informed the Committee on the physical targets fixed and achievements made for creation of irrigation potential under Major and Medium Irrigation for the XI Plan as under:-

**Table – 10 : Physical targets and achievements under MMI for XI Plan**

Item	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Target for irrigation potential	15.0	11.96	10.50	10.50	10.50	58.46
Achievements	6.44	6.55	9.82	*	**	**

\*Information under compilation

\*\*Information from States is awaited.

2.9 Regarding the targets set for creation of irrigation potential (year-wise and cumulative) including its utilization for Major and Medium Irrigation (CAD works) during the XII Plan, the Ministry furnished the following information:



**Table – 11 : Physical targets for XII Plan (AIBP & CAD works)**

<b>Year</b>	<b>AIBP</b>	<b>CAD</b>
	Physical Target (in Mha)	Physical Target(in Mha)
2012-13	1.2	3.0
2013-14	1.3	3.5
2014-15	1.7	4.0
2015-16	1.8	5.0
2016-17	0.75	1.25
<b>Total</b>	<b>6.75</b>	<b>16.75</b>

### **Unapproved Projects**

2.10 As per XI Plan document, a large number of Major and Medium Irrigation Projects totaling 90 Major, 136 Medium and 74 ERM Projects have been under execution without investment clearance from Planning Commission. When the Committee inquired about unapproved projects pending with the Government during XI Plan ending by March 2012, the Ministry informed as follows :

"As per the Report of the Working Group, 327 projects were reportedly ongoing in XI Plan, out of which 170 Projects including 70 Major, 87 Medium, and 13 ERM are unapproved."

2.11 The Ministry was asked about steps taken to get these unapproved projects regularized by the Planning Commission during XI Plan period. The Ministry replied that no Central assistance is provided to the unapproved projects. On being asked about the steps proposed to be taken during XII Plan to tackle this problem of unapproved projects, the Ministry informed in a written reply as under :

"State Governments need to take necessary initiative to put up the comprehensive proposal/DPR of the unapproved projects for techno-economic appraisal before the

'Advisory Committee on Irrigation, Flood Control and Multi-Purpose Projects of MoWR for their acceptance, followed by investment clearance from the Planning Commission.'

## **Development of Water Resources Information System**

2.12 The management of Water Resources is a highly complex task that involves multidisciplinary domains including data acquisition, numerical modeling, optimization, 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.234.30 crore. The Ministry informed the Committee regarding the objective of the Scheme as under :

"The objective of the scheme is to develop information system on water resources at the national level. The data for the system will emanate mainly from the ongoing activities of the Ministry of Water Resources at their attached offices. For gathering regional and related information, the concerned State and Central agencies will be provided with regular connectivity. The processed information will be made available to all users through a web enabled system."

2.13 The Committee asked about the physical achievements made under DWRIS during XI Plan. The Ministry replied as follows :

"The detail of main physical achievements is as follows:

**Data bank and Online Information System:** For the purposes of online data collection and development of databank on water resources and related various aspects, the work pertaining to providing of computers and related equipments for internet connectivity to each of State Irrigation Departments as well as to field offices of CWC is going to be completed. Nodal Officers have been designated in 31

States/UTs so that CWC could correspond with them for the purpose of setting up data bank on water resources and related aspects.

**Rationalization of Minor Irrigation Statistics:** Up till now, 4 Minor Irrigation Censuses have been completed under the scheme with reference year of 1986-87, 1993-94, 2000-01 and 2006-07 respectively. Reports for the first three censuses have been published by this Ministry and have been put up on the website of the Ministry except for the first census with the reference year 1986-87 which is available in the printed form only. Thus a time series data base has been constructed in respect of MI Schemes and it is observed that approximately 70% of irrigation is done by MI Schemes in the country. However, in view of the time gap of 5 years, after which the results of the census are usually made available, it is proposed to adopt new methodology using which the census shall be conducted in a more scientific manner and results shall be available much faster. In this context a study was awarded to Indian Agricultural Statistical Research Institute (IASRI) for evaluation of the Plan Scheme 'Rationalization of the Minor Irrigation Statistics' (RMIS) in August, 2009 which was completed in 4 months time and report was submitted to the Ministry in December, 2009. The study has recommended for continuation of RMIS scheme while pointing out a few modifications in the scheme.

Subsequently, another evaluation study was awarded to the National Institute of Smart Government (NISG) for studying the existing process of MI Census and suggest new methodology with or without use of technology, so as to have more scientific and faster results of the census. In their report, NISG suggested a new methodology by which the census is to be conducted using mobile phones with GPRS facilities, on the field to capture the census data along with GPS co-ordinates. This would reduce a lot of time and errors which used to occur while making data entry from paper base schedule into the computer.

**Creation of watershed maps and Geographic Information System:** Central Water Commission (CWC), MoWR, initiated the project 'Generation of Database and Implementation of Web enabled Water Resources Information System named as India –WRIS in XI plan. The work of web enabled water resources information system (WRIS) amounting to Rs. 78.3164 Crore has been given to ISRO in Oct' 2008. Central Water Commission & ISRO has signed an MOU on 3<sup>rd</sup> December 2008 to develop web enabled GIS based Water Resources Information System for the entire country during XI plan to be completed in 4 years. WRIS has been jointly formulated by CWC and ISRO to generate nationally consistent water resources database to be completed by December 2012.

India-WRIS will have 30 layers of information both spatial and non-spatial having more than 180 sub layers grouped in five heads:

- 1) Watershed Atlas,
- 2) Administrative Layers,
- 3) Water Resources Projects,
- 4) Thematic Layers and
- 5) Environmental Data.

The VISION OF INDIA-WRIS is to provide a comprehensive, credible and contextual view of India's water resources data along with allied natural resources data and information. The goal of the project is a 'Single Window solution' for all water resources and related data in a standardized GIS format in national framework for water resources assessment and monitoring, planning and development, integrated water resources management (IWRM) and provide foundation for advanced modeling purposes to all departments, organizations, professionals and other stakeholders. It will allow users to Search, Access, Visualize, Understand and Analyze water resources data for planning, development and finally IWRM.

The First version of website of INDIA WARIS has been launched on 07 Dec, 2010 in New Delhi by Hon' ble Minister Water Resources. Further, the development of Information System is under progress and the 2<sup>nd</sup> version INDIA WRIS was launched by Chairman, CWC on world water day i.e. 22<sup>nd</sup> Mar' 2012. The URL of the website is [www.india-wris.nrsc.gov.in](http://www.india-wris.nrsc.gov.in) can be seen for more details. The full version with complete database of the project would be launched by June' 2014.

An amount of Rs. 53.11 crores has been incurred/ released to ISRO and spill over cost of Rs. 25.21 crore will be released during 12<sup>th</sup> plan.

Strengthening of Monitoring Unit in CWC including online Monitoring of AIBP assisted projects and to assess Irrigation Potential by Remote Sensing Technique: In the XI Plan, the target for general monitoring of ongoing Major/ERM projects was tentatively fixed as 150 projects per year. However, actual year-wise targets based on yearly review of projects to be monitored, the target for the first four year as well as achievement was as follows:

**Table – 12 : Targets and achievements under DWRIS**

<b>Years</b>	<b>Target</b>	<b>Achievement</b>
2007-08	86	66
2008-09	65	33
2009-10	58	20
2010-11	56	34
2011-12	54	19 (upto Feb, 2012)

There were several constraints faced by the field Monitoring Directorate inadequacy of supporting technical and secretarial staff, financial and other related problems of the respective states etc.

During the year 2003-04, out of the General Monitoring projects, total 30 nos. of Major Projects of pre-Fifth and Fifth Plan were identified by Planning Commission for vigorous monitoring with 2 or more visit/year for their early completion. Till 2010-11, total 18 projects have been completed and 12 projects may spill over to XII Plan. During the year 2011-12, all these 12 Projects are targeted for monitoring and 9 monitoring visits have been performed upto Feb, 2012, out of 24 targetted during 2011-12

Under AIBP Monitoring, there was a target of 300 visits for 150 AIBP projects to be monitored each year during XI Plan. However, based on yearly review of projects to be monitored under AIBP, the year wise target fixed as well as achievement were as flows:

**Table – 13 : Targets and achievements for Monitoring visits in respect of AIBP Projects**

	<b>Years</b>	<b>Target</b>	<b>Achievement</b>
	2007-08	278	200
	2008-09	324	186
	2009-10	330	167
T	2010-11	364	192
h	2011-12	328	117 (upto Feb, 2012)
e			

reason for the shortfall are that the requisite expenditure against the release of 1st installment of CLA for the respective year could not be incurred by the project authorities resulting in non-release of 2<sup>nd</sup> installment.

The work of assessment of Irrigation potential Creation through mapping of irrigation infrastructures to monitor the progress was assigned to NRSA, Hyderabad in respect of 53 AIBP assisted projects spread over 18 States during XI Plan (2007-08). The study has been completed during 2009-10. It not only provides the potential created but also gives critical gap areas for further effective monitoring. NRSC has been further awarded the work of similar assessment in respect of another 50 projects spread over 14 States in second phase during XI Plan (2010-11), which is targeted for completion by Oct, 2012.

**Hydrological Observations including Snow Hydrology, Water Quality and Monitoring of Glacial Lakes:** The data collected from the 866 hydrological observation

stations under 12 Organizations of CWC has been published in the form of Water Year Book, Water Quality Year Book and Sediment Year Book. The data has been used by the central government, state government, private sector and other agencies for development of water resources of the country, flood forecasting & warning purpose, carrying out research activities, hydrological studies for assessment of water availability, development of basin plan etc. The data has also been considered by the various Inter-State dispute tribunal. The data of H.O. sites at international border has been shared with neighboring countries as per existing treaties for flood warning and water sharing purposes.

The work of preparation of 'Inventory of Glacial Lakes and Water Bodies' has been completed and final report has been submitted by NRSA in July 2011. The work of 'Monitoring of Glacial Lakes and Water Bodies' has started in the XI plan and it has been proposed to continue its monitoring in the XII Plan also.

Considering the increased threat of glacial lake outburst flood due to reported climate change and creation/bursting of land slide dams in the Himalayas having a potential threat of flooding in plains of India, monitoring of glacial lakes and water bodies is required to be continued during XII Plan.

The project "Snowmelt runoff forecasting in the Himalayan Region Basins using Remote Sensing" is being implemented from XI Plan through National Remote Sensing Centre (NRSC), Hyderabad. NRSC submitted the second status report for the status of "Snowmelt runoff forecasting in the Himalayan Region Basins using Remote Sensing inputs". The report provided the status of project activity till October 2010 with respect to satellite data procurement and processing field data supply by CWC, Shimla, Terrain analysis of all the five basins and brief methods logical aspects. Model development & testing will start from March 2012 and Experimental seasonal snow runoff forecasting will start from April 2012.

Presently models are being developed for five River Basins i.e. Yamuna up to Hatnikund/Tajewala, Ganga Basin model shall be developed for Bhagirathi up to Tehri and Alaknanda up to Rudraprayag, Sutlej Basin up to Bhakra, Chenab Basins up to Akhnoor and Beas Basins up to Bhuntar. For the XII Plan period, it is proposed to extend the model in other basins including Teesta & Brahmaputra Rivers, Improve upon the existing models, Continue data collection of the existing sites, Modernization of data collection/transmission at existing sites.

**Water Quality Assessment Authority:** This component is for maintenance of secretariat/coordination cell for providing information support to the Water Quality Authority in the Ministry of Environment & Forests. The cell has been providing information and secretarial support to the Water Quality Authority. State Level Water

Quality Review Committees have been re-constituted so far in 12 States. Under the aegis of WQAA, "Mitigation and Remedy of Ground Water Arsenic Menace in India-A Vision Document" has been prepared. This is a comprehensive vision document to mitigate the arsenic contamination in ground water. An MoU has been signed in March 2011 between WQAA and WHO in the areas of Water Quality Monitoring and Assessment activities. An independent web portal of the Authority having web address <http://wqaa.gov.in/> has been created containing various details of functions and achievements inter-alia reports/publications published by the Authority."

2.14 Regarding the year wise financial progress of the DWRIS in the XI Plan, the Ministry informed the Committee about the position upto February 2012 as follows:

**Table – 14 : Financial Progress of DWRIS**

XI Plan Outlay	2007-08	2008-09	2009-10	2010-11	(Rs. In crores)	
					2011-12 (upto Feb, 2012)	Total (upto Feb, 2012)
234.34	19.07	45.58	63.07	38.81	48.41	214.94

2.15 The Ministry in a written reply informed the Committee that Rs.59.00 crore was the Budget Estimate for DWRIS in 2011-12, which was retained at Revised Estimate stage 2011-12. The allocation for DWRIS was enhanced to Rs.85.00 crore for 2012-13, due to enhancement of the scope of work of DWRIS for XII Plan.

2.16 Giving the new thrust of the DWRIS for XII Plan, the Ministry further informed the Committee as follows :

"The scheme proposed to be continued in the XII Plan would include the following five new activities relating to water resources (i) Up-gradation and Modernization of Library Information Bureau (ii) Up-gradation and Modernization of IT in CWC (iii) Data collection relating to various natural phenomena in coastal process and Appraisal and Monitoring of Coastal Protection projects for developing Coastal Management

Information System (CMIS) (iv) Telemetry based monitoring by automation in collection of data on reservoir water level and live storage capacity, and (v) Census of Major and Medium Irrigation Projects."

2.17 Giving details about the proposed activities during XII Plan, the Ministry informed that for the purposes of operational convenience of monitoring implementation of the scheme in XII Plan, the structure of the scheme has been modified and activities have been regrouped under the following components as described in the following table:

**Table – 15 : Structure of DWRIS for XII Plan**

<b>Sl No.</b>	<b>Components</b>	<b>Activities</b>
1	Data Bank and Information System	Web-enabled Water Resources Information System Up-gradation and Modernization of Library Information Bureau Up-gradation and Modernization of IT in CWC
2	Irrigation Census	Rationalization of Minor Irrigation Statistics Census of Major and Medium Irrigation Projects
3	Strengthening of Monitoring Unit in CWC	Strengthening of Monitoring Unit in CWC including online Monitoring of AIBP assisted projects and to assess Irrigation Potential by Remote Sensing Technique
4	Hydrological Observations and Monitoring System	Hydrological Observations including Snow Hydrology, Water Quality and Monitoring of Glacial Lakes.  Developing Coastal Management Information System (CMIS).  Developing Telemetry based reservoir monitoring system
5	Water Quality Assessment Authority and Monitoring System	To create awareness and information base in the area of water quality

2.18 It is also further stated that under the thrust proposed in XII Plan, in component 3 above, a new organization namely National Water Resources Information Centre (NWR-IC) to be registered under the Societies Act comprising professionals from the specialized fields, namely: Water Resources, GIS, Remote Sensing, Computer Science and other related



disciplines has been proposed to manage the large volume of data on water resources and allied fields generated under India-WRIS project and also to update periodically for proper decision making.

