



GOVERNMENT OF INDIA

OUTCOME BUDGET

2012 - 2013

MINISTRY OF WATER RESOURCES

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EXECUTIVE SUMMARY

The Outcome Budget 2012-13 of this Ministry has been prepared in accordance with the broad format contained in the guidelines issued by the Ministry of Finance, highlighting physical dimensions of the financial budgets indicating actual physical performance in the financial year 2010-11, performance in first 9 months of the financial year 2011-12 and the targeted performance during 2012-13. This has the following chapters covering different aspects of the Ministry:

Chapter	Aspect(s) covered
I	It gives brief introductory note on the functions of the Ministry, organizational setup, planning and policy framework and programmes / schemes being implemented by the Ministry. Briefly, the Ministry of Water Resources in the Government of India is responsible for laying down policy guidelines for overall development, conservation and management of water as a national resource, overall national perspective and coordination in this regard including coordination of diverse water uses. Under the Cabinet Minister, Minister of State, Secretary, the Ministry is organized under the administration wing, finance wing and nine Subject Matter Wings. The Ministry has two attached offices, seven subordinate offices, seven statutory bodies, two autonomous bodies (societies) and two public sector undertakings. For XI plan period, the activities under various programmes / schemes being implemented / monitored by the Ministry have been clubbed into 15 central sector and 5 state sector schemes (one centrally sponsored scheme of CAD&WM has been shifted to State Sector from 2008-09).
II	It contains a tabular format, which may be visualized as “vertical compression and horizontal expansion” of the Statement of Budget Estimate (SBE) included in the expenditure Budget Vol. II. The main objective is to establish a one-to-one correspondence between (Financial) Budget 2012-13 and Outcome Budget 2012-13. The details comprise the financial outlays, projected outputs and projected/budgeted outcomes (intermediate, partial and final, as the case may be).
III	It details reform measures and policy initiatives taken by the Ministry and how they relate to the intermediate outputs and final outcomes in areas such as public private partnerships, alternate delivery mechanisms, social and gender empowerment processes, greater decentralization, transparency, etc.
IV	It gives scheme-wise analysis of physical performance with reasons for variations; explaining the scope and objectives of individual programmes / schemes, giving their physical targets and achievements during 2010-11 and those upto third quarter of 2011-12.
V	It contains financial review covering overall trends in expenditure vis-à-vis Budget Estimates and Revised Estimates in recent years. This chapter also gives position of outstanding utilization certificates and unspent balances with states and implementation agencies.

Chapter	Aspect(s) covered
VI	It contains review of performance of statutory / autonomous bodies and public sectors undertakings under the administrative control of the Ministry.
	<p>1. In pursuance of the approval accorded by the Union Cabinet to the National Water Mission on 6th April 2011, a Mission Secretariat has been set up. Presently it is functioning with Additional Secretary, Ministry of Water Resources as Mission Director. Eight Advisory Groups / Committees envisaged in the National Water Mission Document have been constituted.</p>
	<p>2. Ministry of Water Resources has undertaken a review of National Water Policy, 2002 to ensure sustainable and equitable development taking into consideration the likely impact due to climate change.</p>
	<p>3. Ministry of Water Resources proposes to set up a National Bureau of Water Use Efficiency (NBWUE) for the purpose of improving water use efficiency across various sectors.</p>
	<p>4. The Ministry adopted National Water Policy in 1987 and the same was subsequently revised. The revised National Water Policy was adopted by the National Water Resources Council under the Chairmanship of the Prime Minister of India in its 5th meeting held on 1st April, 2002.</p>
	<p>5. The Central Water Commission, an attached office of MOWR, carries on specific activities related to hydrological observations at key stations, survey & investigations of identified projects particularly in North Eastern Region, assistance to States in planning, design and appraisal of water resources projects and flood forecasting. The Central Water Commission (CWC) carries out general monitoring of selected on-going major, medium and extension, renovation and modernization (ERM) of irrigation projects through its various Monitoring Directorates and Field formations. The Commission particularly monitors implementation of major, medium and selected minor irrigation projects receiving central assistance under Accelerated Irrigation Benefits Programme (AIBP) and schemes for Command Area Development & Water Management. As a part of monitoring, the projects are visited by officers of CWC on regular basis. The command area development projects are also visited by the officers of Command Area Development Wing of the Ministry to monitor various activities under the programme.</p>
	<p>6. The important activities of Central Ground Water Board, a subordinate office of the Ministry of Water Resources, include ground water management studies, ground water monitoring, geophysical studies, exploratory drilling, artificial recharge & rain water harvesting studies, remote sensing studies, water quality analysis, short term water supply investigations, regulation of ground water development, mass awareness and training programme etc. Major achievements during 2011-2012 (Up to 31st December, 2011) under the scheme of Ground Water Management and Regulation include coverage of 1.70 Lakh sq. km under Ground Water Management Studies during pre-monsoon and 1.19 lakh Sq.km. during post-monsoon, drilling of 495 wells (including 43 wells with high discharge ranging from 5400 liter per hour to 140160 liter per hour) under the programme of</p>

Scientific Ground Water Exploration supported by Geophysical & Remote Sensing Studies, Monitoring of ground water 15640 ground water observation wells, 1161 Vertical Electrical Sounding and geophysical logging of 35 bore holes have been conducted, analysis of 14619 samples (basic analysis, Heavy Metal & organic), 140 Water Supply Investigations for Defence and other departments and preparation of various reports. The Country wide Dynamic Ground Water Resource assessment, taking base year 2009 has been completed.

7. During the XI Plan, 83 Artificial Recharge projects of 1488 structures amounting to Rs.83.920 Crores have been approved and Rs.64.70 Crores have been released to the 20 States as on 31st December 2011. Till November, 2011, 568 structures have been completed and remaining are under progress. On completion of civil works of recharge facility, impact assessment studies will be taken up to demonstrate the efficacy of artificial recharge and rain water harvesting through the successful examples in these sites and for replication by the states in similar set ups in future. During the year 2011-12, 59 Artificial Recharge Projects with 413 no Artificial Recharge structures in Orissa, Rajasthan, Himachal Pradesh, Jammu & Kashmir, Delhi, Bihar, Nagaland., Kerala, Andhra Pradesh, Karanataka, Uttar Pradesh Punjab, amounting to Rs 35.29 Crores have been approved & Rs 31.23 Crores have been released till December 2011. This includes Rs 6.51 Crores released as second / third installment. A total of 204 Artificial Recharge structures were completed in this year till November 2011.

8. The Centrally Funded State Sector Scheme of the Ministry of Water Resources on “Artificial Recharge to Ground Water through Dug Wells” is implemented in 7 states namely Andhra Pradesh, Maharashtra, Karnataka, Rajasthan, Tamilnadu, Gujarat and Madhya Pradesh at an estimated cost of Rs. 1798.71 Crores in which the subsidy component is Rs. 1499.27 Crores. The main objective of the scheme is to augment the ground water resources in over-exploited/Critical/Semi-critical areas in 7 states. Total of subsidy of Rs. 260.921 Crore has been released to 713042 numbers of beneficiaries. Construction of dug well recharge structure by beneficiaries who received subsidy is still in progress in implementing states. A total 107249 no. of Dug well recharge structures have been constructed in the participating states till 31st August 2011. The total expenditure incurred under various component of the scheme as on 31st August 2011 is Rs. 280.798 Crore. 23 training courses have been conducted successfully and 409 trainees have been trained under Rajiv Gandhi National Ground Water Training & Research Institute.

9. Financial and physical progress in respect of various central sector schemes is monitored by the Ministry through regular periodic expenditure review meetings with concerned implementation agencies. Meetings with state Secretaries of Water Resources/Irrigation/ Flood Control are convened for monitoring of implementation of state sector schemes.

10. Other organizations under this Ministry like Central Soil & Materials Research Station, Central Water & Power Research Station and National Institute of Hydrology are engaged, inter-alia, in research and development activities in the water resources sector.

11. Under Information Education and Communication Scheme, mass awareness activities of the Ministry and its organizations are implemented with a view to create

awareness among various target groups about the importance of optimum development and management of Water Resources in a holistic manner. A committee reviews the Media Plan from time to time to ensure effective implementation of the activities and to take timely remedial measures and corrective actions.

12. Investigation of Water Resources Development Scheme is regularly monitored by the department and ministry. Financial progress is monitored monthly alongwith the physical progress. To inform the general public about the progress in this regard, the concerned organizations are required to put the details of physical/financial targets vis-à-vis achievement on their respective web-sites and update it regularly.

CHAPTER - I

BRIEF INTRODUCTORY NOTE ON THE FUNCTIONS OF THE MINISTRY/ DEPARTMENT, ORGANIZATIONAL SET UP, LIST OF MAJOR PROGRAMMES /SCHEMES IMPLEMENTED BY THE MINISTRY/ DEPARTMENT, ITS MANDATE, GOALS AND POLICY FRAMEWORK

INTRODUCTION

1.1 Ministry of Water Resources is responsible for overall development, conservation and management of water as a national resource, overall national perspective and coordination in this regard including co-ordination of diverse water uses.

1.2 The Ministry's functions as per Allocation of Business Rules, are as follows:

- 1) 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.
- 2) National Water Resources Council.
- 3) General Policy, technical assistance, research and development, training and all matters relating to irrigation, including multi-purpose, major, medium, minor and emergency irrigation works; hydraulic structures for navigation and hydro-power; tube wells and groundwater exploration and exploitation; protection and preservation of ground water resources; conjunctive use of surface and ground water, irrigation for agricultural purposes, water management, command area development; management of reservoirs and reservoir sedimentation; flood (control) management, drainage, drought proofing, water logging and sea erosion problems; dam safety.
- 4) Regulation and development of inter-State rivers and river valleys, Implementation of Awards of Tribunals through Schemes, River Boards.
- 5) Water Laws, legislation.
- 6) Water quality assessment.
- 7) Cadre control and management of the Central Water Engineering Services (Group A).
- 8) International organizations, commissions and conferences relating to water resources development and management, drainage and flood control.
- 9) International Water Law.
- 10) Matters relating to rivers common to India and neighbouring countries; the Joint Rivers Commission with Bangladesh, the Indus Waters Treaty 1960; the Permanent Indus Commission.
- 11) Bilateral and external assistance and cooperation programmes in the field of water resources development

1.3 The above functions of Ministry of Water Resources are carried out through the following organizations/institutions of the Ministry:

ATTACHED OFFICES

1. Central Water Commission
2. Central Soil & Materials Research Station

SUBORDINATE OFFICES

1. Central Water & Power Research Station
2. Central Ground Water Board
3. Farakka Barrage Project
4. Ganga Flood Control Commission
5. Bansagar Control Board
6. Sardar Sarovar Construction Advisory Committee
7. Upper Yamuna River Board

STATUTORY BODIES

1. Brahmaputra Board
2. Betwa River Board
3. Narmada Control Authority
4. Tungabhadra Board
5. Ravi and Beas Water Tribunal
6. Cauvery Water Disputes Tribunal
7. Krishna Water Disputes Tribunal
8. Vansadhara Water Dispute Tribunal
9. Mahadayi Water Dispute Tribunal

AUTONOMOUS BODIES (SOCIETIES)

1. National Water Development Agency
2. National Institute of Hydrology

PUBLIC SECTOR UNDERTAKINGS

1. Water and Power Consultancy Services (India) Limited
2. National Projects Construction Corporation Limited.

1.4 The Ministry, during 2011-12, implemented and monitored 15 central sector, and 5 state sector schemes. The following gives a brief overview of the Central Sector Schemes:

1.4.1. Development of Water Resources Information System: The objective of the scheme is to develop a water resources information system and make it fully operational at the earliest. 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. In view of vital role of water in human life, there is a need for better design and optimal use of hydro-systems. In this context, a rational analysis must be based on an approach that considers all related causes and effects and systematically evaluates the various alternatives. The water resources information system plays a vital role in achieving optimal utilization of the resources.

1.4.2. **Hydrology Project II:** The objective of the Hydrology Project Phase-I (HP-I) implemented during the period 1995-2003 was to improve institutional arrangements, technical capabilities and facilities for development of Hydrological Information System (HIS). As a follow up of HP-I, Hydrology Project Phase – II (HP-II) is taken up with the objectives to extend and promote sustained and effective use of HIS by all potential users concerned with water resources planning and management, public and private, thereby contributing to improve productivity and cost effectiveness of water related investments in 13 States and 8 Central Agencies

1.4.3. **Investigation of Water Resources Development Scheme:** It comprises of two components e.g. “Investigation of River Link Proposals by NWDA” and “Investigation of WR/ Multipurpose Schemes by CWC”. The objective of the scheme is to carry out the activities related to survey, field investigation, preparation of pre-feasibility/feasibility report (FRs) & details project report (DPRs) of the schemes for Inter Basin transfer of Water, intra-State links and to carry out other studies & activities considered necessary incidental, supplementary or conducive to attainment of above objectives.