2.19 The Ministry also informed about the proposed DWRIS, stating that considering WMO guidelines the existing Hydrological Observation (H.O.) stations are far below the minimum requirement. So, in component 5, this proposal has attempted to strengthen H.O. stations. In total 1917 additional H.O. stations have been proposed in order to meet the minimum requirement of H.O. stations for achieving various goals such as assessment of basin wise water availability, study of climate change, better flood forecasting, flood mitigation, reservoir inflow forecasting, water quality and sediment assessment, morphological studies, planning and design of water resources projects, assessment of navigational potential for inland waterways etc. Besides, it is proposed to open 810 new water quality sites in a phased manner.

### **Major and Medium Irrigation**

2.20 The Committee note that the planning, formulation and execution of all Major and Medium Irrigation(MMI) projects is carried out by the concerned State Governments and the required funds are allocated in their State Plans. For the financial year 2011-12, the Budget allocation(Plan) of Rs.273.89 crore for MMI was reduced to Rs.222.85 crore, *i.e.* a reduction of Rs.51.04 crore at RE stage. The Committee were informed that the year 2012 being the last financial year of XI Five Year Plan, the allocation was reduced by the Department of Economic Affairs, Ministry

of Finance in consultation with the Ministry of Water Resources as certain modifications are being envisaged in this Central Sector schemes during the XII Plan. The Ministry claimed that no schemes/projects have been adversely affected due to reduction at Revised Estimate stage and that Regular Expenditure Review Meetings are conducted at appropriate levels by competent authorities to accelerate the rate of implementation of various schemes so as to fully utilise the allocation under the schemes/projects. The Committee are of the considered view that the frequency of meetings of Expenditure Review Meetings should be increased to ensure that regular tab is kept on the implementing agencies under Major and Medium Irrigation projects. They are also of the firm view that proper pre-Budget planning and conscientious efforts are needed to foresee the problems so that solutions could be found well in time to avoid reduction at RE stage. The Committee, therefore, would like the Ministry of Water Resources to prepare their RE with due care and diligence and undertake periodic, regular review of the offices, institutes, agencies working under them. They would also like the Ministry to undertake a comprehensive review of the working of all subordinate offices under MoWR during the XII Plan period.

### **Unapproved Projects**

2.21 The Committee note that the schemes under Plan Sector require investment clearance from the Planning Commission for which there is an established procedure. The Committee were informed during examination of Demands for Grants (2010-11) that in case of MMI projects, State Planning Boards are empowered to clear the

proposals if inter-State issues are not involved. Despite well-defined guidelines and procedure being in place, the Committee are shocked to learn that a large number of Major and Medium Irrigation Projects have been under implementation without having necessary approval from the Planning Commission. As per XI Plan document, 90 major, 136 Medium and 74 ERM Projects have been under execution without investment clearance from the Planning Commission. The Committee were informed that as per the Report of the Working Group, 327 projects were reportedly ongoing in XI Plan, out of which 170 projects including 70 Major, 87 Medium and 13 ERM are unapproved. The Ministry informed the Committee that no Central assistance is provided to the unapproved projects and that it is incumbent on the part of State Governments to take necessary initiative to put up comprehensive proposal/DPR of the unapproved projects for techno-economic appraisal before the 'Advisory Committee on Irrigation, Flood Control and Multi-Purpose Projects' of MoWR for their acceptance, followed by investment clearance from the Planning Commission. The Committee, therefore, recommend that the Ministry pursue the matter with the State Governments to get regularised all the 170 unapproved projects which spillover into XII Plan period. They also recommend that the Ministry impress upon the State Governments to accord priority to unapproved projects for getting them regularised instead of taking up new proposals.

## Development of Water Resources Information System

2.22 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.234.30 crore. The objective of the scheme is to develop information system on water resources at the national level. The data for the system will emanate mainly from the ongoing activities of the Ministry of Water Resources at their attached offices. For gathering regional and related information, the concerned State and Central agencies will be provided with regular connectivity. The processed information will be made available to all users through a web enabled system. The Ministry informed the Committee that during XI Plan several physical achievements were made by DWRIS viz. Data bank and Online Information System, Rationalization of Minor Irrigation Statistics, Creation of watershed maps and Geographic Information System, Hydrological Observations including Snow Hydrology, Water Quality Assessment Authority, and that under the thrust proposed in XII Plan, the structure of the Scheme has been modified and activities have been regrouped under several components which include Data Bank and Information System, Irrigation Census, Strengthening of Monitoring Unit in CWC, Hydrological Observations and Monitoring System and Water Quality Assessment Authority and Monitoring System. The Committee, therefore, fervently urge the Ministry to develop and operationalise the DWRIS expeditiously to achieve the twin objectives of making the processed information available at the national level for

policy planning, coordination and monitoring and also to all users through a web-enabled system.

2.23 The Committee were informed that the first version of website of INDIA WRIS was launched on 7 December, 2010 and the development of information system is under progress. The second version INDIA WRIS was launched on World Water Day *i.e.* 22 March, 2012. The full version with complete database of the project would be launched by June, 2014. The Committee hope and expect that the full version will be launched by the stipulated time *i.e.* June, 2014.

2.24 The Committee note that in the XI Plan, the target for general monitoring of ongoing major/ERM projects was tentatively fixed as 150 projects per year. However, it has been observed that during the year 2007-08, only 66 projects were monitored against the target of 86 projects. During 2008-09 the figures were 33 against 65. During 2009-10 the figures were 20 against 58; during 2010-11 it was 34 against 56 and during 2011-12 it was 19 against 54 (upto February, 2012). The constraints cited, therefore, are stated to be inadequacy of supporting technical and secretarial staff, financial and other related problems. Similarly, under AIBP monitoring there was a target of 300 visits for 150 AIBP projects to be monitored each year during XI Plan. However, it has been observed that during 2007-08 only 200 projects were monitored against the target 278, during 2008-09 only 186 projects were monitored against 324, during 2009-10 167 out of 330 were monitored, during 2010-11 only 192 against 364 targets were monitored whereas during 2011-12 only 117 against target by 328 (upto February, 2012) was monitored. The reasons for shortfall are stated to be the

expenditure against release of first instalment which could not be incurred by the project authorities. The Committee are perturbed over the slow monitoring of the projects and the fact that the project authorities failed to incur the expenditure against the release of first instalment and, therefore, desire that the Ministry revisit the Scheme and re-tailor it suitably to make it successful. They would like to be apprised of the action taken in the matter. The Committee also desire the Ministry to strengthen the monitoring mechanism in respect of the projects.

2.25 The Committee were informed that the work study of assessment of irrigation potential creation through mapping of irrigation infrastructures to monitor the progress was assigned to NRSA, Hyderabad in respect of 53 AIBP assisted projects spread over 18 States during the XI Plan. According to the Ministry, the study was completed during 2009-10. It not only provides the potential created but also gives critical gap areas for further effective monitoring. The Committee note that the NSRC has also been further awarded the work of similar assessment in respect of another 50 projects spread over 14 States in second phase during XI Plan which is targeted to be completed by October, 2012. The Committee desire the Ministry to furnish the details of the study conducted by NSRC, Hyderabad regarding the potential created and the gap areas suggested for further effective monitoring and the corrective steps taken to fill up the gaps so suggested. The Committee expect that the study of another 50 projects will be completed within the stipulated time *i.e.* October, 2012.

## CHAPTER III

### MINOR IRRIGATION

3.1 Minor Irrigation (MI) schemes are those ground and surface water schemes which have a culturable command area (CCA) upto 2,000 hectare individually. Surface water Minor Irrigation schemes are generally funded from the public sector outlay. Many schemes under Minor Irrigation have been transferred to State Sector and some others have been merged in a new Scheme. The detailed Budget allocations for Minor Irrigation during the year 2011-12 and 2012-13 are given as under :-

**Table – 16 : Budget allocations for Minor Irrigation Projects**

Name of scheme	Budget Estimates (2011-12)		Revised Estimates (2011-12)		Budget Estimates (2012-13)	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
Minor Irrigation	130.40	105.02	139.45	105.14	336.80	105.98

3.2 The Plan allocation for Minor Irrigation for 2011-12 was fixed at Rs.130.40 crore. But it was increased to Rs.336.80 crore in 2012-13, while the Non Plan allocation was kept at Rs.105.02 crore and Rs.105.98 crore during the same period. When asked the reasons for substantial enhancement in Plan allocation during 2012-13, the Ministry replied as under :

"During 2012-13, Aquifer Mapping and Management has been taken up as major component in addition to procurement of new rigs, strengthening of observation wells, spill over work of Demonstrative Artificial Recharge and exploration through outsourcing."

3.3 The Ministry also informed the Committee in a written reply that the following schemes/projects are proposed to be taken up during the year 2012-13 under Ground Water Management & Regulation :

- (I) Aquifer Mapping and Management;
- (II) Ground Water Regime Monitoring and Strengthening of Ground Water Observation Well Network;
- (III) Participatory Ground Water Management;
- (IV) Ground Water Resource Assessment and Technical Assistance to Govt. Organizations;
- (V) Preparation of Reports & Information Dissemination; and
- (VI) Ground Water Regulation/ Awareness/ Workshops.

3.4 Regarding Aquifer Mapping as a major component for 2012-13, the Committee wanted to know why in spite of this technology well known throughout the world was not being introduced in the country, the representative of the Ministry during evidence stated *inter alia* as follows:-

"Sir, the technology for what we are looking at is very restrictive and not available....."

3.5 On being asked about the time by when the aquifer map will be available for the Hydrological Department, Meteorological Department and Agriculture Department, the representative of the Ministry deposed:

"Let me give you the timeline. For the projects, we have given exactly 18 months. By the end of the XII Plan, we would be able to do a substantial portion. But the work is so vast, I would not be surprised if such a map of the detail we are doing takes ten years. Even then, we have got letters from the World Bank and other institutions saying you people are being too ambitious. So, we are trying to work it out. It is a very huge project."



## Ground Water Management & Regulation

3.6 The Scheme of Ground Water Management & Regulation (GWM&R) was launched with the merger of some X Plan schemes at a cost of Rs.460 crore for implementation by the Central Ground Water Board (CGWB) during XI Plan. The Budget allocation for GWM&R are given below :

**Table – 17 : Budget allocation for GWM&R**

(Rs. In crore)

Name of Scheme	Budget Estimates	Revised Estimates	Budget Estimates
	2011-12	2011-12	2012-13
Ground Water Management and Regulation	117.40	129.00	285.00

3.7 The allocations were increased during 2011-12 at RE stage by Rs.11.60 crore, which were further increased to Rs.285.50 crore in 2012-13. When asked to explain the reason for upward revision of Plan allocation at RE stage in 2011-12, the Ministry submitted as under :

"The plan allocation is (was) revised at RE stage for keeping provisions for (i) final payments towards Peizometers construction through outsourcing (ii) advance payments for exploration work through outsourcing (iii) release of sanctions towards demonstrative artificial recharge projects to various State Government departments / institutions etc."

3.8 Asked further the reasons for increase in Plan allocation for GWM&R to the tune of Rs.285.00 crore in 2012-13, the Ministry replied as under :

"The Plan allocation in respect of CGWB for Ground Water Management & Regulation has been enhanced by Rs. 168 crore in 2012-13. During year 2011-12 BE

was Rs. 117.40 crore which is enhanced to Rs. 285.50crore in 2012-13. The reasons for enhancement in Plan allocation is due to provisions kept for :-

- Provision of Rs 70 crore under M&E for procurement of new Rigs, machinery and other equipment software data etc. for aquifer mapping and technological upgradation during 2012-13
- Provision of Rs. 144.60 crore under Major Works for outsourcing of exploration activity, spill over of artificial recharge projects, construction of peizometers through outsourcing and activities related to aquifer mapping, participatory Ground Water management."

3.9 The Ministry has furnished the details of physical achievements and financial achievements made under the Scheme of Ground Water Management and Regulation since its inception, which are given at **Annexure I** and **Annexure II** respectively. The details regarding major activities being proposed during XII Plan under GWM&R scheme as received from the Ministry are also given at **Annexure III**.

### **Central Ground Water Board**

3.10 The Central Ground Water Board (CGWB), under the Ministry of Water Resources, is a multi-disciplinary scientific organisation with a mandate to :

"Develop and disseminate technologies, monitor and implement national policies for 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."

3.11 The Board is headed by the Chairman and has four Wings, namely (i) Sustainable Management & Liaison (ii) Survey, Assessment & Monitoring (iii) Exploratory Drilling & Materials Management and (iv) Technology Transfer & Water Quality. The Rajiv Gandhi

National Ground Water Training and Research Institute, headed by a Director (RGI) is located at Raipur. The Board has 18 regional offices, each headed by a Regional Director, supported by 17 Engineering Divisions and 11 State Unit Offices for undertaking various field activities. Achievements made by CGWB during 2011-12 relate to (i) ground water management studies (ii) geophysical studies (iii) water quality analysis (iv) estimation of ground water resources of the country (v) web-enabled ground water information system (WEGWIS) (vi) enactment of legislation on ground water by States/UTs (vii) constitution as Central Ground Water Authority (CGWA).

3.12 It is stated that the Central Ground Water Board needs to be adequately reinforced with additional scientific, engineering and administrative manpower. Accordingly, a proposal for the restructuring and strengthening of CGWB was prepared and submitted earlier. The total Budget allocation for CGWB for 2012-13 was earmarked at Rs.105.98 crore, which is almost the same amount earmarked for BE 2011-12 and RE 2011-12, viz. Rs.105.02 crore and Rs.105.14 crore respectively.

3.13 The Committee asked the Ministry whether the Budget allocation of Rs.105.98 crore will be adequate for this financial year 2012-13 in view of the restructuring proposal of CGWB. To this query, the Ministry in a written reply informed the Committee as under:

"The Budget allocation of Rs. 105.98 crore does not include the financial implication of restructuring proposal, as the proposal is not yet accepted and approved."

3.14 Asked to elaborate on the restructuring plan of CGWB, the Ministry stated in a written reply as under:

"Restructuring of CGWB aims at horizontal expansion as well as vertical extension of the field activities to achieve the desired goals as envisaged in the "National Water Policy 2002" and report of "National Water Mission". In view of limited organizational resources, the desired goals as envisaged in the above documents are partially achieved and become the driving force in restructuring the organization. Also, the expectations from public and User Groups have increased drastically which has put enormous work load on the Board leading to partially meeting the aspirations with the existing organizational strength.

There is paradigm shift in ground water sector from development to management at micro level wherein serious efforts need to be made for strengthening and restructuring of this organisation."

As regards, the Central Ground Water Board, the Ministry submitted :

"At present CGWB has 18 Regional Offices, 17 Divisional Offices and 11 State Unit offices and one Rajiv Gandhi National Ground Water Training Institute to perform its mandated functions which include Ground Water Management Studies in identified thrust areas, Ground Water Exploration in hard rock, alluvial and boundary terrain, Country wide periodic Ground Water Monitoring, Short Term Water Supply Investigations, demonstrative Studies on Artificial Recharge and Rainwater Harvesting in GW stress areas. The Geophysical investigation and water quality studies are also being taken up to support GW Management, Exploration and water supply investigations. CGWB disseminates its data and information through publications of State Hydrogeological Atlases, State Reports, District Reports, Ground Water Year Books, Ground Water Exploration Report, District Ground Water Brochures, Bhujal News-Quarterly Journal etc. Collaborative Special Studies are taken up with premier scientific/ Academic/public Sector organizations/institutes in field of GW. Notification and Regulation of Ground Water Development and Management is one of the major activities of the Board. In order to develop human resources, training programmes are organized at Rajiv Gandhi National Ground Water Training & Research Institute for Ground Water professionals from Central/ State Organizations, NGOs etc.

During the XII Plan, it is proposed to enhance the activities of CGWB like Aquifer mapping and management, Participatory ground water management etc. In order to carry out enhanced activities, revamping of the present organization structure is essential. The functions to be performed by Head Quarters and Field Formations have been attempted in this proposal. Advanced instruments are also proposed to be procured for which additional manpower is required.

Under this proposal, for operational convenience, the country has been sub-divided into 11 Major aquifer systems. The existing regional offices and state unit offices are proposed to be reorganized to assess the ground water potential in basin and sub-basin level and prepare the regional aquifer level management plans. The scientific

information will be translated to administrative units for effective management of water resources on sustainable basis and also frame regulatory measures. The states will have their water resources development plan at micro level with local socio-economic considerations and prevailing state Ground water policy.

The proposed Aquifer Level Commissionerate offices will be headed by Commissioner in PB-4 with GP Rs.10,000/-) will be located at Ahmadabad, Patna, Chandigarh, Lucknow, Kolkata, Guwahati, Nagpur, Bhubaneswar, Hyderabad and Chennai. These Commissionerates will have jurisdiction of different regions and Center of Excellences. Further, 2 Commissionerates posts are proposed to be created at RGI).

It is proposed to upgrade the post of Chairman to HAG –Rs.75500-80000 scale and existing Five Members (SAM, SML, TT&WQ, ED&MM and Director (RGI) to HAG-67000-79000 scale), Placing Member Secretary also in HAG – 67000-79000/- scale and creating new post of Member (HRM) in PB-4 with Grade Pay of Rs.10,000/-.

It has also been proposed to upgrade some SUOs to Regional Directorates and opening of Divisional Offices in some States where Divisional offices do not exist.

It is proposed to create 9 Centers of Excellence for the specialized work in Aquifer mapping, Remote Sensing & GIS, Modeling, Managed Aquifer Recharge & Aquifer Remediation, IT ( Database Management & Standardization of protocol for data storage & transfer), Drilling Technology, Geophysics & Instrumentation, Water Quality, Environment & Health and Climate Change.

The proposal has been submitted to the Ministry, which is under examination in the Ministry."

3.15 The Committee pointed out that several models have been practiced abroad for replenishing ground water levels. To address ground water depletion in its most populous areas, Arizona State in USA, for instance, enacted the Ground Water Code in 1980. In Oman too, it is stated that obligatory registration of all wells, introduction of well permits, national well inventory, well metering etc. have been adopted to tackle the problem. Asked whether there is any proposal to initiate similar steps in the country in the near future, the Ministry replied as under:

"Water being a state subject, necessary measures for regulation of ground water development and promotion/ implementation of artificial recharge measures are to be undertaken by the State Governments. However, Central Ground Water Authority constituted under EPA, 1986 is regulating ground water withdrawal through notification of OE/Critical areas. It has notified 82 OE/Critical areas in the country as given below:-

**Table – 18 : Number of areas Notified by CGWA**

<b>Sl No.</b>	<b>State</b>	<b>No of Areas Notified</b>
1	Andhra Pradesh	3
2	Gujarat	1
3	Haryana	15
4	Madhya Pradesh	7
5	NCT, Delhi	3
6	Punjab	18
7	Rajasthan	32
8	Uttar Pradesh	1
9	West Bengal	1
10	UT of Daman & Diu	1
	<b>Total</b>	<b>82</b>

List of notified areas for Regulation of Ground Water Development is in **Annexure IV**.

In order to regulate ground water withdrawal by Industries and Infrastructure Projects CGWA has made provision for rainwater harvesting, well metering etc., mandatory. In order to address ground water depletion in different areas CGWA is undertaking mass awareness programmes, training programmes and painting competition for school children under IEC scheme of MoWR.

The Model Bill circulated by Government of India provides for regulation of ground water development as well as implementation of artificial recharge measures to address the problem of over-exploitation and falling water levels. The Bill has a provision for setting up of State Ground Water Authority, notification of areas for regulation, registration of wells, permits for new wells, issuing directions to various State Departments or individuals for construction of rain water harvesting structures, promotion of rain water harvesting and artificial recharge through public awareness campaigns etc.

Government of Gujarat has banned construction of new wells in Over-exploited and Critical category areas in the state. Government of Gujarat has also adopted an aggressive recharge strategy that has contributed significantly in stabilizing the

ground water levels and even reversing the trend of ground water depletion in Saurashtra region. The State Govt. has extended strong support to communities to expand this work in a participatory mode under the Sardar Patel Sahakari Jal Sanchay Yojana. Recharge structures constructed under the scheme include check dams, farm ponds, percolation tanks etc. Other State/ UT Governments need to replicate these measures."

3.16 On being asked steps being proposed to ensure adoption of Model Bill on ground water by States/UTs on the line circulated by the Ministry in 1970, 1992, 1996 and 2005, the Ministry replied as under:

"The MoWR have circulated a Model Bill to the States and Union Territories to enable them to enact suitable legislation for regulation and control of ground water development and management. The model bill provides for setting up of Ground Water Authority in States/ Union Territories to regulate and control development and management of ground water. The Authority may notify areas for control/ regulation of ground water extraction or use in any form. The Authority may also identify areas worthy of artificial recharge, issue necessary guidelines for rain water harvesting and artificial recharge and give appropriate directions to the concerned departments in the State/ UT to include rain water harvesting in all developmental schemes falling in notified areas. In urban areas falling in notified areas, the Authority may issue directives for construction of appropriate rain water harvesting structures in all residential, industrial and other premises having an area of 100 sq. m. or more.

The Bill was initially circulated in 1970 which has been re-circulated in 1992, 1996 and 2005 for adoption. So far 11 State/UTs viz., Andhra Pradesh, Bihar, Goa, Himachal Pradesh, Kerala, Tamil Nadu & West Bengal and UT of Chandigarh, Dadra & Nagar Haveli, Lakshadweep and Puducherry have enacted ground water legislation. In other States/UTs, action have been initiated to adopt Model Bill.

The CGWB through its Regional Offices is pursuing respective state Government departments for early enactment of ground water Legislation and formation of Ground Water Regulatory Authorities."

3.17 When asked to furnish the names of States/UTs which have enacted legislation on roof top rain water harvesting, the Ministry also informed the Committee as follows :

"As per information received from the States/UTs, so far 18 States and 4 UTs namely, Andhra Pradesh, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Chandigarh, Daman & Diu, NCT Delhi and Puducherry have made roof top rain water harvesting mandatory in their respective States. In UT of Andaman & Nicobar, roof top rain water harvesting has been made mandatory in Port Blair Town. 4 States namely Meghalaya, Arunachal Pradesh, Odisha, Jharkhand and 1 Union Territory i.e. Lakshadweep are also in the process of making such provision."

### **Repair, Renovation and Restoration of Water Bodies**

3.18 The Ministry informed that the Government of India launched a Pilot Scheme for Repair, Renovation and Restoration (RRR) of water bodies as a State sector scheme during X Plan. The Pilot Scheme envisaged a Plan outlay of Rs.300.00 crore to be shared by the Centre and States in the ratio of 3:1.

3.19 Highlighting the objectives of the Scheme of RRR, the Ministry in a written reply informed the Committee as follows :

"The pilot scheme on Repair, Renovation and Restoration (RRR) of water bodies implemented during X Five Year Plan envisaged revival, augmentation and utilization of storage and irrigation potential of water bodies. The scheme of RRR of water bodies approved for implementation during XI Five Year Plan envisages following objectives:

- (I) Comprehensive improvement of selected water bodies.
- (II) Improvement of catchment areas of water bodies.
- (III) Community participation and self-supporting system for sustainable management for water bodies covered by the programme.
- (IV) Ground Water Recharge.
- (V) Capacity Building of communities, user groups standing committee for Panchayats and State Government/Central Government Agencies concerned with the planning, implementation and monitoring of the project.
- (VI) Increase in storage capacity of water bodies.
- (VII) Improvement in agriculture/horticulture productivity and increase in recharge of ground water in downstream areas of water bodies.



- (VIII) Environmental benefits through improved water use efficiency.
- (IX) Irrigation benefits through restoration of water bodies.
- (X) Promotion of conjunctive use of surface and ground water.
- (XI) Development of tourism, cultural activities, etc.
- (XII) Increased availability of drinking water."

3.20 The Government of India has approved two Schemes on Repair, Renovation and Restoration of Water Bodies (i) with External Assistance with an outlay of Rs.1500 crore and (ii) with Domestic Support with an outlay of Rs.1,250 crore, for implementation during XI Plan period. During the year 2011-12 (till 31<sup>st</sup> December 2011), a sum of Rs.288.09 crore has been released under the Scheme with domestic support, whereas a sum of Rs.174.88 crore has been released till December 2011 under External Assistance component. The details of funds released under the Scheme with Domestic Support till 31.12.2011 is as follows :

**Table – 19 : Status of fund released under the Scheme of RRR of water bodies (Domestic Support) : 2009-10, 2010-11 and 2011-12**

<b>Name of State</b>	<b>No. of Water Bodies</b>	<b>Fund released during 2009-10</b>	<b>Fund released during 2010-11</b>	<b>Fund released till 31.12.2011</b>
Odisha	1321	72.12	75.00	70.33
Karnataka	427	74.04	47.47	77.51
Andhra Pradesh	1029		189.00	
Bihar	15		25.00	
U.P. (Bundelkhand)	28		29.08	
M.P. Bundelkhand)	78		7.33	2.62
Meghalaya Umiam Lake	1		1.78	
Chhattisgarh	131			34.68

Gujarat	34			10.61
Haryana	3			9.79
Maharashtra	258			80.53
Rajasthan	16			5.02
<b>Total</b>	<b>3341</b>	<b>146.16</b>	<b>374.66</b>	<b>288.09</b>

3.21 Under the Scheme of RRR of water bodies with external assistance, World Bank Loan Agreements have been signed with Tamil Nadu for Rs.2,182 crore to restore 5,763 water bodies having a CCA of 4 lakh hectares, with Andhra Pradesh for Rs.835.00 crore for restoration of 3,000 water bodies with CCA of 2.5 lakh hectares, with Karnataka for Rs.268.78 crore for restoration of 1,224 water bodies with CCA of 0.52 lakh and with Odisha for Rs.448 crore for restoration of 900 water bodies having CCA of 1.2 lakh hectares.

3.22 Budget allocation for RRR scheme was not reflected in the Budget documents. When the Committee asked Ministry to comment on it, the Ministry in a written reply informed as follows :

"There is no indication about allocation of funds for the Scheme of RRR of water bodies during the XII Five Year Plan against requirement of Rs.30,000 crore proposed by the Ministry for the scheme. The requirement of funds/budget estimates 2012-13 will depend on funds allocated for the scheme by the Planning Commission."

3.23 Elaborating further, the representative of the Ministry clarified during evidence,

"Of the total funding of Rs.14,224 crore for AIBP for the four projects together, within a short time, the Ministry of Finance will indicate to us how much is for RRR and how much is for AIBP and FMP etc."

3.24 The Ministry also informed that a total sum of Rs.808.91 crore has since been released during 2009-10, 2010-11 and 2011-12 to 12 States, covering 3341 water bodies. Further, a proposal for covering 126 more water bodies in Odisha and Madhya Pradesh has also been processed for release of funds.

3.25 The physical and Financial achievements of RRR Scheme are given at **Annexure V**.

### **Minor Irrigation**

3.26 The Committee observe that Minor Irrigation (MI) schemes are those ground and surface water schemes which have a culturable command area (CCA) upto 2,000 hectare individually. Surface water Minor Irrigation Schemes are generally funded from the public sector outlay. Many schemes under Minor Irrigation have been transferred to the States Sector and some others have been merged in a new scheme. A total of Rs.336.80 crore is the Budget allocation (Plan) for Minor Irrigation Schemes during 2012-13 which is Rs.206.40 crore more than the allocation made for 2011-12. The Committee were informed that during 2012-13, Aquifer Mapping and Management has been taken up as major component in addition to procurement of new rigs, strengthening of observation wells, spill over work of Demonstrative Artificial Recharge and exploration through outsourcing which necessitated a substantial enhancement in Plan allocation during 2012-13. The Committee also note that several new schemes/projects are proposed to be taken up during 2012-13 under Ground Water Management & Regulation, viz. Aquifer Mapping and Management, Ground

Water Regime Monitoring and Strengthening of Ground Water Observation Well Network, Participatory Ground Water Management, Ground Water Resource Assessment and Technical Assistance to Govt. Organizations, Preparation of Reports & Information Dissemination and Ground Water Regulation/ Awareness/ Workshops. The Committee hope that the Ministry would make full utilization of increased allocation of Rs.336.80 crore during 2012-13. They would also like to be apprised of the achievements made in this behalf.