1.4.4. **Research and Development Programmes for Water Sector:** The objectives of the scheme are (i) to find practical solutions to the country’s water resources related problems and to improve available technology and engineering methods and procedures, particularly to take up research studies for improvement of the efficiency of the existing facilities, (ii) to create / upgrade research facilities of the premier organizations/institutions at National level to keep pace with the state-of-art technology, and (iii) to support research works to be taken up by the various institutions in water sector.

1.4.5. **National Water Academy:** This scheme will cover the activities related to training of water resources professionals from State and Central organizations in the area of water resources development, particularly integrated river basin planning and management.

1.4.6. **Information, Education and Communication (IEC) Scheme** has been launched for implementation during the XI Five Year Plan with an outlay of Rs. 83.00 crore with the aim of creating awareness among various target groups about the importance of development and management of water resources in a holistic manner with due emphasis on a coordinated effort for addressing various water related issues. The objectives of the scheme are as under :-

OBJECTIVES

- (i) To create awareness for optimal sustainable development, maintenance of quality and efficient use of country’s water resources to match the growing demands on this precious natural resources with active involvement of all stakeholders in order to achieve accelerated, equitable, economic development of the country.
- (ii) To create awareness for the urgent need for mutual cooperation and adopting integrated planning and participatory approach in management.
- (iii) To create awareness among the people about necessity of water conservation.
- (iv) To promote advocacy on the tenets of National Water Policy with focus on learning, documenting and dissemination of knowledge of water science and technology and issues concerning sustained development of water resources.
- (v) To create awareness about necessity of adopting measures for rainwater harvesting and artificial recharge of ground water to meet present and future needs of water.

- (vi) To strengthen awareness infrastructure specially campaign mechanism and support structure.

1.4.7. River Basin Organizations/Authority: The objective of the scheme is to provide a forum to all the co-basin states for taking up necessary studies, evaluation etc. for finding optimum method for development and utilization of water resources within that basin and meeting the aspirations of all stake-holders.

1.4.8. Infrastructure Development: This scheme pertains to the activities related to lands & buildings and Information Technology development and specifically include the activities related to (i) Land & Building & Information Technology Plan of Central Ground Water Board, (ii) Land & Building of Central Water Commission, (iii) Information Technology Development Plan of Ministry of Water Resources, and (iv) Up-gradation and modernization of computerization and information system of Central Water Commission.

The scheme aims at providing better working environment in the offices, creation of assets and savings on payment of monthly rent. To achieve this, construction of offices at various locations, provision of hutments for field workers, provision for construction of staff quarters as well as modernization of existing offices of the Ministry (Proper) and Central Water Commission have been included under the ambit of the scheme. It also aims at integrating and streamlining existing scattered information systems into unidirectional dynamic E-governance mode.

1.4.9. Dam Safety Studies & Planning: The scheme envisages taking up of necessary studies related to Dam Safety and infrastructure strengthening of the Dam Safety Organization.

1.4.10 Ground Water Management and Regulation:

- ❖ Ground water exploration
- ❖ Ground water resource assessment
- ❖ Ground water regime monitoring
- ❖ Artificial recharge & rainwater harvesting studies
- ❖ Ground water management studies in identified thrust areas
- ❖ Geophysical Studies
- ❖ Hydro-chemical studies
- ❖ Regulation of ground water development
- ❖ Remote sensing studies
- ❖ Ground water modeling
- ❖ Conjunctive use studies of surface and ground water
- ❖ R&D studies
- ❖ Education / knowledge transfer etc.

1.4.11. Rajiv Gandhi Institute of Training and Research: The Institute is responsible for organization of training of officers/ officials of CGWB, Central/State government organizations/ Academic institutes etc to create capacity building in the field of ground water and related aspects.

1.4.12. Pagaladiya Dam Project: The main objective of the scheme is the flood moderation and construction of dam and canal system to protect an area of 40000 ha in

Nalbari area of Assam from recurring floods from the river Pagladiya and to provide irrigation to a gross command area of 54,160 ha annually (average). The project is also to generate 3 MW of hydro-electricity from release of water from canal as incidental benefit. Main construction activity of the project has not started due to non-completion of the Zirat survey by the Government of Assam and the work is held up. Only normal R&M works for the assets created for the project are maintained with skeleton staff.

1.4.13. Flood Forecasting: The objective of the scheme is to strengthen flood forecasting and inflow forecasting network in India and develop forecast information system.

1.4.14. River Management Activities in Border Areas: On advice of Planning Commission, ten continuing/ spillover schemes/ works of X Plan period were amalgamated into a restructured scheme namely, "River Management Activities and Works related to Border Areas" under central sector; to cover the on-going river management activities on common rivers with Nepal, Bhutan China and Bangladesh. Besides, some new developmental works in border areas are envisaged under this scheme to provide 100% Central assistance to the concerned States for their timely completion during XI plan period. The scheme was approved by the Cabinet Committee on Economic Affairs (CCEA) at an estimated cost of Rs. 601 crore for implementation during XI Plan period in its meeting held on 04.12.2008. However, in order to provide central assistance for restoration of Breached Kosi Embankment in Nepal and De-silting of river Ichhamati in West Bengal along international border with Bangladesh, etc., Revised Cost Estimate amounting to Rs. 820 crore of this scheme was approved by CCEA in its meeting held on 25.10.2011.

Under the scheme, works of (i) finalization of Detailed Project Report (DPR) of Pancheshwar Multipurpose Project (PMP), proposed on the Mahakali river at Indo-Nepal Border (ii) Survey & Investigation of Kosi High Dam Project at Barahkshetra in Nepal (iii) Detailed Investigation of Naumure Storage Project (Nepal) on river Rapti (iv) Hydrological observations on common rivers with Nepal, Bhutan, China and Bangladesh (v) Maintenance of flood protection works of Kosi and Gandak barrages in the Nepal territory (vi) Establishment cost of Ganga Flood Control Commission and (vii) new river bank protection works on common/ border rivers with Bangladesh and Pakistan proposed by West Bengal, Tripura & J & K states are taken up during XI Plan period. The total cost of above works covered in XI Plan period is Rs. 281 crore.

In addition, Brahmaputra Board, Guwahati is provided grant-in-aid for establishment cost besides urgent flood protection works in critical reaches, in Brahmaputra & Barak basin including protection of Majuli Island from river erosion amounting to Rs.320 crore under this scheme.

An amount of Rs.115.00 crore has been released so far by Ministry of Water Resources from the above scheme to Government of Bihar for the work of breach closure of Kosi Embankment in Nepal.

Three Bank Protection/ flood control works covering six locations on Mahananda river in West Bengal along international border with Bangladesh have been completed at a cost of Rs. 32.71 crore. 10 Bank Protection works in West Bengal and 2 Bank Protection works in Tripura are under various stages of completion. 100% central assistance was provided by the Ministry of water resources for the above works. In addition, central assistance of Rs. 14.52 crore has been released during 2011-12 to the state Government of

Tripura for undertaking three more Bank Protection works along international border with Bangladesh.

1.4.15. **Farakka Barrage Project:** The main objective of the Farakka Barrage Project is operation and maintenance of Farakka Barrage and associated structures including anti-erosion measures for safety of barrage.

CHAPTER-II
OUTCOME BUDGET 2012-2013
Statement of Outlays & Outcomes/Targets Annual Plan 2012-13

(Rupees in Crore)

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
1	Development of Water Resources Information System	<p>(a) Creation of Watershed Atlas and development of web enabled Water Resource Information System of the country at 1:50000 scale.</p> <p>(b) Strengthening of Monitoring Unit in CWC including Online Monitoring of AIBP assisted projects and to assess Irrigation Potential by Remote Sensing Technique.</p> <p>(c) To provide support to Water Quality Assessment Authority (WQAA) and implement identified studies /programme for assessment</p> <p>(d) (i) Continuation of Hydrological Observation activities including Snow Hydrology, water quality & monitoring of glacier lakes.(ii) Expansion and modernization of hydrological observation network with state of the art techniques and equipments.(iii) Collection compilation storage, dissemination, analysis and publication of data in the form of Water Year Books.</p> <p>(e) Collection of information about Minor Irrigation Schemes through minor irrigation (MI) census</p>	85.00	<p>Complete Water Resources Information System website will be launched during 2012-13</p> <p>(i) Assessment of potential creation of additional 50 AIBP funded projects through remote sensing. (ii) Monitoring of Major, Medium and ERM Projects.</p> <p>This is a continuous activity. Hence no quantifiable deliverables identified for WQAA</p> <p>(i) Observation of data at 878 sites to continue. (ii) Data collection at G&D sites and snow observation sites for various uses etc.</p> <p>Conduct of filed work for the 5th MI Census</p>	<p>Creation of Watershed Atlas and development of web enabled Water Resources Information System (WRIS) of the country at 1 : 50000 scale.</p> <p>(i) Evaluation of potential creation reported by Project Authorities and that assessed by NRSC Date of submission of report October 2012. (ii)Expeditious completion of projects and creation of additional potential through regular monitoring by CWC Monitoring Teams</p> <p>This is a continuous activity.</p> <p>Data is made available in the published form of reports / books</p> <p>Filed work & supervision to continue throughout the year</p>	<p>Expected by Dec - 2012</p> <p>Activities to continue throughout the year.</p> <p>Activity to continue throughout the year.</p> <p>Daily / periodical observation of hydro-meteorological, snow observation, water quality parameters as per established procedures and protocol to continue throughout the the year</p> <p>Filed work / inspection to start by July 2012</p>	
2	Flood Forecasting	To maintain the network of hydrological observations sites across the country by CWC covering 20 river basins to provide timely flood forecasts at 175 stations to the local administration and extension of Flood Forecasting	48.00	To collect real time data, its analysis and issue of flood forecasts. About 6000 forecasts are issued every year.	Advance warning of the incoming flood to help in planning activities for reducing the damages from floods.	The work will be implemented by Central Water Commission during the year.	
3	Hydrology Project	To extend and promote the sustained and effective use of the Hydrological Information System by all implementing Agencies concerned with water resources planning and management in 13 States and 8 Central Agencies.	70.00	Implementation of the project components, i.e. institutional strengthening, vertical extension (with Hydrological Design Aids, DSS-Planning, DSS-Real Time and 36 Purpose Driven Studies) and Horizontal Expansion including 5 PDS in new States with support of 4 major consultancies. Aquifer Mapping in 6 pilot study areas.	Development of modeling software for HDA-SW, DSS-P, DSS-RT, Installation of Real Time Data Acquisition System (RTDAS), Up-gradation of WISDOM software, Establishment of Automatic Water Quality Monitoring Stations, Aquifer Mapping at 6 Pilot Study Areas, Up-gradation of e-GEMS, GIS-Based Web Portal and Water Quality Criteria	Activities to continue throughout the year.	