3.27 The Committee are surprised to note that although the aquifer mapping technology is universally known, it is not yet available in the country. The representative of the Ministry testified that the said technology was very restrictive and not available. Regarding availability of aquifer map as real time information for the Hydrological Department, Meteorological Department and Agriculture Department, the representative of the Ministry stated that by the end of XI Plan, a substantial portion of the work will be done. The Committee are appalled that there is no sense of urgency on the part of the Ministry to take up this project on and apprehend that this will come back year after year as a pilot project or as a water mission. Being a matter of largest and highest urgency in view of the Eastern States being opened up for the next Green Revolution, the Committee recommend that this matter be accorded priority and earnest consideration. They would like to be informed of the progress in this regard.

## **Ground Water Management & Regulation**

**3.28 The Committee note that the Scheme of Ground Water Management & Regulation was launched by the Central Ground Water Board at a cost of Rs.460.00 crore during XI Plan with the merger of some X Plan schemes. The Budget allocation for the GWM&R during 2011-12 was Rs.117.40 crore, which was increased to Rs.129.00 crore at RE 2011-12. The allocation for the financial year 2012-13 has been pegged at Rs.285.99 crore, i.e. an increase of Rs. 167.60 crore over BE 2011-12. The Ministry informed the Committee that the reasons for enhancement of Budget allocation in 2012-13 by Rs.167.60 crore is due to (i) provision kept of Rs.70.00 crore for M&E for procurement of new Rigs, machinery and other equipment software data etc. aquifer mapping and technological upgradation during 2012-13, and (ii) provision of Rs.144.60 crore under Major Works for outsourcing of exploration activity, spillover of artificial recharge projects, construction of piezometers through outsourcing and activities related to aquifer mapping, participatory Ground Water management. The Committee hope the Ministry would make judicious and optimum utilisation of the increased allocation for the purpose for which it was allocated within the given timeline.**

**3.29 The Committee note that during 2007-2012 (upto February 2012), the performance in activities like monitoring of ground water observation wells, geo-physical studies, hydro chemical studies, preparation of report/maps, etc. have all been equal to or below targets. The Committee further note that the Ministry has chalked out physical activities including tentative target for XII Plan period in respect**

of Ground Water Management & Regulation scheme, viz. Aquifer Mapping & Management; Monitoring Water Level, Participatory Ground Water Management, Ground Water Resource Assessment & Technical Assistance to Government Organizations, preparation of Report and Information & Dissemination, and Ground Water Regulation/ Awareness/ Workshops. They desire that the Ministry pursue the targets set for XII Plan under GWM&R vigorously so that tangible results are achieved on ground water front in the near future.

#### Central Ground Water Board

3.30 The Committee note that the Central Ground Water Board is a multi-disciplinary scientific organisation set up with a mandate to "develop and disseminate technologies, monitor and implement national policies for 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." The Board has 18 regional offices, each headed by a Regional Director, supported by 17 Engineering Divisions and 11 State Unit Offices for undertaking various field activities. The total Budget allocation for CGWB for 2012-13 was earmarked at Rs.105.98 crore, which is almost the same amount as earmarked for BE 2011-12. The Ministry submitted that the CGWB needs to be adequately reinforced with additional scientific, engineering and administrative manpower. Accordingly, a proposal for the restructuring and strengthening of CGWB was prepared and submitted earlier. The

Committee also note that restructuring of the Central Ground Water Board aims at horizontal expansion as well as vertical extension of the field activities to achieve the desired goals as envisaged in the National Water Policy 2002 and report on National Water Mission. In view of this, it is proposed to enhance the activities of CGWB like aquifer mapping and management, participatory ground water management etc., for which the revamping of the present organisational structure is essential. The Committee desire that the restructuring process of CGWB be completed during XII Plan through the concerted efforts of the Ministry and its subordinate organisations.

3.31 The Committee note that with a view to regulating ground water withdrawal by industries and infrastructure projects, the Central Ground Water Authority has made provision for rainwater harvesting and well metering etc. mandatory. Notably, the Government of Gujarat has banned construction of new wells in over-exploited and critical category areas in the State which has contributed significantly in stabilising ground water levels and even reversing the trend of ground water depletion in Saurashtra region. The State Government of Gujarat has extended strong support to communities to expand this work in a participatory mode under the Sardar Patel Sahakari Jal Sanchay Yojana involving construction of recharge structures such as chek dams, farm ponds, percolation tanks etc. The Committee recommend the GOI popularize the Scheme so that other State/UT Governments replicate the measures to address ground water depletion in different parts of the country. The Committee further desire that all the States be persuaded to enact legislation on the lines of

**Model Bill already circulated for regulation and control of ground water development and management.**

### **Repair, Renovation and Restoration of Water Bodies**

**3.32 The Committee note that the Government of India launched a Pilot Scheme for Repair, Renovation and Restoration(RRR) of Water Bodies as State sector scheme during X Plan which envisaged a Plan outlay of Rs.300.00 crore to be shared by the Centre and States in the ratio of 3:1. The objectives of the Scheme are revival, augmentation and utilisation of storage and irrigation potential of water bodies. Two schemes namely, (i) scheme with external assistance with an outlay of Rs.1500 crore, and (ii) scheme with domestic support with an outlay of Rs.1250 crore have been approved by the Government in this regard for implementation during the XI Plan period. During the year 2011-12(till December, 2011), a sum of Rs.288.09 crore had been released under the Scheme with domestic support, whereas a sum of Rs.174.88 crore had been released till December, 2011 under external assistance component. The Committee were informed that a total sum of Rs.808.91 crore had been released during 2009-10, 2010-11, and 2011-12 to 12 States, covering 3341 water bodies. Further, a proposal for covering 126 more water bodies in Odisha and Madhya Pradesh has also been processed for release of funds. However, the Committee are dismayed to note that out of 3341 water bodies involving a total project cost of Rs.1350.90 taken up during the same period, only 694 water bodies have been completed, (i.e. a mere 20.77% achievement). Works in the remaining 2647 water**



bodies are stated to be in progress. The Committee recommend that the Ministry make concerted efforts to complete the remaining 2641 water bodies for which work is stated to be in progress. They also would like the Ministry to apprise about the thrust areas which have been identified for achievement during 2012-13 as also the fund allocated by the Planning Commission for RRR Scheme and the follow up action taken in this regard.

## CHAPTER IV

### FLOOD CONTROL

4.1 Even though the management and control of flood falls under the jurisdiction of State Governments, the Central Government initiates various supportive measures. Apart from overall planning and coordination of flood management activities, the Ministry has been providing assistance/grants for flood control works. The Table 20 shows the total Budget allocations for flood control during 2011-12 to 2012-13:

**Table – 20 : Allocations for flood control**

(Rs. in crore)

Name of the scheme	Budget Estimates (2011-12)		Revised Estimates (2011-12)		Budget Estimates (2012-13)	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
Flood Control	161.00	78.35	127.00	78.02	193.00	78.62

4.2 The Plan allocation for Flood Control for the year 2011-12 was fixed at Rs.161.00 crore, but it was reduced to Rs.127.00 crore at the RE stage for the same financial year and again enhanced to Rs.193.00 crore for BE 2012-13. When the Committee asked the reason for reduction of Plan allocation for flood control at Revised Estimate stage in 2011-12, the Ministry in a written reply stated as under :

"As expenditure till September, 2011 was very less mainly in respect of Grants-in-aid to State Governments due to non receipt of Utilization Certificate and proposals for further release, the budget for the Scheme- River Management activities and works related to Border Areas was reduced from Rs. 188.00 Crore (BE: 2011-12) to Rs. 138.00 Crore (RE: 2011-12)."

4.3 Asked to state the reasons for increase in Plan allocation in 2012-13 over BE 2011-12, the Ministry informed the Committee as under:

"Under the Scheme- 'River Management activities and works related to Border Areas', the provision for BE: 2012-13 is Rs. 125 crore in place of Rs. 114.00 crore (BE: 2011-12), mainly to provide more funds to Joint Project Office- Sapta Kosi and Sun Kosi Investigation (JPO-SKSKI), Biratnagar (Nepal), as works are being resumed in view of enhanced security provided by the Government of Nepal."

4.4 The outlay (Non Plan) for Emergent Flood Protection Works in Eastern and Western Sectors for 2012-13 has been earmarked at Rs.3.00 crore. When asked to provide details of works undertaken during XI Plan under this head, the Ministry informed as under :

"The works are undertaken by the State Government of Punjab with Central Loan Assistance provided by the Ministry of Water Resources (MoWR) under Non Plan every year as recommended by an inter-Ministerial Committee constituted by the MoWR in December 1989 after pre-monsoon and post-monsoon inspection of the river reaches in Sutlej and Ravi in border areas. The funds are released only after receipt of utilization certificate for funds released in earlier year."

4.5 The details of the works carried out with the Non Plan Central Loan Assistance (CLA) during XI Plan are given at **Annexure VI**. The Ministry also further informed the Committee that as the works are limited in scope, being of emergent nature, and in some years there had been no releases of funds for these works, the provision of Rs.3.00 crore is considered adequate.

### **Flood Management Programme**

4.6 The Ministry also informed the Committee that a re-structured Scheme, namely 'Flood Management Programme' (FMP) amounting to Rs.8,000 crore has been 'in principle'

approved by the Cabinet under the State Sector by amalgamating four on-going Schemes of X Plan : (i) Critical anti-erosion works in Ganga Basin States – a Centrally Sponsored Scheme (CSS) (ii) Flood Control Works in Brahmaputra Valley States – a State sector Scheme (SS) (iii) Critical anti-erosion works in coastal and other than Ganga basin States – a State sector Scheme (SS) and (iv) Improvement of drainage in the critical areas of the country – a State sector Scheme (SS).

4.7 The re-structured Scheme would cover all on-going and new works related to river management, flood control, anti-erosion, drainage development, flood proofing including flood prone area development programme to be implemented by the State Governments in their respective States with the Central assistance. It is also stated that based on the approval of the Cabinet, detailed revised Guidelines for providing Central assistance to the State Governments were issued by the Ministry of Water Resources on 05.08.2009. Further, as directed by Cabinet, an Empowered Committee under the Chairmanship of Secretary (Expenditure), Ministry of Finance has been constituted for examining and approving of the proposals submitted by the State Governments to ensure cost effective solutions. Seven meetings of the Empowered Committee have been held so far, and a total of 406 flood management works of critical nature from 24 States with a total cost of Rs.7,574.80 crore have been included under FMP for providing Central assistance to the States. During XI Plan, Central assistance amounting to Rs.3,140.05 crore has been released to the States (including Rs.89.79 crore for spilledover works of X Plan) as on 31.12.2011. A total of 218 works in 11 States are reported physically completed at site by the respective State

Governments by 31.03.2011, through which an area of 1.86 Mha has been restored/protected against floods and which would provide safety to over 19.72 million people during high flood situation.

### **Flood Forecasting**

4.8 Flood Forecasting and warning in India involves hydrological observations on inter-State rivers and is entrusted to the Central Water Commission (CWC). The Committee were informed that two on-going Schemes of X Plan, namely 'Establishment and Modernization of Flood Forecasting Network in India including Inflow forecast' and 'Strengthening and Modernization of Flood Forecasting and Hydrological Observation Network in the Brahmaputra and Barak Basin' of the Central Water Commission had been amalgamated into a combined Scheme, namely 'Flood Forecasting' during XI Plan. The activity of flood forecasting by the CWC is stated to continue during XII Plan. In the year 2011, a total of 5,662 forecasts with an accuracy of 98.66% were issued by CWC to the State Governments/Local Administration. These forecasts have been proved to be very useful in saving life and public properties as a result of timely action by the authorities. The Budget allocations for Flood Forecasting(FF) are given below :

**Table – 21: Budget allocation for Flood Forecasting**

	<b>(Rs. in crore)</b>	
<b>Year</b>	<b>Plan</b>	<b>Total</b>
2011-12(BE)	34.00	34.00
2011-12(RE)	34.00	34.00
2012-13(BE)	44.00	44.00

4.9 When asked to comment on the reasons why allocation at Revised Estimate stage in 2011-12 was kept at the same level of BE 2011-12, the Ministry submitted that:

"Allocation in RE 2011-12 was based on actual assessment of ongoing works of flood forecasting and installation of telemetry system based on progressive inputs received from regional offices of Central Water Commission, where works are being executed. The allocation in RE 2011-12 was thus estimated to be at the same level as BE 2011-12."

4.10. On being asked to explain the reasons for an increase of Rs.10 crore in allocation for 2012-13 over BE 2011-12, the Ministry submitted:

"BE 2012-13 has been enhanced to take up the works of up gradation of existing telemetry system to TDMA system, installation of real time data transmission system at around 100 existing stations etc."

### **Pagladiya Dam Project**

4.11 The Pagladiya Dam Project is meant for flood moderation to benefit an area of 40,000 ha, irrigation to 54,160 ha and incidental power generation of 3 MW. It is proposed to be built across Pagladiya River at Thalkuchi in Baska District, which falls under Bodoland Territorial Autonomous Districts (BTAD) in Assam. The project envisages construction of 25m high and 21km long earth dam with a concrete spillway. The Government of India had sanctioned the Project in January, 2001 at an estimated cost of Rs.542.90 crore for construction by the Brahmaputra Board.

4.12 The Committee were informed that following works had been carried out since 2001 in respect of the Pagladiya Dam Project : (i) Pre- Pre-construction survey, investigation, studies, design, drawings etc. (ii) Taking possession of land (956 ha) for Resettlement &

Rehabilitation (R&R) purpose (iii) Construction of project roads, offices, etc. (iv) Preparation of technical specifications & tender document (v) Pre-qualification of contractors for main works. The Ministry informed that the start of effective implementation of the Project is dependent on two activities to be carried out by the State Government of Assam viz (i) Zirat Survey (property assessment) of the Project Affected Families (PAF) for finalizing the Resettlement and Rehabilitation (R&R) Plan and (ii) land allotment/acquisition for R&R and project construction. These two activities could not be carried out due to the resistance from a section of the PAF.

4.13 When asked the expenditure incurred by the Government on Pagladiya Dam Project, the Ministry submitted that:

"The expenditure incurred by Government on Pagladiya Dam Project till 27.03.2012 is Rs. 25.64 crore."

4.14 Asked about the steps being proposed for this Project during XII Plan, the Ministry in a written reply submitted as under :

"Efforts are on to remove the stalemate situation of Pagladiya Dam Project. During XII Plan period it is expected that deadlock on Pagladiya Dam Project could be broken with the joint effort of Brahmaputra Board, State Government of Assam and BTC."

### **Flood Control**

**4.15 The Committee note that the Plan allocation for Flood Control during 2011-12 was fixed at Rs.161.00 crore, which was reduced to Rs.127.00 crore at RE stage and enhanced to Rs.193.00 crore for BE 2012-13. The reasons for reduction at RE 2011-12**

stage are stated to be less expenditure till September, 2011 in respect of grants-in-aid to State Governments due to non receipt of UCs and proposals for further release. The Committee are perturbed to note that non receipt of Utilisation Certificates resulted in non release of the funds and hence less expenditure was incurred till September, 2011. Apparently, the Ministry has not devised new and pragmatic measures to avoid delays in submission of UCs. The Committee, therefore, recommend that the Government devise better and effective measures in consultation with the stakeholders and the Ministry of Finance so that funds are released to the affected or flood prone States given the severity of recurring floods. The Committee would also like to be apprised of the particulars of the States who failed to furnish the UCs and the budget implications thereof and the amount of losses claimed by them owing to floods during the last five years.

4.16 The Committee note that a budget provision of Rs.125.00 crore has been made for 2012-13 as against Rs.114.00 crore in BE 2011-12 mainly to provide more funds to Joint Project Office for Sapta Kosi Project and Sun Kosi Investigation(JPO-SKSKI), Biratnagar, Nepal under 'River Management activities and Works related to Border Areas'. The Committee were apprised that these works are being resumed in view of the enhanced security provided by the Government of Nepal. Noting that these Projects had suffered due to political turmoil prevailing over there in the past, the Committee urge the Ministry to expedite these works in view of the improved security scenario within definitive timelines so that the flood-affected people or flood prone areas in North Bihar escape from the fury to recurrent floods and the devastation



caused. Further, the progress of flood control works be continuously monitored so that, if necessary, more funds are allocated and the project is not allowed to slow down or come to a halt for want of funds. The Committee should like to apprise of the measures taken by the Government in this behalf.

4.17 The Committee also note that a total outlay (Non-Plan) of Rs.3.00 crore has been earmarked for 'Emergent Flood Protection Works in Eastern and Western Sectors' during XI Plan. Works were undertaken during XI Plan period by the State Government of Punjab with Central Loan Assistance(CLA) provided by the MoWR every year as recommended by the Inter-Ministerial Committee after pre-monsoon and post-monsoon inspection of the river reaches in Sutlej and the Ravi in border areas. The Committee note that the funds for the works were released only after receipt of Utilisation Certificates(UCs) for funds released in earlier years. The Committee recommend the Ministry to continue to keep a tab on release of funds under this Scheme and insist on receipt of UCs for each and every CLA released in this regard. In view of the fact that large swathes of the country specially Eastern India are prone to the menace of recurring floods, the Committee desire that the allocation under this head be reviewed during the year in case more funds are required to address the menace of recurrent floods in certain areas. They would also like the Ministry to take every possible step for full utilisation of funds allocated in this regard.

**Flood Management Programme**

4.18 The Committee note that a re-structured Scheme, namely 'Flood Management Programme(FMP) amounting to Rs.8,000 crore has been approved 'in principle' by the Cabinet by amalgamating four on-going Schemes of X Plan: (i) Critical anti-erosion works in Ganga Basin States – a Centrally Sponsored Scheme(CSS) (ii) Flood Control Works in Brahmaputra Valley States – a State sector Scheme(SS) (iii) Critical anti-erosion works in coastal and other than Ganga basin States – a State sector Scheme(SS) and (iv) Improvement of drainage in the critical areas of the country – a State sector Scheme(SS). According to the Government, a total of 406 flood management works of critical nature from 24 States with a total cost of Rs.7,574.80 crore have been included under FMP for providing Central assistance to the States. Surprisingly, only 218 works in 11 States are reported physically completed by the respective State Governments as on 31.03.2011. The Committee are unhappy at the slow speed of the works and desire the Ministry to step up the efforts to pursue the respective States for speedy completion of the remaining works.

#### Flood Forecasting

4.19 The Committee note that two on-going Schemes of X Plan namely 'Establishment and Modernisation of Flood Forecasting Network in India including inflow forecast' and 'Strengthening and Modernisation of Flood Forecasting and Hydrological Observation Network in the Brahmaputra and Barak Basin' of Central Water Commission had been amalgamated into a combined Scheme, namely 'Flood Forecasting' during XI Plan. The Budget allocation for the year 2012-13 has been increased by Rs.10 crore over the BE 2011-12 to take up the works of upgradation of

existing telemetry system to TDMA system, installation of real time data transmission at around 100 existing stations. The Committee do hope that with the increase in allocation, though meagre, the target will be achieved within the stipulated timeframe. They would like to be apprised of the progress in this regard.

#### **Pagladiya Dam Project**

4.20 The Committee observe that the Pagladiya Dam Project, meant for flood moderation to benefit an area of 40,000 ha, irrigation to 54,160 ha and incidental power generation of 3mw, is proposed to be built across Pagladiya River at Thalkuchi in Baska District falling under Bodoland Territorial District in Assam. The Union Government had sanctioned the Project in January, 2001 at an estimated cost of Rs.542.90 crore for construction by the Brahmaputra Board. Although several preliminary works had been carried out for Pagladiya Project and an expenditure of Rs.25.64 crore incurred on it till 27.03.2012, the Committee regret that effective implementation of the Project could not be carried out till date. According to the Ministry, before the start of implementation of the Project, the work relating to Zirat Survey(property assessment) of the Project Affected Families(PAF) for finalising the Resettlement and Rehabilitation(R&R) Plan, and Land allotment/acquisition for R&R and project construction needed to be carried out but for the resistance from a section of the PAF. The Committee are convinced that the Pagladiya Dam Project holds out promise of considerable benefits to the people of Assam and that no efforts should be spared to get the Project going in right earnest. They also believe that had the

benefits, to accrue from the Pagladiya Dam, been properly communicated to the Project Affected Families by the Government, the opposition to the Project might not have prolonged. The Committee, therefore, urge the Ministry to make sustained and vigorous efforts for removing the stalemate without any delay so that the work on the Pagladiya Dam Project could be commenced early. They would also like to be apprised of the outcome of steps taken in this regard.

## CHAPTER V

### ACCELERATED IRRIGATION BENEFITS PROGRAMME

5.1 The Accelerated Irrigation Benefits Programme(AIBP) was launched during 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. The surface minor irrigation schemes of North-Eastern States, Hilly States of Sikkim, Uttarakhand, Jammu and Kashmir, Himachal Pradesh and Koraput, Bolangir and Kalahandi districts of Odisha have also been provided Central Loan Assistance(CLA) under this Programme since 1999-2000. Grant component has been introduced in the programme from April, 2004 like other Central Sector Schemes.

5.2 As per the existing AIBP criteria effective from December 2006, grant amounting to 25% of the project cost for major and medium irrigation projects in non-Special Category States and 90% grant of the project cost for major/medium/minor irrigation projects in Special Category States (included undivided Koraput, Bolangir and Kalahandi districts of Odisha) are provided to the selected projects. The balance cost of the project as the State's share is to be arranged by the State Government from its own resources. The minor irrigation schemes in non-Special Category States falling in drought prone/tribal areas are treated at par with Special Category States and are released 90% grant of the project cost. Major and Medium projects providing irrigation benefit to drought prone/tribal area and flood prone area are also eligible for 90% grant of the project cost. The State Governments have been provided an amount of Rs.51132.02 crore and Rs.53395.74 crore as CLA/Grant under AIBP since

inception of this programme upto December, 2011 and till 19.03.2012 respectively for 292 major/medium irrigation projects and 13098 surface minor irrigation schemes.

5.3 The Committee were informed that as per the above guidelines, a comprehensive physical and financial periodical monitoring of major/medium projects is to be carried out by CWC/MoWR and Ministry of Statistics and Programme Implementation. The monitoring visit and submission of status reports will be carried out by the CWC at least twice a year for the period ending March and September of the year. The latest techniques such as monitoring through Remote Sensing Technology may be used by the Government of India to monitor the progress of works specifically the irrigation potential created and States are required to provide necessary details of the project to the Central Government from time to time even after completion of the project. 50 projects have been studied through the NRSA and 53 more projects are under study by it.

5.4 Asked by the Committee about the monitoring and evaluation carried out on the performance of AIBP Programme and the findings of monitoring/evaluation work, the Ministry in a written reply submitted as under:-

"Ministry of Statistics and Programme Implementation(MoSPI) carried out evaluation of AIBP projects. MoSPI submitted final report in July, 2007. The broad outcome of this report indicates that Central Assistance in AIBP projects has helped acceleration in project implementation. It has also led to provision to quality irrigation in time leading to higher cropping intensity, crop productivity, employment and income generation in the command areas. Economic and social returns to public investment under AIBP are reasonable justifying such investment."

5.5 The Committee wanted to know the financial achievements under AIBP since its inception in 1996-97. To this query, the Ministry replied that Central Assistance released under AIBP since 1996-97 till April 2012 was Rs.53395.744 crore. The State-wise/Year-wise releases pertaining to AIBP till March 2012 is enclosed in **Annexure VII**. When further asked to state the funds earmarked for AIBP during the current financial year and also for the XII Plan, the Ministry made a written submission as follows:-

"The amount of funds earmarked for AIBP during the financial year 2012-13 has been finalised as Rs.14242 crore, however, for the XII Plan finalised funds are yet to be received from Ministry of Finance (MoF)."

5.6 According to report of Comptroller and Auditor General of India (No. 4 of 2010-11), the performance of AIBP has been found to be very poor. It has been revealed that maintenance of assets created under AIBP were not being accorded due priority. 3 major, 3 medium and 37 minor irrigation projects have lost their capacity due to silting, weed growth and structural erosion. Further, arrangement for handing over completed projects to farmers/water users had not been operationalized in 30 major/medium and 194 minor irrigation projects. Asked about the present status of maintenance of assets created under AIBP in respect of major, medium and minor irrigation projects, the Ministry replied as under:

"The Central assistance under AIBP is provided to the State governments for completion of the projects which are in the advanced stage of construction. Funds to the tune of 1% are kept in detailed project report for maintenance of irrigation projects. The State governments are required to maintain properly the assets created. However, the Govt. of India have already introduced a condition in its MoU for releasing funds under AIBP to the effect that State governments shall ensure adequate funds for maintenance of projects at least for the following 10 years after execution of the project."

## National Projects

5.7 According to the Outcome Budget 2012-13 of the Ministry of Water Resources, the Union Cabinet in its meeting held on 7 February, 2008 gave consent to the proposal of the Ministry of Water Resources on implementation of National Projects with Central assistance of 90% of the cost of the Project as grant.

5.8 The criteria adopted for inclusion of a project as 'National Project' include the following:-

- (i) International projects where usage of water in India is required by a treaty or where planning and early completion of the project is necessary in the interest of the country.
- (ii) Inter-State projects which are dragging on due to non-resolution of inter-State issues relating to sharing of costs, rehabilitation, aspects of power production etc. including river inter-linking projects.
- (iii) Intra-State projects with additional potential of more than 2,00,000 ha. and with no dispute regarding sharing of water and where hydrology is established.

5.9 The Committee were informed that the Ministry has finalized modalities of funding and Guidelines for implementation of the scheme of National Projects in consultation with the Planning Commission and Ministry of Finance and has sent the same to all the States and Union Territories. So far, three projects, namely Gosikhurd Project of Maharashtra, Shahpur Kundi Project of Punjab and Teesta Barrage Project of West Bengal, which are under execution, have been funded under the scheme of National Projects.

5.10 The Committee wanted to know the status of each of the three National Projects under execution, namely, Gosikhurd Project of Maharashtra, Shahpur Kundi Project of



Punjab and Teesta Barrage Project of West Bengal. The Ministry in a written reply has furnished the status of the three National Projects which is given at **Annexure VIII**.

5.11 The Committee wanted to know the total cost of Shahpur Kundi Project of Punjab.

The representative of the Ministry deposed before the Committee:-

"Sir I can send you all the details later. But the only point which I would like to make is that the progress in this project has been very slow. We have been telling the Punjab Government to please speed it up. We said that it is National Project and there is no shortage of money."

5.12 On being asked the reasons for slow progress, the representative of the Ministry deposed:-

"One reason which I thought was that they want to do everything departmentally. What they were doing up till now is that they were using only work charged employees, their own tractors, etc. For a mega project you cannot go about like this. A Government Department cannot do a mega project. So, we had insisted on them and said why do not you combine all this and float a large tender, let some big companies like L&T and Gammon come and finish this project. I am told, I do not have it in writing, that they are trying to float tenders."

5.13 Asked to indicate the amount allocated for National Projects during the last five years and expenditure incurred so far, the Ministry replied that the funds under the scheme of National Projects started from 2008-09. The amount allocated and the expenditure incurred on the National Projects under execution is given below:-

**Table – 22 : Allocation for and expenditure on National Projects**

<b>Year</b>	<b>Funds allocated (Rs. in Cr.)</b>	<b>Expenditure incurred (Rs. in Cr.)</b>
2008-09	450.00	450.00
2009-10	1800	730.8

2010-11	2200	1509.17
2011-12	1450	97.2

### **Accelerated Irrigation Benefits Programme**

**5.14 The Committee note that the Accelerated Irrigation Benefits Programme (AIBP) was launched during 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. Grant component has been introduced in the Programme since April, 2010. The Committee were informed that an amount of Rs. 14242 crore has been allocated for AIBP for the financial year 2012-13 and that a total of Rs. 53395.744 crore of Central assistance has been released till date for the Programme. The Committee's examination has however revealed that the performance of AIBP has been very poor. The maintenance of assets created under AIBP was not being accorded due priority, and owing to this, 3 major, 3 medium and 37 minor irrigation projects lost their capacity due to silting, weed-growth and structural erosion. The Ministry's reply to this sorry state of affairs is that funds to the tune of 1% are kept in the detailed project report for maintenance of irrigation projects, and it is the job of State Governments to maintain the assets created. The Committee, while recognizing the pivotal role of State Governments in maintenance of irrigation assets created under AIBP, are of the considered view that much more needs be done by the Union Ministry of Water Resources in this regard. The Committee would like to have a comprehensive status report of funds released and the irrigation potential targeted and actually created**

State-wise and year-wise since 1996-97 and the new measures devised in view of the bottlenecks faced and the experience gained.