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
4	Ground Water Management & Regulation	<p>(a) Aquifer Mapping & Management (i) Evolve strategies for scientific planning, monitoring, development and management of ground water resources under different hydrogeological environs.(ii) Develop and operationalize area - specific techniques / technologies for ground water development, augmentation and management.(iii) Regulate and control the development and management of ground water resources.(iv) Conduct Research & development studies including upgradation of technological capabilities and infrastructural base of the Central Ground Water Board to meet the upcoming challenges in ground water (v) Transfer of knowledge and education in hydro-geological research and ground water management. Also increase capacity building in all aspects of ground water development and management through information dissemination, education, awareness and training.(vi) Increase coordination with concerned central / state govt. organizations for sustainable ground water development and</p> <p>(b)Ground Water Exploration utilizing scientific tools viz. Remote sensing and GIS, Geophysical surveys aided by drilling to locate ground water worthy areas.</p> <p>(c)Monitoring of Ground Water levels from the ground water monitoring stations.,</p> <p>(d)Short term water supply investigations for source finding to Central / State Govt. department</p> <p>(e)Geophysical studies to selection of sites for ground water exploration and artificial recharge structures and deciphering aquifers</p> <p>(f)Chemical studies to assess ground water quality</p> <p>(g)Preparation of reports, maps for use by planners and administrators</p> <p>(h)Regulation of ground water development by CGWA</p> <p>(i)Demonstrative project for Artificial Recharge to ground water for replicating the same by State Govt. and other agencies.</p>	318.00	<p>Hydrogeological Survey, Investiagtion, Data acquisition and analysis (150 Number of Toposheets)</p> <p>Ground Water Exploration - 800 wells(EW-530, OW-270) Construction of Piezometers/Exploration through Wapcos</p> <p>Monitoring of Ground Water observation wells - 15640</p> <p>Short term water supply investigations - Need Based (~200)</p> <p>Geophysical Survey: VES – 2000 Well Logging – NB</p> <p>Chemical analysis of water samples – 20000 samples</p> <p>District brochures –120,Ground Water Year Book – 23,State Reports - 5</p> <p>Regulation of Ground Water development in notified areas</p> <p>Spill Over work of Demonstrative Artificial Recharge</p>	<p>(i)Preparation of aquifer mapping in 150 toposheets will help in sustainable development and management of ground water.(ii) Improved ground water information services for wider dissemination of data to the stakeholders including integration of ground water data with State Government organizations.(iii)Generation of scientific data under various studies will provide inputs for policy planning in ground water development and management.(iv) Awareness for conservation and management of ground water will be created through holding National Ground Water Congress/ workshops etc.(v) Regulation of ground water development and management in the country will result in arresting the trend of depletion.</p> <p>Delineation of potential aquifers and their yield.</p> <p>Assessment of GW scenario</p> <p>Request based assistance in augmenting water supply source finding for Defence & other organization.</p> <p>To select potential aquifers and well sites</p> <p>To analyze the quality of GW for various uses</p> <p>Publication of District brochures, Ground Water Year Book and State Reports for promoting ground water literacy</p> <p>Notification of GW stressed areas for batter GW governance</p> <p>Sustainable management of GW supply through AR and RWH</p>	<p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>Continuing</p> <p>2-3 years</p>	will be achieved up to March,2013

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
5	Research & Development	The scheme comprises of various activities related to R&D and Training in the water resources sector. These activities are being implemented by the premier research Institutes in the filed of hydrology, hydraulics, soil and material sciences, i.e. NIH, CW&PRS and CSMRS and CWC. The outcomes of the programme will be improvement in efficiency of rrigation system, reduction in risk/hazard in water resources project, economic design for project and	100.00	The implementation of the scheme will help in capacity building and creation of additional facilities. The research output are generally in terms of technical reports & research papers having recommendations for improved techniques for planning and design.	Quantifiable Deliverables are: Research/Technical reports - 236 Research papers - 280 Training and workshop - 29	The work is to be implemented by various organisations of the Ministry.	
6	HRD/ Capacity Building		100.00				
a	Information, Education and Communication	To generate awareness amongst the masses about the importance of water and need for its conservation	25.00	(i) Organisation of Painting competition at Schools/ States and National level (ii) Awareness on water conservation through Doordarshan, All India Radio and Private T.V. & Radio Channels and Internet sites.(iii) New short films & documentaries including animation film may be produced to create awareness among children.(iv) Mass awareness programmes and water management training programmes/workshops through CGWB and CWC.(v) Publicity through print media/ traditional media/ Jal Yatras / Printing and distribution of banners, posters, stickers etc. (vi) Display of backlit translights at selected sites/ Erection of hoardings.(vii)Participation in Trade Fair.(viii)Celebration of India Water Week-2012.(ix)Grant in Aid/financial support to Chambers of Commerce/reowned organisations for organizing conferences/workshops/mass awareness programmes.(x) Holding of workshops/seminars/conferences with Irrigation Ministers/ Principal Secretaries/Secretaries of Water Deptt.(xi) Organizing events for empowering people's organiz	Publicity and awareness about water resources sector with emphasis on water conservation and management	Activities will be conducted throughout the year	
b	National Water Academy	(i)Training in all aspects of WRD&M for all stakeholders of wate sector including Induction Training Programme. (ii) Infrastructure development	5.00	a) 37 nos. of Training Programme b) Spillover work of XI Plan like construction of Swimming Pool iii) Furnishing of newly constructed Guest House & Annexe Building	a) 37 nos. of Training Programmes to be completed by March 2013 b) Remaining work of Swimming Pool, if any. lii) Furnishing of newly constructed Guest House	(a)Training Program will be spread over the whole year and will be conducted in accordance with the approved Training Calender. (b) To be completed by March 2013. (c) to be completed by March 2013.	Achieving the targets depends upon filling of the vacant posts.
c	RGN Ground Water Training Institute	Training of officers & Staff of CGWB and other Central / State Govt. organizations on ground water aspects.	15.00	32 Training Courses	Capacity building of professionals and sub-professionals in GW investigations, development an management techniques and also in administrative matters and management aspects.	One year	will be completed up to March, 2013

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
d	Capacity Building Programme	i)Strengthening of WALMIs/MTIs. ii) National level Training/visit of farmers iii) Demonstrations iv) National Water Mission	55.00	Strengthening of 14 WALMIs, 200 training courses, 600 demonstrations and programme on water conservations, preservation & augmentation	Better and more efficient working environment	Activities to be implemented by States Govt. in one/two years. National level training programmes are proposed in addition to the State level training programme organized by the States.	
7	Infrastrure Development	To procure land and building for Ministry of Water Resources and its attached / subordinate offices and implementation of IT Plan in MoWR, CWC and CGWB	55.00	(i)Construction of office and residential buildings for CWC and CGWB and other activities.(ii)Procurement of hardware, software and development of unified web enabled information and management system for CWC, CGWB and Ministry (Proper).	Better and more efficient working environment.	Activities to be implemented by Central Water Commission and Central Ground Water Board.	
8	River Basin Management		200.00				
a	River Basin Organisation	To encourage setting up of River Basin Organisation with the primary objective of providing a forum to all the co-basin states for taking up necessary studies and evaluation etc., with a view to identify the most appropriate alternative for optimum utilisation of resources and meeting the aspirations of all state-holders.	0.00	Concerned basin states of Mahanadi and Godavari basin would be pursued for seting up of RBOs.	Concurrence of basin states for setting up of RBO	Activities to continue through-out the year.	Setting up of RBO is dependent upon concurrence of the co-basin States
b	Investigation of Water Resources Development Schemes	Carrying of investigation in respect of identified projects for water resources development	100.00	Survey & Investigation of Kirthai-II, Ujh Multipurpose Project, Kalez khola, Suntaley HEP and Manas- Teesta-Sankosh link projects to continue .New projects in NER and other areas including Morphological studies, Meteorological/hydrological observations and funding of national projects Gyspa, Bursar to continue. DPR of K-B phase-II, P-T-N and D-P and 2 intrastate links of Bihar to continue. PFR of 6 intrastate links to be completed	PFR/FRs of 6 intrastate links,DPR of 2 intra-state links, DPR of K-B Link, P-T-N and D-P link and 5 no DPRs for benchmarking projects for water use efficiency.	Activities to continue through-out the year.	Completion of DPR work of P-T-N and D-P links is dependent upon removal of Public hinderance in S & works.
c	Re-Structuring of CWC	Horizontal expansion of field activities at basin level 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	10.00	Approval of the Scheme of "Restructuring of CWC" and creation of posts for restructured CWC	Approval of new posts created due to restructuring of CWC	Activities to continue through-out the year.	

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
d	Brahmaputra Board	Survey, Investigation & preparation of Master Plan, DPRs for Drainage Development Schemes & DPRs for Multipurpose project, Execution of Drainage Development Schemes, Anti-erosion schemes & Flood Management Schemes , Operation & maintenance & upgradation of NEHARI, Construction of H.Q.Complex & R&M of assets created by the Board,construction of raised platform,Upgradation of IT&GIS,Climate Change Studies etc.	90.00	3 Nos Master Plan, 2 Nos DPR of DDS , completion of 3 Nos. of DPRs of MPP viz. Kuls, Noa-Dihing and Simsang, completion of 40% works of Barbhag DDS, 18% of Amjur DDS, 42%of Jengrai, 22% of Jakaichuk, 43% of Phase-II &III works of Protection of Majuli Island from flood and erosion, 26% works of Avulsion of Dhola Hatighuli Phase -IV, 30% works of Raised Platforms. Continuation of feasibility study of channalisation of river Brahmaputra,Operation & maintenance & upgradation of NEHARI,Upgradation of IT &GIS,Climate Change studies would be taken up, 20% of anti-erosion works for protection of Kalair Alga of Man Cachar Masalpur area in Assam.	3 Nos Master Plan, 2 Nos DPR of DDS , completion of 3 Nos. of DPRs of MPP viz. Kuls, Noa-Dihing and Simsang and partial completion/continuation of other works	Activities to continue through-out the year.	
9	River Management Activities and Works Related to Border Rivers	Hydrological observations and investigations of Water Resources Projects with neighboring countries besides river management works on common/border rivers. Flood control, Anti-erosion & Drainage development works by Brahmaputra Board. Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).	125.00	(i)Continuation of Joint Hydrological observations on river Ganga with Bangladesh, (ii) Preparation of Joint Detailed Project Reports (DPR)*(iii) Transmission of flood related data from / to neighboring countries, (iv) Development works on common/border rivers.	Mitigating the recurring flood problems, bank protection works in Indo-Bangladesh border would be carried out on 18 sites in 2011-12. These works are in Tripura and West Bengal Sectors.	It would be implemented by Central Water Commission, Ganga Flood Control Commission, Brahmaputra Board and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal & Jammu & Kashmir	The progress of works in Nepalese territory will depend upon law & order situation in Nepal.
10	Farakka Barrage Project	(i)Maintenance of Farakka Barrage Project and its appurtenant structure including feeder canal, Jangipur Barrage etc.(ii) Anti-erosion works for protection of embankments along river Ganga and its tributaries to train the river along main barrage.	75.00	Maintenance of Farakka Barrage Project and its appurtenant structure including feeder canal, Jangipur Barrage etc which is a continuing activity and procurement of gates etc.Erosion control works in the extended jurisdiction of FBP from 40 km u/s to 80 km d/s of Farakka Barrage to save land, crops, orchards, public buildings etc. along river Ganga-Padma	Operation of Farakka and Jangipur Barrages/ Gates are ongoing activities. Erosion control works would save land, crops, buildings, etc. along the river banks which get eroded every year due to high floods. Besides ongoing works, Many new anti erosion works have been recommended by TAC to be carried out	The identified activities to be implemented by Farakka Barrage Project. Activities to continue throughout the year.	
11	Implementation of National Water Mission	The objective of National Water Mission is "conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management".	200.00	Institutional Mechanism	Convening of meetings of Advisory Boards/ Groups /Committees.	As per Requirement	
				Goal 1 –Comprehensive water database in public domain and assessment of the impact of climate change on water resources	(i) Downscaling of Climate Change models on river basin scale.	Expected by March 2013	
				Goal 2 –Promotion of citizen and state action for water conservation, augmentation and preservation	Sensitization of all Panchayat members and their functionaries in dark and grey blocks - Preparation of Framework Action Plan	Expected by March 2013	

Sl.No.	Name of Scheme/Programmes	Objective/Outcome	Plan Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes/Timelines	Remarks /Risk Factors
1	2	3	4	5	5	6	7
				Goal 3-Focused attention to vulnerable areas including over exploited areas	(i) Comprehensive assessment of ground water resources through aquifer mapping.(ii) All over-exploited areas to be covered by recharge of ground water.	Expected by March 2017	
				Goal 4-Increasing water use efficiency by 20%	(i) Increasing water use efficiency by 20%(ii) The gap of about 15% between the irrigation potential created and the irrigation potential utilized to be reduced by half.	Expected by March 2017	
				Goal 5-Promotion of basin level and integrated water resources management	(i)Finalisation of National Water Policy (2013)(ii) Preparation of River Basin Master Plan for integrated water resources, development & management.	(i) and (iii) Expected by March 2013and (ii) Expected by March 2017	
12	Irrigation Management Programme	Central assistance linked to outcomes in terms of MMI performance and impacts of States or the local bodies such as Panchayats or Water Users's Association.	100.00	(a) improve the ISF collection ratio; (b) generate more accurate data on irrigation potential utilized; (c) give strong fillip to PIM; (d) speed up CAD; (e) encourage rationalization of ISC levels; (f) encourage volumetric water supply and pricing; (g) foster partnership between irrigation agencies and WUAs; (h) in general help reduce	The incentive appropriately linked with ISF collection either by the States or the local bodies such as Panchayats or Water Users's Association.	Preparation of Cabinet Note and EFC Memo and processing for approval would be taken up during the year 2012-13.	
13	Dam Rehabilitation & Improvement Programme	The Engineering and Management Consultant for the CPMU will be hired. CPMU activities related to rehabilitation of Phase-I project will commence	24.00	Hiring of CPMU consultant	CPMU activities related to rehabilitation of Phase-I project will commence	June,2012	The CPMU will be responsible for coordination and supervision of DRIP works in States.
		Total Plan Scheme of MoWR	1500.00				

CHAPTER – III

REFORM MEASURES AND POLICY INITIATIVES

3.1 The National Action Plan on Climate Change envisages institutionalization of eight national missions which inter-alia includes “National Water Mission”. The comprehensive Mission Document for National Water Mission drafted by the Ministry of Water Resources through a consultative process has been considered by the Prime Minister’s Council on Climate Change and in-principle approval has been accorded by the Prime Minister’s Council on Climate Change in its meeting held on 28.05.2010.