5.15 The Committee are unable to accept the reply of the Ministry that the present coverage of AIBP is adequate. The fact that 75-85% of AIBP grants were released during 2005-06 to 2007-08 to just 6 States reveals that there have been disparities in the coverage of funds of AIBP. In this connection, the Committee note that the Ministry proposed to introduce certain incentives and conditions to be linked with the Central Assistance(CA) under this Programme during XII Plan, including a proposal for enhancement of CA from @ 25% to @ 90% of the cost of the project in areas under Desert Development Programme. The Committee would like to see the tangible outcome of the efforts of the Ministry in due course. As regards the release of funds, the Committee recommend that the Ministry devise a suitable mechanism to avoid issuing of sanctions for release of funds at the fag end of the financial year (last quarter/March). They also recommend that the Ministry interact with the State Governments on regular basis and impress upon them for timely submission of proposals for funding under AIBP so as to avoid frequent occurrence of March rush every financial year.

5.16 The Committee note that the yearly allocation of AIBP funds to the States is reflected in the DFG of the MoWR. Considering the mandate given to the MoWR, the Committee recommend that the AIBP budget form an integral part of the DFG of the

**Ministry of Water Resources for better conception, coordination, superintendence and outcome.**

### **National Projects**

**5.17 The Committee observe that the National Projects being implemented with the Central Assistance of 90% of the cost of the Project as grant, the Government has in 2008 selected 14 projects in several States out of which 3 projects, namely Gosikhurd Project of Maharashtra, Shahpur Kundi Project of Punjab and Teesta Barrage Project of West Bengal are under execution. The Ministry apprised the Committee that National Projects are basically (i)projects involving inter-country rivers and also (ii)large projects with inter-State problems or (iii)projects with additional potential of above 2,00,000 ha. and with no dispute on sharing of river waters. Noting that there have been proposals from Odisha State Government for inclusion of Ringali Project and Subarnarekha Project under the category of National Projects, the Committee urge that expeditious action be initiated by the Ministry in this regard. Regarding the total cost of Shahpur Kundi Project, the representative of the Ministry was unable to furnish the information during evidence. The Committee, therefore, desire that the requisite information in regard to Shahpur Kundi Project be gleaned within three months from presentation of this Report and placed before the Committee.**

## CHAPTER VI

### INITIATIVES IN NORTH EAST

6.1 The Committee were informed that North Eastern Region (NER) with its geographical area of 26.52 million hectare is endowed with enormous water resources. The combined annual water resources potential of Brahmaputra and Barak rivers is 586 BCM, which is the highest among all river basins in the country. The Ministry of Water Resources has taken significant initiatives through its organizations for the development of North Eastern Region.

6.2 The Committee had pointed out in their 8<sup>th</sup> Report (2011-12) that no new Major and Medium Irrigation (MMI) project was taken up under AIBP in the North Eastern Region during the last five years. The reason attributed to this situation was stated to be absence of new proposals from States of the NE Region. The Committee had, therefore, urged the Ministry to make special efforts to encourage and incentivize the State Governments of this region to submit proposals for MMI projects in their own benefits. When asked to indicate efforts made in this regard, the Ministry stated in a written reply as under :

"During review meetings by MoWR/CWC, it has been suggested to the NE States to submit proposals for inclusion in AIBP. Also, the Hon'ble Minister of State (WR) during meetings with NE Region/States, has suggested to come up with the MMI proposals for creation of more irrigation potential."

6.3 Asked to inform any thrust areas identified for MMI for NE Region during XII Plan period and to provide details in terms of physical and financial targets, the Ministry stated as follows :

"The details are finalized by Planning Commission in consultation with the State Governments. The details of funds allocated to MMI projects of NE States for 2012-13 are not available."

6.4 The Committee were informed that under the Scheme for Repair, Renovation and Restoration (RRR) of water bodies with Domestic Support, Rs.731.4 crore had already been released upto 31.12.2011. The Budget allocation (net) for RRR scheme with Domestic Support has been kept at Rs.684.00 crore. Only Meghalaya among the States of NE Region has figured in the list of recipients of funds. The Committee wanted to know why the remaining six other States of NER have been left out. The Ministry gave the following reply :

"As per guidelines of the scheme of Repair, Renovation & Restoration of water bodies, the State Governments are required to prepare Detailed Project Reports giving information about details of CCA, present CCA and CCA planned in the DPR, original storage capacity/present storage capacity and storage capacity planned in the DPR, water quality situation in the water body, ground water situation in adjoining areas with likely impact of the project on water quality of the water body etc.

The Detailed Project Report duly approved by State Technical Advisory Committee are required to be submitted to the Ministry for necessary funding under the scheme of RRR of Water Bodies by the State Governments. While proposal from Government of Meghalaya from (NER) were received in the Ministry as per guidelines of the scheme, no proposal from other States in the NER was received in the Ministry for funding as per the guidelines of the scheme of RRR of water bodies."

6.5 When the Committee asked about the steps proposed to be taken to extend RRR scheme to other States of NE Region, the Ministry made a written submission as follows :

"The scheme was approved for implementation during XI<sup>th</sup> Plan period. 10% of the project cost are to be earmarked by the State Governments for Capacity Building, awareness and institutional strengthening programme under the Scheme. The State Governments are required to take necessary steps in the matter and show interest in submitting project proposals as per the guidelines of the Scheme."

6.6 The Committee note that the main functions of Brahmaputra Board are survey and investigations in the Brahmaputra Valley and preparation of Master Plans for the control of flood and bank erosion and improvement of drainage giving due importance to the development and utilisation of water resources of Brahmaputra Valley for irrigation, hydropower, navigation and for other beneficial purposes. In this context, the Committee wanted to know the position of preparation of Master Plans in North East Region. To this query, the Ministry submitted as under :

"Out of 57 identified Master Plans, so far 49 numbers of Master Plans completed by the Board and approved by the Government of India have been sent to the concerned States for necessary action and implementation. 3 (three) Sub-basin Master Plans have been completed and circulated to the Board Members for comments/views for approval of the Board. Another 5(five) Master Plans have been completed and are being circulated to Board Members for comments/views. The position of preparation of Master Plans in the North East Region under the jurisdiction of Brahmaputra Board is placed at **Annexure IX.**"

6.7 Asked about the status of the schemes for Protection of Majuli Island Phase II & III, the Ministry submitted:

"The scheme 'Protection of Majuli Island from flood and erosion Phase-II & III' at an estimated cost of Rs.115.99 crore was taken up for execution from March, 2009. The physical progress of the work achieved up to February, 2012 is 35.89% and the financial progress is Rs.36.78 crore. The target date of completion is March, 2014."

6.8 The Committee also wanted to know the progress of Phase IV works under Anti-Erosion works at Dhola-Hatiguli. The Ministry in response to this query stated as below :

"The scheme Dholla-Hatighuli Phase-IV at an estimated cost of Rs.54.43 crore was taken up for execution from June, 2009. The physical progress of the work achieved

upto February, 2012 is 48.09% and the financial progress is Rs.26.18 crore. The target date of completion is March, 2013."

6.9 Regarding the status of various Multipurpose projects of NE Region for which Brahmaputra Board had completed preparation of Detailed Project Reports (DPRs), including Single Stage and Subansiri Single Stage (Arunachal Pradesh), Tipaimukh Dam Project (Manipur and Mizoram) and Bairabi Project (Mizoram), the Ministry also further informed the Committee as under :

"DPRs (were) completed for five projects (Siang Single Stage, Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram).

Pagladiya Dam Project is under execution by the Board – Siang and Subansiri Dam Projects have been handed over to the National Hydro Electric Power Corporation (NHPC) for execution. Tipaimukh and Bairabi Dam projects have been handed over to the North East Electric Power Corporation (NEEPCO) and the Government of Mizoram respectively. DPR for Dibang Project in Arunachal Pradesh was partially completed and handed over to NHPC for DPR completion and implementation.

The status of DPR of Multipurpose Projects prepared by Brahmaputra Board is given at **Annexure X**.

6.10 When the Committee inquired about the status of restructuring of Brahmaputra Board, the Ministry submitted as follows :

"The Central Government has constituted a Nodal Group to look into all aspects regarding restructuring of Brahmaputra Board with a wide mandate as a Basin Level Authority. The Report submitted by the Nodal Group on restructuring of Brahmaputra Board as a Basin Level Organisation/Authority is under active consideration of Ministry of Water Resources."

6.11 The representative of the Ministry also testified before the Committee as under :



"The working of the Brahmaputra Board has come under a lot of criticism, specially from the North Eastern States and are now moving a Bill to amend the Brahmaputra Board Act are to make this Brahmaputra Board more responsive and better functioning... For the Brahmaputra Board this year, as per the request, we have given them Rs.90.00 crore, which is a big increase from Rs.56.00 crore which they had last year. This will be divided between the Majuli works, flood protection works and all that."

### **Major & Medium Irrigation and RRR Scheme**

**6.12 The Committee note that the North Eastern Region, endowed with a combined water resources potential of 586 BCM, has the highest water potential among all the river basins in the country. However, despite some initiatives taken by the Ministry for the development of the water potential of the Region, the Committee in their 8th Report (2011-22) pointed out that no new Major and Medium Irrigation(MMI) Projects had been taken up under AIBP during the last five years. The Committee had, therefore, urged the Ministry to make special efforts to encourage and incentivise the State Governments of this Region to submit proposals for MMI projects for their own benefits. Noting that the Ministry has since taken a few initiatives for incentivising the States of NE Region to submit proposals for new MMI schemes for creation of more irrigation potential, the Committee urge that the Ministry intensify its efforts so that the State Governments of NER come forward with suitable schemes in this regard. In addition, the implementation of the Scheme for Repair, Renovation and Restoration (RRR) of water bodies with domestic support is another point that calls for urgent corrective measure in respect of NER States. The Committee are dismayed to note that as against the Budget provision of Rs.684.00 crore for the financial year 2011-12,**

and the actual release of funds to the tune of Rs.731.40 crore released to various States, no provision has been made in the Budget of 2012-13. Asked to explain, the Ministry submitted that they would need Rs.30,000 crore for the RRR projects during the XII Plan period and the requirement of funds for the purpose during 2012-13 would depend upon the actual allocations of funds by the Planning Commission. This is unfortunate to say the least as RRR of water bodies is a very vital scheme across the country. Further, only Meghalaya among the States of NE Region has figured in the list of recipients of funds. The explanation offered by the Ministry in this regard stated that during 2011-12 while proposals from Government of Meghalaya were received in the Ministry as per guidelines of the scheme, no proposal from other States in NER was received in the Ministry for funding as per the guidelines of RRR scheme. The Committee are not satisfied with the reply of the Government. They believe that given the relative geographical isolation and backwardness of the Region, awareness is perhaps lacking among the people of the Region about the significance of water bodies like tanks, ponds, etc. as a source of irrigation, fisheries and other beneficial purposes due to which proper attention has not been given to water bodies despite the huge potential available in NER. The Committee, therefore, urge the Ministry to take effective steps to raise awareness among the States of NER, and encourage and motivate them to submit proposals in this regard. They hope that concrete results will follow such efforts and tangible benefits will accrue to the NE States commensurate with the huge water resources potential of the region. The Committee would like to be apprised of the measures devised and put in place in this behalf.

## **Other Activities under Brahmaputra Board**

**6.13 The Committee further note that among the activities carried out under the Brahmaputra Board, 49 Master Plans, out of 57 identified Mater Plans, have been prepared and sent by the Board to the concerned States for necessary implementation. 3 (three) Sub-basin Master Plans already prepared are awaiting approval of the Board, while another 5 (five) Master Plans are already completed and being circulated for comments of the Board Members. The Committee, therefore, desire that the Brahmaputra Board take steps to expedite completion of the remaining 8 Master Plans which are under different stages of completion/approval. Regarding the schemes for Protection of Majuli Island, the Committee note that phase I & II of the works were taken up for execution since March, 2009, and that 35.89% of the physical progress of the work has been achieved upto February, 2012 at a cost of Rs.36.78 crore. The Committee hope and expect the Scheme will be completed by its target date of completion, *i.e.* March, 2014 in order to avoid wasteful time and cost overruns and to extend the necessary benefits to the people expeditiously. The Ministry also informed the Committee that the Brahmaputra Board had completed Detailed Project Reports(DPRs) for 5 (five) Multipurpose projects of NE Region, viz. Siang Single State and Subansri Singe Stage(Arunachal Pradesh), Tipaimukh Dam Project (Manipur and Mizoram), Bairabi Project(Mizoram) and Dibang Project(Arunachal Pradesh). Siang and Subansri Dam Projects have been handed over to the National Hydro Electric Power Corporation(NHPC) while Tipaimukh and Bairabi Dam Projects have been**

handed over to the North East Electric Power Corporation(NEEPCO) and the Government of Mizoram respectively for execution. The DPR for Dibang Project in Arunachal Pradesh was partially completed and handed over to NHPC for DPR completion and implementation. The Committee hope that the Brahmaputra Board/Ministry would not wash its hands off the 5(five) Projects after their handing over to concerned implementing agencies, but would call for status report once in a year to ensure their proper implementation. The Committee should like to be updated on the status of the above stated five Multipurpose Projects of NE Region for which DPRs have been completed/partially completed by the Brahmaputra Board. On the restructuring of Brahmaputra Board, the Committee were informed during evidence that the functioning of the Board has come under a lot of criticism, specially from NE States. The Ministry is, statedly moving a Bill to amend the Brahmaputra Board Act so as to make the Board more responsive and better functioning. An allocation of Rs.90.00 crore (a raise from Rs.56.00 crore allocated in 2011-12) has been made for the Board by the Ministry for 2012-13. Further, the Central Government has constituted a Nodal Group to look into all aspects regarding restructuring of Brahmaputra Board with a wider mandate as a Basin Level Authority. The report submitted by the said Nodal Group, is statedly under consideration of MoWR. The Committee desire to see speedy completion of the restructuring process of Brahmaputra Board. However, they see no rationale in creating a Nodal Group on restructuring of the Board since the legislative process is already underway for amendment of the Brahmaputra Board Act, 1980. The Committee, therefore, recommend that expeditious and conclusive action be

taken by the Government to suitably restructure the Brahmaputra Board so as to make it more effective and a better functioning body within a definitive timeframe.

NEW DELHI  
20 April, 2012  
31 Chaitra, 1934 (Saka)

DIP GOGOI,  
*Chairman,*  
*Standing Committee on Water Resources*

**Annexure – I**  
**(para 3.7)**

**PHYSICAL TARGETS VIS-À-VIS ACHIEVEMENTS UNDER THE SCHEME OF GROND WATER MANAGEMENT & REGULATION DURING XI PLAN (2007-12)**

S. No	Name of the Scheme	2007-08		2008-09		2009-10		2010-11		2011-12		Total (2007-12)	
		Target	Achvt.	Target	Achvt.	Target	Achvt.	Target	Achvt.	Target	Achvt. Feb. 2012	Target	Achievement Up to Feb,2012
1	Ground Water Management Studies (lakh sq.km.)	1.5	1.61	1.5	1.62	1.5	1.52	1.5	1.60	1.5	1.60	7.5	7.95
2	Ground Water Exploration	800	811	800	761	800	790	800	818	800	646 (EW-339, OW-133, PZ-174)	4000	3826
3	Monitoring of Ground Water Observation Wells	4 times a year	4 times a year completed	4 times a year	4 times a year completed	4 times a year	4 times a year completed	4 times a year	4 times a year completed	4 times a year	4 times completed	20	20
4	Geophysical studies (No. of VES)	2200	1793	2200	1932	2200	1671	2200	1842	2200	1603	11000	8841
5	Hydrochemical studies (No. of samples)	20000	19516	20000	17937	20000	15780	20000	18213	20000	18126	100000	89572

6	Preparation of Report/maps												
	(i) State Reports	5	2	5	2	5	2	5	6	5	2(WCR, SECR)	25	14
	(ii) District Reports	40	22	40	13	40	28	40	23	40		200	92
(iii) Ground Water Brochures	70	53	70	83	--	---	--	239	--	6 (NCCR, SECR,NHR, SER-2,SWR)	140	375	
7	Short Term Water Supply Investigation	Need based	188	Need based	116	Need based	121	Need based	195	Need based	163	<b>NB</b>	783
8	Demonstrative project for Artificial Recharge to Ground water												629
9	<b>Central Ground Water Authority</b>												
	Notification of areas	Need Based		Need Based		Need Based		Need Based		Need Based	82 blocks	Need Based	82 blocks
	Mass Awareness Programmes		20		19		1		39		15	Need Based	94
	Water Management Training Programmes		22		20		-		37		11	Need Based	90
	State & National Painting competition							Need Based	35	Need Based	35	Need Based	70

**Annexure – II**

**(para 3.7)**

**Financial Achievements made under Ground Water Management & Regulation during XI Plan**

Sl. No.	Scheme	XI Plan Out lay	BE 2007-08	Exp. 2007-08	BE 2008-09	Exp. 2008-09	BE 2009-10	Exp. 2009-10	BE 2010-11	Exp. 2010-11	BE 2011-12	Exp. 2011-12 ( up to Feb 2012)
1	Ground Water Management & Regulation	460	62.00	48.15	95.00	54.38	70.00	68.91	100.00	91.29	117.40	88.24



**Annexure - III**

**(para 3.7)**

**Proposed Physical Activities and Tentative Targets for the XII<sup>th</sup> plan Period**

Sl. No	Scheme- Ground Water Management & Regulation (Continuing of ongoing Scheme)	Activity	Target					Total
			2012-13	2013-14	2014-15	2015-16	2016-17	
<b>1</b>	<b>Aquifer Mapping &amp; Management</b>							
1.1	Available Data Collection and data gap analysis -In-house & Outsourcing	1250 toposheets	-	-	-	-	1250 Toposheets	
1.2	Hydrogeological Survey, Investigation, Data acquisition and documentation- Inhouse & Outsourcing ( No )	75	225	250	350	350	1250 Toposheets	
1.3	Ground Water Exploration	1500	4500	5000	7000	7000	25000	
	Outsource	700	3700	4200	6200	6200	21000	
	Inhouse	800	800	800	800	800	4000	
1.4	Hydro Geophysical Studies							
	Borehole Logging	Need Based	Need Based	Need Based	Need Based	Need Based	Need Based	
	Vertical Electrical Sounding(VES)	3750	11250	12500	17000	17000	60500	
	Outsource	1750	9250	10500	15000	15000	50500	
	In-house	2000	2000	2000	2000	2000	10000	
	Heliborne TEM* Outsourcing (No of Toposheets)	0	0	100	100	100	300	
	Ground TEM* ( No of toposheet)	0	50	100	100	100	350	
	2D Resistivity Imaging*- Outsourcing ( No of toposheet)	0	50	100	100	100	350	
1.5	Hydro Chemical Studies							
	Chemical analysis(Outsourcing)	15000	45000	50000	70000	70000	250000	
1.6	Isotope studies /Tracer Studies/ Specific yield determination/Slug test/ Core Drilling for geochemical studies in quality affected areas ( Outsourcing)							
		Need Based	Need Based	Need Based	Need Based	Need Based	Need Based	

Sl. No	Scheme- Ground Water Management & Regulation (Continuing of ongoing Scheme)						
	Activity	Target					
		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.7	Preparation of Aquifer maps ,Management plan and Publication of Map ( Inhouse& Outsourcing) No of toposheet	75	225	250	375	375	1250
<b>2</b>	<b>Ground Water Regime Monitoring &amp;Strengthening of GW Observation Well Network</b>						
2.1	<b>Monitoring Water Level</b>						
	Monitoring of existing ground water observation wells- Inhouse& Participatory (No of monitoring wells)	15000	15000	15000	15000	15000	15000
	Establishment and monitoring of additional ground water observation wells -In-house & Participatory (No of monitoring wells)	5000	7000	7000	8000	8000	35000
	Total GW Observation well	20000	27000	34000	42000	50000	50000
	<b>Water Quality Sampling &amp;Analysis</b>						
2.2	In-house (No of samples)	20000	20000	20000	20000	20000	100000
	Outsourcing (No of samples)	5000	12000	19000	27000	35000	98000
2.3	Peizometer construction for Automatic Water Level Recorder with telemetry		475	425	425	175	1500
2.4	Installation of Automatic Water Level Recorder with telemetry in Peizometer	500	400	400	400	300	2000
3.	<b>Participatory Ground Water Management</b>						
3.1	Launching of PGWM in 5 pilot areas	3	2	Continuation of work in 5 pilots in phases	Continuation of work in 5 pilots in phases	Continuation of work in 5 pilots in phases	5 pilot projects
3.2	Expansion of pilot PGWM in different areas	-	5 projects	Continuation of work in 5 projects in phases	Continuation of work in 5 projects in phases	Continuation of work in 5 projects in phases	5 projects
<b>4</b>	<b>Ground Water Resource Assessment &amp; Technical Assistance to Govt organisation</b>						

SI. No	Scheme- Ground Water Management & Regulation (Continuing of ongoing Scheme)						
	Activity	Target					
		2012-13	2013-14	2014-15	2015-16	2016-17	Total
4.1	Revision of Dynamic Ground Water Resources	Revision as per data up to March,2011		Revision as per data up to March,2013		Revision as per data up to March,2015	
4.2	Technical Assistance to Govt organisation as per requests	Need Based	Need Based	Need Based	Need Based	Need Based	Need Based
<b>5</b>	<b>Preparation of Report and information's&amp;Dissemination</b>						
5.1	State /UT Hydrogeological Report (Nos)	18	17	18	17	-	<b>70</b>
5.2	District Brochures (Nos)	125	125	125	125	125	<b>625</b>
5.3	Ground Water Year Books (Nos)	23	23	23	23	23	<b>115</b>
5.4	Ground Water Exploration Report (Nos)	18	18	18	18	18	<b>90</b>
<b>6</b>	<b>Ground Water Regulation/Awareness/Workshop</b>						
6.1	Ground Water Regulation &Notification of areas	Need Based	Need Based	Need Based	Need Based	Need Based	<b>Need Based</b>
6.2	impact studies in the notified areas	Need Based	Need Based	Need Based	Need Based	Need Based	Need Based
6.3	Regulation of ground water development and management	In all notified areas	In all notified areas	In all notified areas	In all notified areas	In all notified areas	<b>In all notified areas</b>
6.4	Awareness for ground water conservation & rainwater harvesting etc	19	19	19	19	19	<b>95</b>
6.5	Organizing National Ground Water Congress, Workshops, Seminars etc	11	11	11	11	11	<b>55</b>
<b>7.0 Spill Over Work of 11<sup>th</sup> plan in respect of Demonstrative Artificial Recharge Projects and ground water exploration</b>							

\* The activities are to be taken up subject to the successful outcome in pilot projects

#### Note

- The hydrometeorological equipments will be established in some toposheets as per need for aquifer mapping.
- Aquifer Information and Management system will be developed for making management plan and information dissemination.
- The target of exploratory wells is tentatively fixed and actual requirements will be based on data gaps.

**Annexure –IV**  
**(para 3.8)**

**List of areas Notified for Regulation of GW Development**

<b>Sl. No.</b>	<b>Place</b>	<b>State/ U.T.</b>	<b>Date of Notification</b>
1	Municipal Corporation of Faridabad &Ballabgarh	Haryana	14.10.1998
2	Union Territory of Diu	Diu	17.10.1998
3	Ludhiana City, Ludhiana District	Punjab	11.12.1998
4	Municipal Corporation of Ghaziabad, Ghaziabad District	Uttar Pradesh	04.04.1998
5	Jhotwara Block, Jaipur District	Rajasthan	12.12.1999
6	Haldia Industrial complex (aquifer below 120 mbgl), Haldia, district East Medinipur	West Bengal	15.08.2000
7	South District	NCT, Delhi	15.08.2000
8	South West District	NCT, Delhi	15.08.2000
9	Gandhinagartaluka (aquifer below 200 mbgl declared as notified for meeting drinking and domestic requirements), district Gandhinagar	Gujarat	2.09.2000
10	Yamuna Flood Plain Area	NCT, Delhi	2.09.2000
11	MidjilMandal of Mahabubnagar District	Andhra Pradesh	5.12.2005
12	Tirupathi (Rural) Mandal of Chittoor District	Andhra Pradesh	5.12.2005
13	VempalliMandal of Cuddapah District	Andhra Pradesh	5.12.2005
14	Pushkar Valley, Ajmer District	Rajasthan	5.12.2005
15	Jalore block, Jalore District	Rajasthan	5.12.2005
16	Raniwara block, Jalore District	Rajasthan	5.12.2005
17	Budhana block, Jhunjunu District	Rajasthan	5.12.2005
18	Chirawa block, Jhunjunu District	Rajasthan	5.12.2005
19	Mundwa block, Nagaur District	Rajasthan	5.12.2005
20	Shahbad Block of Kurkshetra District	Haryana	2.12.2006
21	NangalChowdhary Block of Mahendragarh District	Haryana	2.12.2006
22	Narnaul Block of Mahendragarh District	Haryana	2.12.2006
23	Samalkha Block of Panipat District	Haryana	2.12.2006
24	Karnal Block of Karnal District	Haryana	2.12.2006
25	Khol Block of Rewari District	Haryana	2.12.2006
26	Dhar Block of Dhar District	Madhya Pradesh	2.12.2006
27	Manawar Block of Dhar District	Madhya Pradesh	2.12.2006
28	Mandsaur Block Block of Mandsaur District	Madhya Pradesh	2.12.2006
29	Sitamau Block of Mandsaur District	Madhya Pradesh	2.12.2006
30	Neemuch Block of Neemuch District	Madhya Pradesh	2.12.2006
31	Jaora Block of Ratlam District	Madhya Pradesh	2.12.2006
32	Indore Municipal Corporation	Madhya Pradesh	2.12.2006
33	Moga-I Block of Moga District	Punjab	2.12.2006
34	Moga-II Block of Moga District	Punjab	2.12.2006
35	Sangrur Block of Sangrur District	Punjab	2.12.2006
36	MahalKalan Block of Sangrur District	Punjab	2.12.2006
37	Ahmedgarh Block of Sangrur District	Punjab	2.12.2006
38	Surajgarh Block, Jhunjunu District	Rajasthan	2.12.2006
39	Dhod Block, Sikar District	Rajasthan	2.12.2006
40	ShriMadhopur Block, Sikar District	Rajasthan	2.12.2006
41	Behror Block, Alwar District	Rajasthan	2.12.2006
42	Bhinmal Block, Jalore District	Rajasthan	2.12.2006
43	Entire Gurgaon District	Haryana	13.08.2011
44	Badra block of Bhiwani District	Haryana	13.08.2011
45	Ladwa block of Kurukshetra District	Haryana	13.08.2011

46	Pehowa block of Kurukshetra District	Haryana	13.08.2011
47	Rania block of Sirsa District	Haryana	13.08.2011
48	Tohana block of Fatehabad District	Haryana	13.08.2011
49	Gulha block of Kaithal District	Haryana	13.08.2011
50	Bapoli block of Panipath District	Haryana	13.08.2011
51	Nakodar block of Jalandhar District	Punjab	13.08.2011
52	Shahkot block of Jalandhar District	Punjab	13.08.2011
53	Lohian block of Jalandhar District	Punjab	13.08.2011
54	Pattran block of Patiala District	Punjab	13.08.2011
55	Phagwara block of Kapurthala District	Punjab	13.08.2011
56	Nihalsinghwala block of Moga District	Punjab	13.08.2011
57	Dhuri block of Sangrur District	Punjab	13.08.2011
58	Sunam block of Sangrur District	Punjab	13.08.2011
59	Barnala block of Sangrur District	Punjab	13.08.2011
60	Sherpur block of Sangrur District	Punjab	13.08.2011
61	Malerkotla block of Sangrur District	Punjab	13.08.2011
62	Khanna block of Ludhiana District	Punjab	13.08.2011
63	Rajgarh block of Churu District	Rajasthan	13.08.2011
64	Osian block of Jodhpur District	Rajasthan	13.08.2011
65	Bhopalgarh block of Jodhpur District	Rajasthan	13.08.2011
66	Bilara block of Jodhpur District	Rajasthan	13.08.2011
67	Merta block of Nagaur District	Rajasthan	13.08.2011
68	Baetu block of Barmer District	Rajasthan	13.08.2011
69	Sambher block of Jaipur District	Rajasthan	13.08.2011
70	Govindgarh block of Jaipur District	Rajasthan	13.08.2011
71	Sanganer block of Jaipur District	Rajasthan	13.08.2011
72	Bassi block of Jaipur District	Rajasthan	13.08.2011
73	Amer block of Jaipur District	Rajasthan	13.08.2011
74	Shahpura block of Jaipur District	Rajasthan	13.08.2011
75	Mandore block of Jodhpur District	Rajasthan	13.08.2011
76	Sayala block of Jalore District	Rajasthan	13.08.2011
77	Sanchore block of Jalore District	Rajasthan	13.08.2011
78	Nawalgarh block of Jhunjhunu District	Rajasthan	13.08.2011
79	Udaipurwati block of Jhunjhunu District	Rajasthan	13.08.2011
80	Jhunjhunu block of Jhunjhunu District	Rajasthan	13.08.2011
81	Todabhim block of Karauli District	Rajasthan	13.08.2011
82	Pisangan block of Ajmer District	Rajasthan	13.08.2011