3.2 One of the important initiative is to review the National Water Policy. In this regard, consultation meeting with Hon’ble Members of the Parliamentary Standing Committee on Water Resources, Consultative Committee for Ministry of Water Resources and Parliamentary Forum on Water Conservation and Management was held on 28th July 2010 at New Delhi to review National Water Policy. A Brain Storming Session with the academia, experts and professionals was also organized on 26th October 2010 at New Delhi. A consultation meeting with NGO’s on National Water Policy was held on 11-12 January 2011.

3.3 **Inter Linking of rivers programme:** Mandate of NWDA has been approved in the 4th Special General Meeting of NWDA society to prepare the DPR of Intra-State links after getting concurrence of Co-basin States. The revised EFC memo of NWDA including work of preparation of DPRs of intra-State Links has already been approved and the Gazette Notification of enhanced mandate has been done. NWDA started preparation of two DPRs during 2011-12 after Gazette Notification of enhanced mandate and work will continue during 2012-13.

3.4 **Dam Safety Bill:** Action has been initiated for enactment of Dam Safety Act which would lay down the procedure for proper surveillance, inspection, operation and maintenance of the dams in the country.

3.5 The Dam Safety Bill was introduced in the Lok Sabha on 30.8.2010 and has been referred to Standing Committee on Water Resources for examination. The Standing Committee presented its report which was laid in Rajya Sabha on 17.8.2011. The recommendations contained in the report are being examined.

3.6 Secretary level meeting between India and Bangladesh was held for formulating a working plan on the sharing of water of Teesta, Feni and some other common rivers.

3.7 National Water Mission:

3.7.1 The National Action Plan on Climate Change envisages institutionalisation of eight national missions which inter-alia includes “National Water Mission”. The comprehensive Mission Document for National Water Mission drafted by the Ministry of Water Resources through a consultative process was approved by the Union Cabinet on 6th April, 2011.

3.7.2 The objective of National Water Mission is “conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management”.

3.7.3 Five goals identified for the National Water Mission are: (i) comprehensive water data base in public domain and assessment of the impact of climate change on water resources; (ii) promotion of citizen and State action for water conservation, augmentation and preservation; (iii) focused attention to vulnerable areas including over-exploited areas; (iv) increasing water use efficiency by 20%; and (v) promotion of basin level integrated water resources management.

3.7.4 In pursuance of the approval accorded by the Union Cabinet to the National Water Mission on 6th April 2011, a Mission Secretariat has been set up. Presently it is functioning with Additional Secretary, Ministry of Water Resources as Mission Director, Chief Engineer (P&D), CWC as Advisor (Technical) and Senior Joint Commissioner (PP), MoWR as Advisor (Coordination & Monitoring).

3.7.5 Eight Advisory Groups / Committees envisaged in the National Water Mission Document as mentioned below have been constituted:-

- (i). Advisory Board.
- (ii). High Level Steering Committee for National Water Mission.
- (iii). Inter-sectoral Advisory Group for Goal-I: Comprehensive Water Data Base in Public Domain and Assessment of Impact of Climate Change on Water Resources.
- (iv). Inter-sectoral Advisory Group for Goal-II: Promotion of Citizen and State Action for Water Conservation, Augmentation and Preservation.
- (v). Inter-sectoral Advisory Group for Goal-III: Focused Attention to Vulnerable Areas including Over-exploited Areas.
- (vi). Inter-sectoral Advisory Group for Goal-IV: Increasing Water Use Efficiency by 20%.
- (vii). Inter-sectoral Advisory Group for Goal-V: Promotion of Basin Level and Integrated Water Resources management.
- (viii). Technical Committee on Climate Change and Water Resources.

3.8. Review of National Water Policy:

3.8.1 Ministry of Water Resources adopted National Water Policy in 1987 and the same was subsequently revised. The revised National Water Policy was adopted by the National Water Resources Council under the Chairmanship of the Prime Minister of India in its 5th meeting held on 1st April, 2002.

3.8.2 Ministry of Water Resources has undertaken a review of National Water Policy 2002 to ensure sustainable and equitable development taking into consideration the likely impact due to climate change.

3.8.3 A series of consultation meetings with Members of Parliament, Academia, Experts and Professionals, Non-Governmental Organisations and Corporate Leaders regarding review of National Water Policy was held during the previous year (2010-11). During the current year (2011-12), the following Consultation Meetings have been held with the representatives of Panchayati Raj Institutions (PRIs) for review of National Water Policy:-

- (i) PRI Representatives from Southern States on 16th June 2011 at Hyderabad.
- (ii) PRI Representatives from North Eastern States on 30th June 2011 at Shillong.
- (iii) PRI Representatives from Northern States on 14th July 2011 at Jaipur and
- (iv) PRI Representatives from Western States on 2nd November 2011 at Pune.

3.8.4 A Drafting Committee comprising eminent experts in the water sector was constituted to draft the National Water Policy. The Drafting Committee has submitted draft National Water Policy which is under examination in the Ministry of Water Resources.

Proposal for Setting up of National Bureau of Water Use Efficiency:

3.8.5 The National Water Mission (NWM) document which was approved by the Union Cabinet on 6th April 2011 envisages 'Increasing Water Use Efficiency by 20%' as one of its five key goals.

3.8.6 Ministry of Water Resources proposes to constitute a National Bureau of Water Use Efficiency (NBWUE) as an Authority under Section 3(3) of Environment (Protection) Act 1986 for the purpose of promotion, regulation and control of efficient use of water in irrigation, municipal and / or industrial uses. The proposed Bureau will have the overall responsibility of improving water use efficiency across various sectors namely irrigation, drinking water supply, power generation and industry in the whole country.

3.8.7 A draft note for Cabinet Committee on Economic Affairs has been prepared by the Ministry of Water Resources and circulated to the concerned Ministries / Departments of the Government of India for comments.

3.8.8 In the promotion of International cooperation, India has been implementing the Indus Waters Treaty in cooperation with Pakistan.

3.8.9 The MoWR proposes to Relaunch the Repair, Renovation and Restoration of water bodies which will cover all water bodies which have a culturable command area of upto 2000 hectares. The relaunched project will have catchment and command area development, participatory water management etc as its components. The outline of the proposed scheme (State Sector) is at formulation stage.

39. **Citizens Charter**

The National Institute of Hydrology (NIH) has prepared its Citizen's Charter as part of the *Sevottam* Compliant System.

39.1 Result Framework Document (RFD): The National Institute of Hydrology (NIH) has finalized its RFD, providing a summary of the most important results that a department /ministry expects to achieve during the financial year. This document contains not only the agreed objectives, policies, programs and projects but also success indicators and targets to measure progress in implementing them, and provides an objective and fair basis to evaluate department's overall performance at the end of the year.

CHAPTER - IV

REVIEW OF PAST PERFORMANCE

4.1 Review of past performance: The relevant information regarding performance during 2010-11 and 2011-12 (up to December 2011) against the targets already set are given at **Annexure-I** and **Annexure-II** respectively.

4.2 There is one flagship programme of this Ministry namely, 'Accelerated Irrigation Benefits Programme' and 'National Projects' details of which are given at **Annexure-III**.

CHAPTER - V

OVERALL FINANCIAL REVIEW

5.1 The details of Ministry of Water Resources Budget (the scheme wise allocation of funds vis-a-vis expenditure trend) including XI plan outlay is shown in **Annexure – IV** and Annual Plan for 2012-13 is in **Annexure-V**.

TREND OF EXPENDITURE IN FY 2011-12:

5.2 Budget Estimate for the annual plan of this Ministry for the year 2011-12 is Rs. 720.00 crores which was reduced to Rs. 620.00 crores by the Ministry of Finance at RE stage. As per the expenditure details received from the Office of Controller of Accounts, an expenditure of Rs.357.34 crores has been incurred upto December 2011 which works out to 49.63 % and 57.63 % with reference to B.E and R.E 11-12 respectively.

5.3 The grant of Ministry of Water Resources for FY 11-12 is classified into four Sectors. The Sector-wise distribution of approved plan outlay (both BE/RE) and expenditure up to December 2011 under different Sectors are summarized below:

Sector	(Rs in crore)		
	B.E. 2011-12	R.E. 2011-12	Exp. upto Dec., 2011
Major & Medium Irrigation	277.19	226.15	114.56
Minor Irrigation	134.40	143.45	85.86
Flood Control	238.01	179.00	102.07
Transport Sector	70.40	71.40	55.23
EAT	0.00	0.00	-0.38
Total	720.00	620.00	357.34

Budget at a Glance

5.4 In the water resources sector, the central budget enables the Ministry of Water Resources and its associate organizations to play an overall guiding and coordinating role in relation to schemes, projects and programmes which are essentially implemented in the states/UTs. The Farakka Barrage Project is the only project which is primarily a navigation project, but is under this ministry because in terms of the skills and disciplines involved, it is similar to other hydraulic projects within the ambit of this ministry. In relation to water resources development, the role of the Ministry is one of planning, guidance, policy formulation and assistance.

5.5 Since 'Water' is a state subject, the role of central government in implementing the programmes is essentially of a catalytic nature. The budget of the central government is, thus, supplemented by funds provided in the budgets of various state governments.

5.6 The following plan schemes are being implemented by the Ministry:

Central Sector

1. Development of Water Resources Information System
2. Hydrology Project
3. Investigation of Water Resources Development
4. Research & Development Programme
5. National Water Academy
6. Information, Education and Communication
7. Dam Safety Studies and Planning
8. River Basin Organisation/Authority
9. Ground Water Management and Regulation
10. Rajiv Gandhi NGWT&RI
11. Flood Forecasting
12. River Management Activities and works related to Border Rivers
13. Pagladia Dam Project
14. Infrastructure Development
15. Farakka Barrage Project

State Sector Schemes

16. Accelerated Irrigation Benefit Programme
17. Repair, Renovation and Restoration of Water Bodies
18. Dam Rehabilitation and Improvement Programme
19. Flood Management Programme
20. Command Area Development Programme

5.7 A comparative table showing Budget allocated and expended for last 2 years is explained in Tables A & B. The budget of the Ministry is explained in terms of allocation of funds among various sectors (Table - A) and the manner in which the expenditure of the Ministry is incurred (Table - B).

5.8 Details regarding outstanding utilization certificates are given in Table - C.

TABLE - A
BUDGET AT A GLANCE
(SECTOR-WISE)

(Rupees in crore)

Sl No.	Sector/ Organisation /Scheme	Actuals 2010-11		BE 2011-12		RE 2011-12		BE 2012-13		Total B.E. 2012-13
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
I.	Secretariat- Economic Services									
1.	Ministry of Water Resources	0.00	32.31	0.00	57.17	0.00	59.04	0.00	62.42	62.42
2.	Ravi-Beas Waters Tribunal	0.00	0.83	0.00	0.97	0.00	0.29	0.00	0.57	0.57
3.	Cauvery Water Disputes Tribunal	0.00	2.24	0.00	2.36	0.00	2.18	0.00	2.36	2.36
4.	Krishna Water Disputes Tribunal	0.00	1.67	0.00	1.78	0.00	1.65	0.00	1.75	1.75
5.	Vansadhara Water Dispute Tribunal	0.00	0.55	0.00	4.16	0.00	4.17	0.00	4.04	4.04
6.	Mahadayi Water Disputes Tribunal	0.00	0.08	0.00	3.54	0.00	2.92	0.00	4.14	4.14
	Total :	0.00	37.68	0.00	69.98	0.00	70.25	0.00	75.28	75.28
II.	Major & Medium Irrigation									
	Central Water Commission									
1.	Direction & Administration	0.00	22.70	0.00	23.82	0.00	24.97	0.00	25.03	25.03
2.	Data Collection	0.00	84.16	0.00	87.75	0.00	86.68	0.00	91.77	91.77
3.	Training	0.00	0.32	0.00	0.35	0.00	0.36	0.00	0.38	0.38
4.	Research	0.00	2.37	0.00	2.54	0.00	2.09	0.00	2.14	2.14
5.	Survey & Investigation	0.00	8.68	0.00	5.69	0.00	4.90	0.00	5.50	5.50
6.	Consultancy	0.00	24.31	0.00	23.83	0.00	25.88	0.00	25.92	25.92
7.	Contribution to international bodies									
8.	Seminars and conferences on water resources on water.	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.02	0.02
9.	Exhibition and Trade Fair	0.00	0.12	0.00	0.09	0.00	0.09	0.00	0.14	0.14
10.	Modernization of equipment CWC Offset Press	0.00	0.36	0.00	0.29	0.00	0.28	0.00	0.28	0.28

Sl No.	Sector/ Organisation /Scheme	Actuals 2010-11		BE 2011-12		RE 2011-12		BE 2012-13		Total B.E . 2012-13
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
11.	Cell for monitoring externally aided projects	0.00	0.98	0.00	1.04	0.00	1.15	0.00	1.19	1.19
12.	Water Planning Wing	0.00	1.89	0.00	2.06	0.00	1.91	0.00	1.92	1.92
13.	Hydrological observations in Chenab basin	0.00	1.90	0.00	2.02	0.00	1.88	0.00	2.29	2.29
14.	National Water Academy	2.95	0.00	3.00	0.00	4.00	0.00	0.00	0.00	0.00
	Total : CWC	2.95	147.80	3.00	149.50	4.00	150.21	0.00	156.58	156.58
15.	Central Soil and Materials Research Station	0.00	7.74	0.00	8.31	0.00	8.31	0.00	8.49	8.49
16.	Central Water & Power Research Station	0.00	32.57	0.00	35.67	0.00	35.67	0.00	36.42	36.42
17.	National Institute of Hydrology	0.00	9.80	0.00	8.50	0.00	8.50	0.00	10.05	10.05
18.	Sardar Sarovar Construction Advisory Committee	0.00	0.74	0.00	0.81	0.00	0.83	0.00	0.80	0.80
19.	Bansagar Control Board	0.00	0.23	0.00	0.24	0.00	0.24	0.00	0.25	0.25
20.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	2.06	0.00	2.06	0.00	18.04	18.04
21.	Upper Yamuna River Board	0.00	1.16	0.00	1.90	0.00	1.90	0.00	1.90	1.90
22.	Research and Development Programme	41.36	0.00	46.19	0.00	37.00	0.00	100.00	0.00	100.00
23.	Development of Water Resources Information System	39.36	0.00	58.94	0.00	58.89	0.00	84.99	0.00	84.99
24.	Hydrology Project	27.22	0.00	80.00	0.00	50.00	0.00	70.00	0.00	70.00
25.	Investigation of Water Resources Development Schemes	44.27	0.00	54.00	0.00	54.00	0.00	0.00	0.00	0.00
26.	Information, Education and Communication	13.30	0.00	25.00	0.00	18.00	0.00	0.00	0.00	0.00
27.	River Basin Organization/ Authority	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	Dam Safety Studies and Planning	1.11	0.00	3.00	0.00	2.00	0.00	0.00	0.00	0.00

Sl No.	Sector/ Organisation /Scheme	Actuals 2010-11		BE 2011-12		RE 2011-12		BE 2012-13		Total B.E . 2012-13
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
29.	Infrastructure Development	2.82	0.00	3.00	0.00	2.15	0.00	3.20	0.00	3.20
30.	Human Resource Development/ Capacity Building	0.00	0.00	0.00	0.00	0.00	0.00	85.00	0.00	85.00
31.	River Basin Management	0.00	0.00	0.00	0.00	0.00	0.00	110.00	0.00	110.00
32.	Implementation of National Water Mission	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	200.00
33.	Irrigation Management Programme	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
34.	Dam Rehabilitation and Improvement Programme	0.00	0.00	0.00	0.00	0.00	0.00	24.00	0.00	24.00
	Total: Major & Medium Irrigation	172.39	200.04	277.13	206.99	226.04	207.72	777.19	232.53	1009.72
III.	Minor Irrigation									
1.	Central Ground Water Board	0.00	100.46	0.00	105.02	0.00	105.14	0.00	105.98	105.98
2.	Rajiv Gandhi NGWTRI	3.19	0.00	3.00	0.00	3.60	0.00	0.00	0.00	0.00
3.	Ground Water Management and Regulation	80.93	0.00	120.00	0.00	132.00	0.00	318.00	0.00	318.00
4.	Development of Water Resources Information System	0.07	0.00	0.06	0.00	0.11	0.00	0.01	0.00	0.01
5.	Infrastructure Development	6.86	0.00	11.40	0.00	7.85	0.00	41.80	0.00	41.80
6.	Human Resource Development/ Capacity Building	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	15.00
	Total : Minor Irrigation	91.05	100.46	134.46	105.02	143.56	105.14	374.81	105.98	480.79
IV.	Flood Control Central Water Commission									
1.	Flood Data Collection	0.00	66.51	0.00	72.39	0.00	71.39	0.00	72.04	72.04
2.	Payment to Govt. of Bhutan for maintenance of flood forecasting and warning centres	0.00	0.53	0.00	1.08	0.00	1.08	0.00	1.05	1.05

Sl No.	Sector/ Organisation /Scheme	Actuals 2010-11		BE 2011-12		RE 2011-12		BE 2012-13		Total B.E . 2012-13
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
3.	Strengthening and modernization of flood forecasting and hydrological network in Brahmaputra and Barak Basin	0.00	2.37	0.00	1.88	0.00	2.55	0.00	2.53	2.53
	Total : CWC	0.00	69.41	0.00	75.35	0.00	75.02	0.00	75.62	75.62
4.	Emergent Flood Protection Measures in Eastern and Western Sectors	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	3.00
5.	Pagladia Dam Project	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
6.	Flood Forecasting	24.02	0.00	36.00	0.00	36.00	0.00	48.00	0.00	48.00
7.	River Management Activities and Works related to Border Areas	179.52	0.00	188.00	0.00	138.00	0.00	125.00	0.00	125.00
8.	Infrastructure Development	9.48	0.00	14.00	0.00	5.00	0.00	10.00	0.00	10.00
9.	River Basin Management	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.00
	Total : Flood Control	213.02	72.41	238.01	78.35	179.00	78.02	273.00	78.62	351.62
V.	Other Transport Services									
1.	Farakka Barrage Project	44.02	34.11	70.40	35.29	71.40	34.79	75.00	41.14	116.14
2.	Jangipur Barrage	0.00	2.13	0.00	2.46	0.00	2.21	0.00	2.37	2.37
3.	Feeder Canal	0.00	4.30	0.00	4.64	0.00	4.60	0.00	5.08	5.08
	Total : Transport Services	44.02	40.54	70.40	42.39	245.00	41.60	75.00	48.59	123.59
	TOTAL: (I to V) *	520.48	451.13	720.00	502.73	620.00	502.73	1500.00	541.00	2041.00
VI.	AIBP and other Water Resources Programme **	8757.53	0.00	12620.00	0.00	7460.00	0.00	14242.00	0.00	14242.00
	GRAND TOTAL	9278.01	451.13	13340.00	502.73	8080.00	502.73	15742.00	541.00	16283.00

Source of financing : * Demand No.104 – Ministry of Water Resources for 2012-2013 (excluding AIBP)

** Details shown in Demand No. 35 – Ministry of Finance (Transfers to State and Union Territory Governments)

TABLE - B
BUDGET AT A GLANCE
(TYPE OF EXPENDITURE)

(Rupees in crore)

Sl. No	Sector/Organisation/Scheme	Actuals 2010-11		B.E. 2011-12		R.E. 2011-12		B.E. 2012-13		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	B.E. 2012-13
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
A.	DIRECT EXPENDITURE									
1.	Secretariat-Economic Services	0.00	37.68	0.00	69.98	0.00	70.25	0.00	75.28	75.28
2.	Central Water Commission: -Major & Medium Irrigation -Flood Control	2.95	147.80	3.00	149.50	4.00	150.21	0.00	156.58	156.58
		0.00	69.41	0.00	75.35	0.00	75.02	0.00	75.62	75.62
3.	Central Soil & Materials Research Station	0.00	7.74	0.00	8.31	0.00	8.31	0.00	8.49	8.49
4.	Central Water & Power Research Station	0.00	32.57	0.00	35.67	0.00	35.67	0.00	36.42	36.42
5.	Central Ground Water Board	0.00	100.46	0.00	105.02	0.00	105.14	0.00	105.98	105.98
6.	Rajiv Gandhi & NGWTRI	3.19	0.00	3.00	0.00	3.60	0.00	0.00	0.00	0.00
7.	Farakka Barrage Project	44.02	40.54	70.40	42.39	71.40	41.60	75.00	48.59	123.59
8.	Boards and Committees	0.00	2.13	0.00	2.95	0.00	2.97	0.00	2.95	2.95
	Total : Direct Expenditure	50.16	438.33	76.40	489.17	79.00	489.17	75.00	509.91	584.91
B.	RELEASES									
(a)	Grants to Autonomous Bodies									
1.	National Institute of Hydrology	0.00	9.80	0.00	8.50	0.00	8.50	0.00	10.05	10.05
2.	Research & Development Programme	41.36	0.00	46.19	0.00	37.00	0.00	100.00	0.00	100.00
3.	-Major and Medium Irrigation Pagladia Dam Project	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
	Sub-Total (a) Grants to Autonomous Bodies	41.36	9.80	46.20	8.50	37.00	8.50	100.00	10.05	110.05
(b)	Assistance to States for Flood Control/anti-erosion works									
1.	Emergent Flood Protection measures in Eastern and Western Sectors	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	3.00
	Sub-Total(b : Assistance to States for flood control/anti-erosion works	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	3.00
(c)	State Irrigation Schemes									
1.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	2.06	0.00	2.06	0.00	18.04	18.04
	TOTAL: RELEASES (a) to (c)	41.36	12.80	46.20	13.56	37.00	13.56	100.00	31.09	131.09
	Total (A+B)*	91.52	451.13	122.60	502.73	116.00	502.73	175.00	541.00	716.00
C	OTHER PLAN SCHEMES									
	Major & Medium Irrigations									

Sl. No	Sector/Organisation/Scheme	Actuals 2010-11		B.E. 2011-12		R.E. 2011-12		B.E. 2012-13		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	B.E. 2012-13
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1.	Development of Water Resources Information System	39.36	0.00	58.94	0.00	58.89	0.00	84.99	0.00	84.99
2.	Hydrology Project	27.22	0.00	80.00	0.00	50.00	0.00	70.00	0.00	70.00
3.	Investigation of Water Resources Development Scheme	44.27	0.00	54.00	0.00	54.00	0.00	0.00	0.00	0.00
4.	Information, Education and Communication	13.30	0.00	25.00	0.00	18.00	0.00	0.00	0.00	0.00
5.	River Basin Organization/ Authority	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	Dam Safety Studies and Planning	1.11	0.00	3.00	0.00	2.00	0.00	0.00	0.00	0.00
7.	Infrastructure Development	2.82	0.00	3.00	0.00	2.15	0.00	3.20	0.00	3.20
8.	Human Resource Development/ Capacity Building	0.00	0.00	0.00	0.00	0.00	0.00	85.00	0.00	85.00
9.	River Basin Management	0.00	0.00	0.00	0.00	0.00	0.00	110.00	0.00	110.00
10.	Implementation of National Water Mission	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	200.00
11.	Irrigation Management Programme	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
12.	Dam Rehabilitation and Improvement Programme (DRIP)	0.00	0.00	0.00	0.00	0.00	0.00	24.00	0.00	24.00
	Total - MMI	128.08	0.00	227.94	0.00	185.04	0.00	677.19	0.00	677.19
	Minor Irrigation									
1.	Ground Water Management and Regulation	80.93	0.00	120.00	0.00	132.00	0.00	318.00	0.00	318.00
2.	Development of Water Resources Information System	0.07	0.00	0.06	0.00	0.11	0.00	0.01	0.00	0.01
3.	Infrastructure Development	6.86	0.00	11.40	0.00	7.85	0.00	41.80	0.00	41.80
4.	Human Resource Development/ Capacity Building	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	15.00
	Total - MI	87.86	0.00	131.46	0.00	139.96	0.00	374.81	0.00	374.81
	Flood Control									
1.	Flood Forecasting	24.02	0.00	36.00	0.00	36.00	0.00	48.00	0.00	48.00
2.	River Management Activities and Works related to Border Areas	179.52	0.00	188.00	0.00	138.00	0.00	125.00	0.00	125.00
3.	Infrastructure Development	9.48	0.00	14.00	0.00	5.00	0.00	10.00	0.00	10.00
4.	River Basin Management	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.00
	Total - FC	213.02	0.00	238.00	0.00	179.00	0.00	273.00	0.00	273.00
	Total -(A+B+C)*	520.48	451.13	720.00	502.73	620.00	502.73	1500.00	541.00	2041.00
D	AIBP and other Water Resources Programme **	8757.53	0.00	12620.00	0.00	7460.00	0.00	14242.00	0.00	14242.00
	GRANT TOTAL (A+B+C+D)	9278.01	451.13	13340.00	502.73	8080.00	502.73	15742.00	541.00	16283.00

Source of financing: * Demand No.104 – Ministry of Water Resources for 2012-2013 (excluding AIBP).