**Annexure – V**  
**(para 3.23)**

**PHYSICAL AND FINANCIAL ACHIEVEMENTS OF RRR SCHEME**

Name of State	No. of water bodies	Total project cost	Committed Central Share	Fund released during 2009-10	Fund released during 2010-11	Fund released till 22.02.2012	Number of water bodies completed
Orissa	1321	254.33	228.89	72.12	75.00	70.33	414
Karnataka	427	232.77	209.49	74.04	47.47	77.51	208
Andhra Pradesh	1029	339.69	305.72		189.00		N.A.
Bihar	15	64.45	55.30		25.00		N.A.
U.P. (Bundelkhand)	28	46.15	41.53		29.08		N.A.
M.P. (Bundelkhand)	78	41.89	10.47		7.33	2.62	72
Meghalaya Umiam Lake	1	44.57 (Irrigation related 2.38)	2.54		1.78		N.A.
Chhattisgarh	131	122.91	110.61			34.68	N.A.
Gujarat	34	17.47	15.72			10.61	N.A.
Haryana	3	40.24	10.06			6.79	N.A.
Maharashtra	258	135.08	119.34			80.53	N.A.
Rajasthan	16	11.35	7.45			5.02	N.A.
<i>Total</i>	<i>3341</i>	<i>1350.9</i>	<i>1117.12</i>	<i>146.16</i>	<i>374.66</i>	<i>288.09</i>	<i>694</i>

**Annexure - VI**  
**(para 4.5)**

Details of emergent flood protection works carried out with Central Assistance under Non-Plan on rivers Sutlej and Ravi near border in the Western Sector in the State of Punjab during XI Plan period 2007-12:

\* Rs. in thousands

S. No.	Year	date of release	Amount released*	Details of Works	Approved cost*
1	2007-08	31.03.08	13194.0	Works of replenishment of crate bars, studs, spurs, permeable screens restoration of revetment and studs etc. in Rosse Complex, Lassian Enclave, Tsh Complex of Gurdapur Distt., Kaakrmanj Complex, in Sherpur Complex, Chaharpur Complex in Amritsar Distt and Joginder Complex in Ferozpur Distt	15400
2	2008-09	Nil	Nil	Nil	Nil
3	2009-10	27.05.09	10000.0	Restoring apron, providing revetment, replenishment of crate bar, replenishing studs, apron, spur, repairing, raising and strengthening of damaged studs in Kaakrmaj Complex, Chaharpur Complex, Tanian Complex, Singhok Complex of Amritsar, Rosses Complex, Chauntra Complex in Gurdapur and D.T. Mal Complex, Kassoke Complex of Ferozepur	27585
4	2009-10	22.10.09	14345.0	----- as above -----	As above
5	2010-11	28.03.11	19201.6	Constructing spur, repairing and strengthening of revetment, replenishing studs & revetments, restoration of spur etc	25290
6	2010-11	09.08.10	10798.4	Extension of Banks, stabilization measures on the left bank of river Kushiyara at Steamerghat of Karimganj town in Assam (Eastern Sector)	18298.4
6	2011-12	NA	Nil	Nil	Nil





**Annexure –VIII**  
**(para 5.10)**

**STATUS OF THE PROJECTS DECLARED AS NATIONAL PROJECTS**

<b>Sl. No.</b>	<b>Name of the Project</b>	<b>1) Irrigation (ha.) 2) Power (MW) 3) Storage (MAF)</b>	<b>State</b>	<b>Status</b>
1	Teesta Barrage	1) 9.23 lakh 2) 1000 MW 3) Barrage	West Bengal	<b>Under Execution</b>
2	Shahpur Kandi	1) 3.80 lakh 2) 300 MW 3) 0.016 MAF	Punjab	<b>Under Execution</b>
3	Bursar	1) 1 lakh (indirect) 2) 1230 MW 3) 1 MAF	J&K	DPR under preparation by NHPC
4	2 <sup>nd</sup> Ravi Vyas Link	Harness water flowing across border of about 3 MAF	Punjab	Under conceptual stage
5.	Ujh multipurpose project	1) 0.32 lakh ha 2) 280 MW 3) 0.66 MAF	J&K	DPR under preparation by CWC
6.	Gyspa project	1) 0.50 lakh ha 2) 240 MW 3) 0.6 MAF	HP	DPR under preparation by Govt. of HP
7.	Lakhvar Vyasi	1) 0.49 lakh 2) 420 MW 3) 0.325 MAF	Uttranchal	DPR prepared and under appraisal.
8.	Kishau	1) 0.97 Lakh 2) 600 MW 3) 1.04 MAF	HP/Uttranchal	DPR prepared and under appraisal.
9.	Renuka	1) Drinking water 2) 40 MW 3) 0.44 MAF	HP	DPR prepared Forest Clearance awaited
10.	Noa-Dehang Dam Project	1) 8000 ha. 2) 75 MW 3) 0.26 MAF	Arunanchal Pradesh	DPR under preparation by Brahmaputra Board
11.	Kulsi Dam Project	1) 23,900 ha. 2) 29 MW 3) 0.28 MAF	Assam	DPR under preparation by Brahmaputra Board
12.	Upper Siang	Indirect 9500 MW 17.50 MAF Flood moderation	Arunanchal Pradesh	Under conceptual stage
13	Gosikhurd	1) 2.50 lakh 2) 3 MW 3) 0.93 MAF	Maharashtra	<b>Under execution</b>
14	Ken Betwa	6.46 lakh 72 MW 2.25 MAF	Madhya Pradesh	Phase-I DPR prepared and submitted to CWC in December, 2011. Under appraisal.

**POSITION OF MASTER PLANS IN THE NORTH EAST REGION(As on 31.03.2012)**

<b>Sl. No.</b>	<b>Name of Basin / Sub-Basin</b>	<b>Completion Year</b>	<b>Reference of approval of MoWR (GOI) / present status</b>
1	Brahmaputra Basin (Main stem) Part -I	1986	Approved vide F. No. 30/4/97-ER dtd. 08-08-1997
2	Barak and its Tributaries Part-II	1988	Approved vide F. No. 30/4/97-ER dtd. 08-08-1997
3	Burhi-Dehing	1995	Approved vide No. 30/5/2000-ER-I/472-513 dtd. 23-02-2004
4	Dikhow	1995	-do-
5	Kapili-Kolong	1995	-do-
6	Puthimari	1995	-do-
7	Ranganadi	1995	-do-
8	Gumti	1996	-do-
9	Dhansiri(S)	1996	-do-
10	Pagladiya	1996	-do-
11	Dikrong	1996	-do-
12	Muhuri	1997	-do-
13	Manu	1997	-do-
14	Noa-Nadi	1998	-do-
15	Jia-Bhareli	1998	-do-
16	Champamati	1998	-do-
17	Desang	1998	-do-
18	Bharalu	1998	-do-
19	Jinari	1999	-do-
20	Juri	1999	-do-
21	Na-Noi	1999	-do-
22	Burima	1999	-do-
23	Dhalai	2000	-do-
24	Lohit	2000	-do-
25	Jiadhal	2000	-do-
26	Majuli (Island)	2000	-do-
27	Khowai	2000	-do-
28	Ghiladhari	2001	-do-
29	Jinjiram	2001	-do-
30	Moridhal	2001	Approved vide No. 30/5/2000-ER-II dtd. 08-11-2004
31	Jhanji	2002	-do-
32	Dhalewsari	2002	-do-
33	Subansiri	2002	-do-
	Gaurang	2002	Approved vide No. 30/5/2000-ER-II dtd. 08-11-2004
35	Haora	2003	-do-
36	Gabharu	2003	-do-
37	Belsiri	2004	Approved vide No. 13012/1/2008-B&B/2189-2233; dtd 26-09-2008
38.	Bhogdoi	2004	-do-
39	Gadadhar	2004	-do-
40	Depota	2005	-do-

41	Kulsi-Deosila	2005	Approved vide No. 13012/1/2008-B&B/2189-2233; dtd 26-09-2008
42	Dhansiri (N)	2008	Approved vide No. 13012/1/2008-B&B/3338-3379 dtd 31-08-2009
43	Barnadi	2008	-do-
44	Buroi	2009	Approved vide No. 13012/1/2008-B&B/919-962 dated 19-02-2010
45	Brahmajan	2010	Approved by GOI vide No. 21/1/2011-B&B/2767-2810, dated 20-07-2011
46	Dudhnoi-Krishnai	2010	Approved by GOI
47	Beki-Manas-Aie	2010	
48	Bargang	2010	
49	Tipkai	2010	
50	Tangani	2011	Circulated to Board members for comments
51	Sankosh	2011	
52	Someswari	2011	
53	Kynshi	2012	Completed and are under process of circulation to Board Members for their comments
54	Um-N-Got	2012	
55	Jaldhaka	2012	
56	Teesta	2012	
57	Torsa-Raidak	2012	

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ANNEX-II 7/10

**STATUS OF DPR OF MULTIPURPOSE PROJECTS PREPARED BY  
BRAHMAPUTRA BOARD**

The Board had taken-up survey & investigation of 14 Nos. of Multi-Purpose Projects in Brahmaputra and Barak Basin and in the south flowing rivers of Meghalaya. DPRs of some of these projects have been completed which are tabulated below.

Sl No.	Name of Project	Basin	Installed Capacity (MW)	Status
1	Dehang Dam Project (Siang)	Brahmaputra	20000	Handed over to NHPC
2	Subansiri Dam Project	Brahmaputra	4800	Handed over to NHPC
3	Tipaimukh Dam Project	Barak	1500	Handed over to NEEPCO
4	Bairabi Dam Project	Barak	75	Handed over to Govt. of Mizoram
5	Pagladiya Dam Project	Brahmaputra	3	Under execution by Brahmaputra Board, Construction works stopped due to non completion of zirath survey by Govt. of Assam

**MINUTES OF THE NINTH SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES**  
**(2011-12) HELD ON WEDNESDAY, 04 APRIL 2012**

The Committee sat from 1130 hours to 1330 hours in Committee Room 'D', Ground Floor, Parliament House Annexe, New Delhi.

**PRESENT**

**Shri Dip Gogoi – Chairman**

**MEMBERS**

**LOK SABHA**

2. Shri Ghanshyam Anuragi
3. Shri Haribhau Jawale
4. Shri Virender Kashyap
5. Shri Mahendrasinh P. Chauhan
6. Shri Mangani Lal Mandal
7. Shri Nityananda Pradhan
8. Shri S.P.Y. Reddy
9. Shri Arjun Roy
10. Shri Jagadanand Singh
11. Shri N. Chaluvarya Swamy
12. Dr. P. Venugopal (Tiruvallur)

**RAJYA SABHA**

13. Shri Balwinder Singh Bhunder
14. Shri Kumar Deepak Das
15. Shri Anil Madhav Dave
16. Shri Ashok S. Ganguly
17. Shri Rama Chandra Khuntia
18. Dr. Gyan Prakash Pilonia

**SECRETARIAT**

1. Shri Devender Singh - Joint Secretary
2. Shri B.S. Dahiya - Director
3. Smt. Rita Jaikhan - Additional Director

## REPRESENTATIVES OF MINISTRY OF WATER RESOURCES

1. Shri Dhruv Vijai Singh, Secretary, MoWR
2. Shri S.C. Dhiman, Chairman, Central Ground Water Board
3. Shri R.C. Jha Chairman, Central Water Commission
4. Shri A.B. Pandya, Director General, National Water Development Agency

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 (2012-13) of the Ministry of Water Resources.

2. After the introduction, the Secretary, Ministry of Water Resources highlighted the main points of the Demands for Grants 2012-13. The Members then raised some queries to which the representatives of the Ministry replied. The major concerns raised during the sitting of the Committee included the following :

- (i) Need to have time-frame for aquifer mapping of India and the information to be made available as real time information for the Hydrological Department, Meteorological Department and Agriculture Department;
- (ii) Need to make Brahmaputra Board a functional body so that it can do something for the protection of the people from river-flood and erosion in the North Eastern region and the need to amend the Brahmaputra Board Act;
- (iii) Need to increase Plan expenditure and reduce Non-Plan expenditure;
- (iv) The current status of flood management programmes in the State of Karnataka;
- (v) Need to have adequate Budget for inter-linking of rivers;
- (vi) Need to expedite Shahpurkandi National Project in Punjab;
- (vii) Inclusion of AIBP Funds in the DFG of Ministry of Water Resources to facilitate better control, superintendence and monitoring;
- (viii) Need to negotiate with the States for proper expenditure of the allocated funds;
- (ix) Status of National Projects in Odisha like Ringali and Subaranarekha Projects;
- (x) Need to have Harit Kranti Yojana in Eastern parts of India.

### **The witnesses then withdrew**

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

The Committee then adjourned

**MINUTES OF THE TENTH SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES HELD  
ON FRIDAY, 20 APRIL, 2012**

The Committee sat from 1530 hours to 1600 hours in Room No. 129, First Floor, Chairman Chamber, Parliament House Annexe, New Delhi.

**PRESENT**

**Shri Dip Gogoi – Chairman**

**MEMBERS**

**LOK SABHA**

2. Shri Ghyanshyam Anuragi
3. Shri Bali Ram Jakhar
4. Shri Haribhau Jawale
5. Shri Virender Kashyap
6. Shri Mahendrasinh P. Chauhan
7. Shri Magani Lal Mandal
8. Shri Nityananda Pradhan
9. Shri S.P.Y. Reddy
10. Dr. P. Venugopal (Tiruvallur)

**RAJYA SABHA**

11. Shri Balwinder Singh Bhunder
12. Kumar Deepak Das
13. Dr. Ashok S. Ganguly
14. Shri Rama Chandra Khuntia
15. Shri Mangla Kisan
16. Smt. Bimla Kashyap Sood

**SECRETARIAT**

1. Shri B.S. Dahiya - Director
2. Smt. Rita Jaikhani - Additional 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' (2012-13) pertaining to the Ministry of Water Resources.

2. Thereafter, the Committee took up the draft Report on 'Demands for Grants (2012-13)' pertaining to the Ministry of Water Resources for consideration. After some discussion, the Committee adopted the Report subject to minor amendments/modifications arising out of factual verifications by the Ministry.

3. 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 - 2012-13.

The Committee then adjourned