** Details shown in Demand No. 35 – Ministry of Finance (Transfers to State and Union Territory Governments)

TABLE – C**UTILISATION CERTIFICATES OUTSTANDING IN RESPECT OFF
GRANTS/LOANS RELEASED UPTO 31.3.2009****Position as on 01.10.2011**

State/UT	No. of UCs outstanding in r/o grants released upto March, 2009	Amount involved (Rs in Crores)	No. of UCs received	Amount involved in respect of UCs received	No. of UCs outstanding as on 01.10.2011	Amount involved on outstanding UCs (Rs. in Crores)
1	2	3	4	5	6	7
Institutions & Autonomous Bodies	202	7417.67	2	4131	200	3286.67
*State Govt.	14	48.41	6	28.92	8	19.49

***Details of outstanding UCs in r/o grants/loans released to various state govts.**

Name of the SMD	No. of UCs outstanding in r/o grants released upto March, 2009	Amount involved (Rs in Crores)	No. of UCs received	Amount involved in respect of UCs received	No. of UCs outstanding as on 1.10.2011	Amount involved on outstanding UCs (Rs. in Crores)
1	2	3	4	5	6	7
Minor Irrigation	3	0.295	0	0	3	0.295
Ganga Wing	2	13.87	1	12.51	1	1.36
Command Area Development	9	34.25	5	16.41	4	17.84
Total	14	48.41	6	28.92	8	19.49

CHAPTER - VI

REVIEW OF PERFORMANCE OF STATUTORY/AUTONOMOUS ORGANIZATIONS AND PUBLIC SECTOR UNDERTAKINGS

STATUTORY BODIES:

6.1 BRAHMAPUTRA BOARD:

6.1.1 **Constitution:** The Brahmaputra Board was constituted in 1980 by an Act of Parliament (Act 46 of 1980 called “The Brahmaputra Board Act”) with the objective of planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra and for matters connected therewith. It started functioning since January 11, 1982 with headquarters at Guwahati, Assam. The jurisdiction of the Board includes the states of Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, Tripura, Sikkim and a part of West Bengal falling within the Brahmaputra Basin

6.1.2 Organisation

The Board consists of the Chairman, Vice-Chairman, General Manager and Financial Adviser as Ex-officio members and 17 part time Members representing 7 States of the North Eastern Region, North Eastern Council, concerned Ministries of Government of India namely Water Resources, Finance, Agriculture, Power, Road Transport & Highways and Organizations of Government of India namely Central Water Commission, Central Electricity Authority, India Meteorological Department and Geological Survey of India.

6.1.3 Major functions

The main function of the Board as per the Act is 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 utilization of Water Resources of the Brahmaputra Valley for irrigation, hydropower, navigation and other beneficial purposes.

Other functions include preparation of Detailed Project Reports (DPR) and estimates of projects proposed in the Master Plans as approved by the Central Government and construction of Multipurpose Dams and other works proposed in the Master Plans as approved by the Central Government.

6.1.4 Activities of Brahmaputra Board

The important activities of Brahmaputra Board in North-Eastern Region are as below: -

(a) **Master plans:** Brahmaputra Board carried out the detailed planning and documentation of the Water Resources of North East Region and prepared the Master Plans. It has completed preparation of 51 Master Plans out of 57.

(b) **Protection of Majuli Island, Assam:** Majuli is a chronically flood and erosion effected Island in river Brahmaputra. The protection works of the island were taken up by the Board as on the request of Government of Assam, as under:

The Brahmaputra Board has taken up anti-erosion works at Majuli Island in the year 2003-04 as immediate measures at an estimated cost of Rs. 5.92 crores and completed in 2004-05. These works were followed by regular protection works under Phase-I and works are completed with estimated cost of Rs. 56.07 crores. The Brahmaputra Board also executed emergent works (Rs. 4.99 crores) for protection of Majuli Island on the recommendations of Standing Committee of Experts in 2008. The Board is presently executing the Phase-II and Phase-III works (Rs. 115.99 crores) combined together.

The Government of India has constituted a Standing Committee comprising reputed Experts from Government and non-Government agencies in December 2007 to review and suggest measures for protection of Majuli Island. The Standing Committee has visited Majuli Island seven times. Based on their site visits the Standing Committee has been making suitable recommendations for the works to be undertaken on specific locations by Brahmaputra Board and State Government of Assam. It also provides technical guidance to the Board in adopting the latest state of art techniques in the field. Brahmaputra Board has been carrying out the works recommended by the Standing Committee.

(c) **Anti-Erosion work at Dhola-Hatighuli:** In order to bring the Lohit and Dibang rivers to their original courses, the works were taken up by Brahmaputra Board in phases in 2003-04. These phases of works viz. Phase-I (Rs. 10.47 crores), Phase-II (Rs. 4.95 crores) and Phase-III (Rs. 8.47 crores) were completed by 2007-08. The Phase-IV works (Rs. 23.09 crores) are under progress.

Drainage Development Schemes (DDS):

- (i) **Preparation of DPRs:** The Board has completed the DPRs of 24 numbers of Drainage Development scheme out of 41 nos of identified drainage development schemes (DDS).
- (ii) **Execution of Drainage Development Scheme:** The Brahmaputra Board has taken up the execution of four numbers of Drainage Development Schemes (DDS) viz. Barbhag (Rs. 7.23 crores), Amjur (Rs. 18.84 crores), Jengrai (Rs. 1.49 crores), Jakaichuk (Rs. 2.96 crores). The works are under progress.

(d) **Survey, investigation & preparation of DPR for Multipurpose Project:** The Board has completed 5 nos of DPR for multipurpose project (Siang Single Stage, Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram). Preparation of DPR for 5 nos projects namely Noa-Dehing, Jiadhal, Kulsi, Kiling and Simsang are in various stages of investigation/DPR preparation.

(e) **The North Eastern Hydraulic & Allied Research Institute (NEHARI):** - The Institute was established near Guwahati with facilities of Hydraulic Modeling, Soil Testing, Concrete and Rock Mechanics Laboratory in association with CSMRS, CWPRS. The Board has successfully carried out sample testing as requested by various organizations like NEEPCO, CWC, NEC, NHPC, and State Government of Assam, Manipur, Meghalaya and Mizoram for their on-going projects. So far, NEHARI has completed physical model studies of (i) Jiadhal River (ii) River Brahmaputra from Porvita to South Salmara (iii) Majuli Island and (iv) Kameng River. (Jia Bharali in Assam)

6.1.5 Schemes under execution by Board

Brahmaputra Board is executing following schemes: -

- (A) Protection of Majuli Island phase-II & III
- (B) Avulsion of Brahmaputra at Dhola-Hatighuli Phase-IV
- (C) Drainage Development Schemes, name
 - 1) Barbhag Drainage Development Scheme
 - 2) Amjur Drainage Development Scheme
 - 3) Jengrai Drainage Development Scheme
 - 4) Jakaichuk Drainage Development Scheme
- (D) **Pagladiya Dam Project:** The project meant for flood moderation to benefit an area of 40000 ha., irrigation to 54,160 ha. And incidental power generation of 3 MW is proposed 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 21 km 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 Brahmaputra Board.
 - **Works carried out since 2001**
 - Pre-construction survey, investigation, studies, design, drawings etc.
 - Taking possession of land (956 ha) for Resettlement & Rehabilitation (R&R) purpose
 - Construction of project roads, offices, etc.
 - Preparation of technical specifications & tender document
 - Pre-qualification of contractors for main works

The work is held up due to (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.

(f) **Creation of a Basin Level Water Resources Authority for NE India:** A Nodal Group under the Chairmanship of Chairman, Central Water Commission has submitted report on reorganization of Brahmaputra Board as a Basin Level Water Resources Authority which is under consideration of the Ministry of Water Resources.

6.2. Ravi and Beas Waters Tribunal

6.2.1 The Ravi and Beas Waters Tribunal, which was constituted in April, 1986 as per the Punjab Memorandum of Settlement, submitted its report in January, 1987. This report was forwarded in May, 1987 to the concerned State Governments. In August 1987 further reference was made to the Tribunal comprising reference by the Central Government and references received from the Governments of Punjab, Haryana and Rajasthan seeking explanation/guidance on certain points of the report. The Tribunal could not function during 09.03.89 to 17.11.96 and 04.01.99 to 09.06.2003 as post of a Member remained vacant during these periods. After filling up of the post on 10.06.03, the Tribunal has been holding hearings which however, have to be adjourned pending the outcome of a Presidential Reference on Punjab Termination of Agreements Act, 2004 before the Hon'ble Supreme Court. With the demise of the Chairman and the tendering of resignation by a Member, the Tribunal's functioning has again been affected.

6.3 Cauvery Water Disputes Tribunal

6.3.1 The Cauvery Water Disputes Tribunal (CWDT) was constituted by the Government of India on 2nd June, 1990 to adjudicate the water dispute regarding Inter State River Cauvery and the river valley thereof. The tribunal has submitted its report and decision on 05.02.2007 under section 5(2) of Interstate River Water Disputes Act, 1956. The concerned states and the Central Govt. have sought clarification and guidance under section 5(3) of the Act. Party states have filed special leave petitions in the Hon'ble Supreme Court against the decision dated 5.2.2007 of the tribunal. To consider the Petitions filed under section 5(3) of the Inter State River Water Disputes Act, 1956 on behalf of the Party States and the Union Territory of Pondicherry and the Central Government, a Tribunal sitting was held on 10.07.2007. The Hon'ble Tribunal after observing the party States have filed Special Leave Petition against the Tribunal's decision dated 05th February 2007 before the Hon'ble Supreme Court the Hon'ble Supreme Court has granted Special Leave and the same is pending before the Hon'ble Supreme Court, ordered that further action by the Tribunal will be taken only after decision of the Supreme Court on the special leave petitions becomes available. The matter was last heard on 18th October, 2011 and ordered to be listed for final disposal before the appropriate Bench in month of February, 2012. The matter is under consideration of Hon'ble Supreme Court. The terms of the tribunal has been extended by the Govt. upto 02.11.2012.

Financial Outlays 2012-13

(Rupees in Crore)

Name of the Scheme / Activity	Actual 2010-11	B.E. 2011-12	RE 2011-12	Actual Expenditure upto Dec.11	B.E. 2012-13
Cauvery Water Disputes Tribunal	2.24	2.36	2.18	1.51	2.36

6.4 Krishna Water Disputes Tribunal

6.4.1 The Krishna Water Disputes Tribunal (KWDT) was constituted on 2nd April, 2004 for adjudication of the dispute relating to sharing of waters of Inter-State River Krishna and river valleys thereof. The term of KWDT was extended upto 01.04.09 as per the provisions of ISRWD Act, 1956. Meanwhile, in the Writ Petition filed by the Govt. of A.P., Hon'ble S.C. has ordered that the effective date of constitution of the tribunal will be 01.02.06. Consequently the term of the tribunal has been extended up to 31.12.2010.

6.4.2 The Tribunal forwarded its report and decision under section 5 (2) of the Act on 30.12.2010. Party states and Central Govt. made reference to the tribunal under section 5(3) of the Act seeking clarification and guidance from the tribunal on the report and decision of tribunal dated 30.12.2010 on 28th March, 2011. The arguments on behalf of states of Karnataka and Maharashtra is going on.

FINANCIAL OUTLAYS

(Rupees in Crore)

Name of the Scheme/Activity	Actual 2010-11	B.E. 2011-12	RE 2011-12	Actual Expenditure upto Dec.11	B.E. 2012-13
1	2	3	4	5	6
Krishna Water Disputes Tribunal	1.67	1.78	1.65	1.23	1.75

6.5 Vansadhara Water Dispute Tribunal

6.5.1 The Vansandhara Water Dispute Tribunal (VWDT) was constituted by the Govt. of India on 24th Feb. 2010 to adjudicate the water dispute regarding inter state river Vansadhara and river Valley thereof. The office space for the Tribunal has been allocated at 5th floors Mohan Singh place, New Delhi-110001,. Further actions being taken in this regard.

FINANCIAL OUTLAYS

(Rupees in Crore)

Name of the Scheme/Activity	Actual 2010-11	B.E. 2011-12	RE 2011-12	Actual Expenditure upto Dec.11	B.E. 2012-13
1	2	3	4	5	6
Vansandhara Water Dispute Tribunal	0.55	4.16	4.17	1.05	4.04

6.6 Mahadayi Water Disputes Tribunal

6.6.1 The Mahadayi Water Disputes Tribunal (MWDT) was constituted by the Government of India on 16th November, 2010 to adjudicate the water disputes regarding inter-state river Mahadayi and river valley thereof. The office space has been allocated by Directorate of Estates at 5th Floor, Janpath Bhawan. Further, actions in this regard is being taken.

FINANCIAL OUTLAYS

(Rupees in Crore)

Name of the Scheme/Activity	Actual 2010-11	B.E. 2011-12	RE 2011-12	Actual Expenditure upto Dec.11	B.E. 2012-13
1	2	3	4	5	6
Mahadayi Water Dispute Tribunal	0.8	3.54	2.92	0.32	4.14

AUTONOMOUS BODIES (SOCIETIES)

6.7 National Water Development Agency

6.7.1 The Ministry of Water Resources (MOWR) and Central Water Commission (CWC) formulated a National Perspective Plan (NPP) for Water Resources Development in 1980 envisaging inter basin transfer of water from surplus basins to deficit basins / areas which comprises of two components, namely Himalayan Rivers Development Component and Peninsular Rivers Development Component. The National Water Development Agency (NWDA), a Registered Society under the Ministry of Irrigation (now Ministry of Water Resources) was set up in the year 1982 to carry out detailed studies, surveys and investigations in respect of Peninsular Component of National Perspective for Water Resources Development. The Functions of NWDA were published under Para 4 of the Gazette Notification No. 1(7)/80-PP dated 26.08.1981. The Government subsequently modified the functions of NWDA to include the Himalayan Component of National Perspective for Water Resources Development through the Resolution No. 22/27/92-BM dated 11th March, 1994, composition of Society and Governing Body contained in Para 3 & 5 of the Resolution No. 1(7)/80-PP dated 26.08.1981 through the Resolution Nos. 2/9/2002-BM dated 13th February 2003 & 12th March 2004 and modified the functions of NWDA to include the activity to prepare the DPR of river link proposals under National Perspective Plan (NPP) for Water Resources Development after concurrence of the concerned State vide Notification No. 2/18/2005-BM dated 30.11.2006.

6.7.2. It has now been decided that NWDA may take up the work of preparation of DPRs of intra-State links also and the Notification of enhanced mandate has been done vide "The Gazette of India, June 11, 2011".

To enable National Water Development Agency to undertake above

activities, its functions are modified as under:-

- a. To carry out detailed surveys and investigations of possible reservoir sites and inter-connecting links in order to establish feasibility of the proposal of Peninsular Rivers Development and Himalayan Rivers Development Components forming part of the National Perspective for Water Resources Development prepared by the then Ministry of Irrigation (now Ministry of Water Resources) and Central Water Commission.
- b. To carry out detailed studies about the quantum of water in various Peninsular River Systems and Himalayan River Systems which can be transferred to other basins/States after meeting the reasonable needs of the basins/States in the foreseeable future.
- c. To prepare feasibility report of the various components of the scheme relating to Peninsular Rivers Development and Himalayan Rivers Development.
- d. To prepare detailed project report of river link proposals under National Perspective Plan for Water Resources Development after concurrence of the concerned States.
- e. To prepare pre-feasibility/feasibility/detailed project reports of the intra-State links as may be proposed by the States. The concurrence of the concerned co-basin States for such proposals may be obtained before taking up their FRs/DPRs.
- f. To do all such other things the Society may consider necessary, incidental, supplementary or conducive to the attainment of above objectives.

6.7.3 The Hon'ble Union Minister of Water Resources is the President of the National Water Development Agency Society, which is the apex body of NWDA. The Annual General Meeting of the Society is held once a year to review the programme and progress of the Agency. The Governing Body of the NWDA headed by Secretary (Water Resources) reviews the programme and progress of works in every six months. The Technical Advisory Committee (TAC) of the Agency under the Chairmanship of the Chairman, Central Water Commission examines various technical proposals framed by the Agency. All the concerned states are represented in these committees.

6.7.4. Based on various studies conducted, NWDA has identified 30 links (16 under Peninsular Component & 14 under Himalayan Component) for the preparation of Feasibility Reports (FRs). Out of these, FRs of 14 links under Peninsular Component and 2 links (Indian Portion) under Himalayan Component have already been completed. Further S&I (Indian Portion) in respect of another 7 links under Himalayan Component have been completed. Pre-Feasibility Reports (PFRs) of 15 intra-State links proposed by states have also been completed.

6.7.5. An expenditure of Rs.24.02 Crores has been incurred by NWDA on ILR programme during 2011-12 (upto November 2011). Various studies were continued by NWDA during the year. Further, Detailed Project Report (DPR) of Ken-Betwa link has been completed and as decided during Secretary level meeting with Principal Secretaries of UP & MP on 03.02.2010, DPR will be prepared in two phases. DPR of phase-I completed and sent to concerned States in May, 2010. DPR of phase-II has been taken up and that of two more links viz. Par-Tapi-Narmada and Damanganga-Pinjal were initiated during 2008-09 and work remained under progress during 2009-10 & 2010-11. The work of preparation of DPR of 2 Intra-State link of Bihar remained in progress during 2010-11 and the same is continue.

6.7.6. During the year 2012-13, an outlay of Rs.50.30 Crores has been proposed for NWDA. NWDA would continue to do Survey & Investigation required for ILR programme and preparation of DPR of above two links. Further, it is planned to complete Survey & Investigation works of 4 links in Himalayan Component (Indian Portion). Also, PFRs of 6 Intra-State links proposed by various States will be completed and DPRs of 3 intra-State links will remain under progress.

6.8 National Institute of Hydrology (NIH):

6.8.1 The National Institute of Hydrology, a Govt. of India Society under the Ministry of Water Resources, established in December 1978 at Roorkee, is conducting basic, applied and strategic research in the fields of hydrology and water resources development.

6.8.2 Objectives

- To undertake, aid, promote and coordinate systematic and scientific work on all aspects of hydrology,
- To cooperate and collaborate with other national and international organizations in the field of hydrology,
- To establish and maintain a research and reference library in pursuance of the objectives of the society and equip the same with books, reviews, magazines and other relevant publications,
- To carry out activities that the Society may consider necessary, incidental or conducive to the attainment of the objectives for which the Institute has been established.

6.8.3 Organization

The Union Minister of Water Resources is the President of the NIH Society and the Union Minister of State of Water Resources is its Vice- President. The Ministers-in-Charge of Irrigation/Water Resources in the states, the Secretaries of Ministries in the Government of India, and eminent experts in hydrology and water resources are members of the Society. The Secretary (WR) is the Chairman of the Governing Body. The Institute's research and other technical activities are monitored and guided by the Technical Advisory Committee (TAC). Director of the Institute is the Principal Executive Officer of the Society.

The Institute act as a center of excellence for transfer of technology, human resources development and institutional development in specialized areas of hydrology, and conducts user defined, demand-driven research through collaboration with relevant national and international organizations. NIH works as a nodal centre of the Ministry for effective implementation of the National Water Mission.

6.8.4 Studies and Research

The studies and research in the Institute are carried out under five scientific themes at the Headquarters, two Centers for Flood Management Studies and four regional centers. The Institute has a Research Coordination and Management Unit, which provides interface with various research and academic institutions. The Institute has state-of-art laboratory facilities in the area of Nuclear Applications in Hydrology, Water Quality, Soil Water, Remote Sensing & GIS Applications, Hydrological Instrumentation, and Ground Water Modelling.

6.8.5 Technical Publication and Technology Transfer

The research output of the Institute is published in the form of reports, scientific papers, guidelines, manuals, etc. For transfer of the developed technology and techniques to the target users, the Institute organizes workshops, training courses, seminars, symposia, conferences, and brain storming sessions.

Performance during 2011-12 and targets for the year 2012-13 are shown below:

S. N.	Description of Item	Physical target for 2011-12	Achievement during 2011-12 (upto Dec 2011)	Target for 2012-13
1	Completion of physical/mathematical model/desk studies/Lab. Studies	55	50	55
2	Preparation of technical reports/ studies completed	50	48	24
3	Publication of research papers	160	130	160
4	Preparation of guidelines /manuals	2	1	0
5	Organization of workshops /seminars/ symposia	15	13	14
6	Training of Personnel	25	21	27
7	Technology transfer activity	10	9	10

PUBLIC SECTOR UNDERTAKINGS:

6.9. Water and Power Consultancy Services(India) Limited (WAPCOS):

INTRODUCTION

6.9.1 WAPCOS Limited is a “MINI RATNA-I” Public Sector Enterprise under the aegis of the Union Ministry of Water Resources. Incorporated on June 26th, 1969 under the Companies Act, 1956; WAPCOS has been providing consultancy services in all facets of Water Resources, Power and Infrastructure Sectors in India and Abroad. The quality management systems of WAPCOS comply with the Quality Assurance requirements of ISO 9001:2008 for Consultancy Services in Water Resources, Power and Infrastructure Development Projects.

Mission

6.9.2. Sustained Profitable Growth, Excellence in Performance use of State-of-the-art Technical Expertise, Innovativeness, Capacity Building and Meeting Society's Needs.

Objectives

- (i) To perform the role of a premier agency for offering integrated package of services of the highest scientific, technological and managerial quality with a view to ensure optimal planning and development of water resources and maximizing the efficiency of its utilization.
- (ii) To adopt modern technology and systems to build in quality, reliability and accuracy thereby ensuring a high degree of customer satisfaction.
- (iii) To continue the pace of growth of domestic and overseas business and to transfer know-how to other developing nations
- (iv) To specialize and sustain international standards in surveys, investigations, designs, cost estimates, project planning including environmental studies and project management services for cost-effective and integrated development of Water resources, Power and Infrastructure Development.
- (v) To promote research and development actively through interaction with other national and international agencies.
- (vi) To maintain pre-eminence in the field of consultancy through diversification into areas of new challenges and needs in associated fields.
- (vii) To secure a fair monetary return to the enterprise as a result of its operations through improved productivity and optimization.
- (viii) To play a dynamic role in realizing the potentials by state-of-the-art consultancy in innovative design alternatives.
- (ix) To specialise and attain the highest level of International Standards in providing Consultancy Services.
- (x) To attract the best available talent and promote a committed and motivated workforce.
- (xi) Increase in business growth and effective business management.
- (xii) To gain total client satisfaction
- (xiii) To promote WAPCOS as a Brand Name.

FIELDS OF SPECIALISATION

6.9.3. Main fields of specialization of the company cover Irrigation and Drainage, Flood Control and Land Reclamation, River Management, Dams, Reservoir Engineering and Barrages, Integrated Agriculture Development, Watershed Management, Hydropower and Thermal Power Generation, Power Transmission and Distribution, Rural Electrification, Ground Water Exploration, Minor Irrigation, Water Supply and Sanitation (Rural and Urban), Environmental Engineering including Environmental Impact Assessment and Environmental Audit, Ports and Harbours and Inland Waterways, Rain Water Harvesting; Survey & Investigations, Human Resource Management, System

Studies and Information Technology. WAPCOS has also been venturing into newer fields such as Software Development, City Development Plans, Financial Management System, Technical Education, Quality Control and Construction Supervision, Roads & Bridges. The Company has amended its Articles of Association to provide concept to commissioning services for developmental projects in India and Abroad.

RANGE OF CONSULTANCY SERVICES

6.9.4. WAPCOS' spectrum of services covers a wide range of activities e.g. pre-feasibility studies, feasibility studies, simulation studies, diagnostic studies, socio-economic studies, master plans and regional development plans, field investigations, detailed engineering including designs, detailed specifications, tendering process, contract and construction management, commissioning and testing, operation & maintenance, quality assurance & management, software development and human resource development.

REGISTRATION WITH INTERNATIONAL ORGANISATIONS AND OPERATIONS ABROAD

6.9.5. WAPCOS is registered with various international funding agencies for participating in the funded projects like World Bank/International Bank for Reconstruction and Development, African Development Bank, Asian Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, United Nations Development Program, World Health Organization, West African Development Bank, Indian Technical and Economic Cooperation (ITEC) Programme, Overseas Economic Cooperation Fund, Japan Bank for International Cooperation (JBIC), United Nations Office for Project Services (UNOPS) etc.

6.9.6. Apart from India, WAPCOS has successfully completed/on-going consultancy assignments abroad in 50 countries and is currently engaged in providing consultancy services in Afghanistan, Bangladesh, Bhutan, Burundi, Cambodia, Central African Republic, Chad, DR Congo, Ethiopia, Kenya, Laos, Mozambique, Myanmar, Nepal, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Togo, Yemen and Zimbabwe.

6.10. National Projects Construction Corporation Limited:

6.10.1. National Projects Construction Corporation Limited (NPCC Ltd.) was incorporated in 1957 under Companies Act, 1956, as a Construction Company for taking up the construction of mainly River Valley Projects, dams, barrages, weirs, reservoirs, embankments, canals, irrigation and related infrastructural works. Presently, the Corporate Office of the Company is at Faridabad and its Registered Office at New Delhi. Presently, it has 14 Zonal Offices situated at Kolkata, Bhubaneshwar, Guwahati, Silchar, Shilong, Raipur and Dehradun. At present, it has 95 operational Units. Presently, the total manpower of the Company is 1740.

6.10.2. The Company performed well during the first ten years of its inception and paid dividend on paid up Capital continuously till 1966-67 (barring the year 1962-63). However, from 1985-86 till 2008-09 (except for the year 2005-06) the financial

position of the Company had deteriorated sharply.

6.10.3. In December, 2008, the Government approved a revival package for NPCC by correcting the Govt. of India principal amount of Rs. 219.43 crore and cumulative interest due and accrued on it as on the date of conversion to equity capital and further written down to 10% of value. The decision of the Government has been implemented.

6.10.4 The authorized share capital of the Company is Rs. 700 crore and its paid up capital is Rs. 94.53 crore. Out of this, 14 State Governments and Union Territories are shareholders for an amount of Rs. 1.05 crore and remaining share capital rest with the Central Government.

6.10.5 The projects taken up by the Company included (i) IBB Fencing & Lighting Works, road Works at Tripura, Mizoram, Assam & Meghalaya (ii) Assam Riffle Works in different States of North Eastern Region. (iii) Indo-Tibetan Border Roads in Laddakh (J&K State), (iv) PMGSY Works in different districts of Bihar, Jharkhand & UP etc. The existing business operational pattern is likely to be maintained during the year 2012-13 with innovative diversification.

6.10.6 After the implementation of the revival package, the Company has starting earning profit from 2009-10 onwards. The Company earned net profit of Rs. 31.28 crore and Rs. 72.74 crore for the year 2009-10 and 2010-11 respectively.

Ministry of Water ResourcesPerformance of 2010-11

(Rs. in crore)

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
1.	Development of Water Resources Information System	(i) To collect data from network of Hydrological Observation stations for overall assessment of water resources and analysis of their characteristics (ii) Collection of information about minor irrigation through MI Census (iii) To establish infrastructure and launch the water resources information system.	66.00	(i) Continued hydrological observation at 878 site, (ii) development of water resources information system, (iii) continued activities for MI Census	Activities to continue throughout the year.	(i) (a)Hydolrogy Observations at 878 sites continued. (b) Hydrological network were equipped with modern equipments. (c) Collection, compilation, storgae, dissemination, analysis and publication of data in the form of Water Year Books was achieved. (ii) First version of WRIS launched with the available information. (iii) (a) Project for assessment of irrigation potential by remote sensing approved. MOU for carrying out the work signed with NRSC. (b) 24 number of project visits performed by CWC monitoring team. (iv) 99% 4th MI Census data got validated. (v) Computers and related equipment were provided to regional filed offices of CWC and Irrigation Departments of 3 State Govts. of Haryana, Punjab and Rajasthan.	
2	Research & Development programme in Water Sector	The scheme comprises of various activities related to R&D and training in the water resources sector. These activities are being implemented by the premier research Institutes in the field of hydrology, hydraulics, soil	54.00	The implementation of the scheme will help in capacity building and creation of additional facilities. The research output are generally in terms of technical report & research papers having recommendations for improved techniques for planning & design. Quantifiable deliverables are:	The work is to be implemented by various organizations of the Ministry.	Research / Technical reports - 214 Research papers - 299 Training and workshop - 40	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		and material sciences, i.e. NIH, CW&PRS and CSMRS. Specific research/studies by CWC are also supported under the scheme. Assistance is also provided for research studies to WALMIs located in various States and Academic institutions for research & development in the field of Water Resources.		(a) Research Reports = 311 (b) Research Papers = 280 (c) Training workshops = 31			
3	National Water Academy	Training for in service Engineers / Induction Engineers in Water Resources Planning, Development and Management	4.00	a) 35 Training Programmes b) Construction of Swimming Pool c) Electrical Sub-Station		a) 35 Training Programme completed. b) Contract awarded c) 90% work completed	c) MSEB to give actual connection of power supply.
4	Dam Safety Studies and Planning	(i).Instrumentation Museum in CWC (ii) Preparation and digitization of PMP atlases of 4 Basins and 6 Regions (iii) Development of Environmental and Social Management Framework through Environmental and Social Assessment Studies of 10	1.50	(i). Setting up of Management Information System (MIS) for Dam Safety – 3/2010. (ii). Preparation of generalized PMP Atlas and updation of PMP Atlases and digitization of PMP Atlases- 3/2010. (iii). Models/fixtures for Instrumentation Museum – 3/2010.	Indicated in column 5 alongwith each item.	a. CSMRS, New Delhi is in the process of procurement of instruments. b. An MoU between CWC and RMSI Pvt. Has been signed for preparation of new PMP Atlases and updation of existing. Supply of data by MD has been started and data received is being processed by RMIS Pvt. Ltd. for preparation of new PMP Atlases/ updation of old one. c. Environmental & Social Assessment (ESA) Studies has been completed. Empowered Committee on Mulla Periyar Dam reports to Supreme Court only.	1.16 is actual expenditure

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		existing projects (iv) Risk Analysis and Other Specialised Studies of some existing Projects (v) Training and Development of special purpose packages on Dam Safety Activities.				d. In-country trainings related to Dam Safety and hydrological study were completed.	
5.	Hydrology Project	To extend and promote the sustained and effective use of the Hydrological Information System by all implementing agencies concerned with water resources planning and management in 13 States and 8 Central agencies	53.00	Implementation of the project components, i.e. institutional strengthening, vertical extension with Hydrological Design Aids (HDA), DSS-Planning (DSS-P), DSS-Real Time (DSS-RT) and 40 Purpose Driven Studies and horizontal expansion including PDS in new States, with support of 4 major consultancies in place in Hydrology Project.	The planned activities are to be implemented through the Central Agencies, viz. PCS (MoWR), BBMB, CWC, CGWB, CWPRS, CPCB, IMD and NIH till June, 2012.	(a) The project is being implemented with the assistance of 4 major consultancies. (b) Under Decision Support System-Planning (DSS-P), Generic model had been developed for pilot basin. 17 officers have undergone training at DHI, Denmark. (c) Model development for Decision Support System-Real Time (DSS-RT) is in advanced stage. 8 officers have undergone training at DHI, Denmark. (d) Inception Reports and State of Art Reports have been submitted in respect of Hydrological Design Aids- Surface Water (HDA-SW)	
6.	Investigation of Water Resources Development Schemes	Carrying of investigation in respect of identified projects for water resources development	54.00	Investigation and preparation of project report for identified project to continue.	The works of investigation/preparation of project report are covered in more than one year and are carried over to following years	a) The work on investigation of Water Resources Projects including ILR projects is continued. The work for preparation of DPR of Par Tapi Narmada & Daman Ganga Pinjal Links continued b) S&I works in Indian Territory for preparation of FR in respect of 1 links under Himalayan Component of NPP completed. c) PFR of 6 Intra state links completed. d) Alternate alignment of Jogigappa-Teesta-Farraka link firmed up.	
7.	Pagladiya Dam Project	Flood Control, Irrigation & Ancillary Power Generation	0.50	Zirat Survey to be completed.	Activities to be implemented by Brahmaputra Board		Due to non completion of the Zirat survey by the Government of Assam the work is held up. Only normal

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
							R&M works continued. Efforts were made to sort out the issue in coordination with the Government of Assam as well as Bodoland Territorial Council .Brahmaputra Board, explored the possibility of alternative project location without affecting the Bhutan territory and keeping the submergence within Indian Territory. As per studies carried out by Brahmaputra Board there is no other suitable alternative site The above view of the Brahmaputra Board was conveyed to the State Government of Assam with a request to offer views of State Govt. However, response from Govt. of Assam is awaited.
8.	River Basin Organisation/ Authority	The scheme is to encourage formulation of River Basin Organisation with the primary objective of providing a forum to all the co-basin states for taking up necessary studies and evaluation etc., with a view to	0.50	The creation of RBO has to be preceded by consultations with State Governments. Process of consultations was to be initiated during this year. A token provision has been kept in this regard.		Ministry has sent proposal to the concerned states for constitution of the RBO for Mahanandi & Godavari rivers. The concurrence of the all concerned state Government has not been received. The matters is being pursued with the concerned states.	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		identify the most appropriate alternative for optimum utilisation of resources and meeting the aspirations of all state-holders.					
9.	Infrastructure Development Scheme	1. To procure land and construct office & residential buildings for the Ministry of Water Resources and its attached/ subordinate organizations and 2. Provision of necessary infrastructure for implementation of IT Plan in MoWR, CWC and CGWB.	28.50	(i) Acquisition of Land (ii) Construction of office/residential buildings (iii) Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database in field offices with Headquarters to facilitate e-governance and training of personnel in I.T. facilities.	As acquisition of Land & Buildings is a time consuming process involving various agencies, some of the targeted works have spilled over to next year.	Procurement of consumables and peripherals, AMC of IT equipment expansion of Local Area Network, procurement of server, training on IT aspects has been completed in the Ministry (Proper) and CWC. Building of CWC at New Delhi, Hyderabad constructed. Guwahati & Jammu building partly completed. Modernization of CWC H/Qtr at Sewa Bhawan, New Delhi at 9 th floor completed upto 95%. Land at Burla acquired and boundary wall at Itanagar partially completed. Land acquired at Dehradun, Ahmedabad and construction work for Boundary Wall at Bangalore, Amabla, Bhubneshwar & Guwahati of CGWB are completed.	Acquisition of land and buildings involves various Govt. agencies.
10.	Flood Forecasting.	To maintain the network of Hydrological observations sites across the country by CWC covering 20 river basins to provide timely flood forecasts at 175 stations to the local administration.	36.00	Collection of real time data, its analysis and issue of flood forecasts. About 6000 forecasts are issued every year.	Implemented by Central Water Commission throughout the year.	A total of 7508 forecasts were issued; out of 7393 were within permissible limits of accuracy.	
11.	Farakka Barrage Project.	(i) Maintenance of Farakka Barrage Project and its appurtenant	82.00	(i) Maintenance of Farakka Barrage Project and its appurtenant structure including	Implemented by Farakka Barrage Project. Activities continued throughout	(i) Maintenance of Farakka Barrage, its appurtenant structures & anti-erosion works along river Ganga – Padma & its tributaries were continued, as per	-NIL-

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		structure including feeder canal, Jangipur Barrage etc. (ii) Anti-erosion works for protection of banks along river Ganga and its tributaries to train the river along main barrage.		feeder canal, Jangipur Barrage etc. (ii) Erosion control in the extended jurisdiction of FBP from 40 km u/s to 80 km d/s of Farakka Barrage to save land, crops, orchards, public buildings etc. along river Ganga-Padma..	the year.	requirement. (ii) Anti-erosion works in a length of 1130m, amounting to Rs. 17 crore were completed	
12.	River Management Activities and Work Related to Border Areas	Hydrological observations and investigations of Water Resources Projects with neighboring countries besides river management works on common/border rivers. Flood control, Anti-erosion & Drainage development works by Brahmaputra Board. Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).	199.00	(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and (ii) Preparation of Joint Detailed Project Reports (DPR). (iii) Anti-erosion & Flood protection works of Majuli Island. (iv) Transmission of flood related data from / to neighboring countries, (v) Development works on common/border rivers. (vi) Desilting of River Ichhamati along international border with Bangladesh.	Implemented by Central Water Commission, Ganga Flood Control Commission, Brahmaputra Board and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal & Jammu & Kashmir.	(i) Survey & Investigation of Pancheswar and SaptaKosi projects* (in Nepal) continued. (ii) Flood related data transmitted to Bangladesh. (iii) Joint Hydrological observations on river Ganga with Bangladesh continued as per Treaty of 1996. (iv) Anti-erosion & Flood protection works of Majuli Island continued. (v) Breach closure works of Kosi embankment completed. Rs. 7.45 crore released further to Govt. of Bihar for this work. (vi) Rs. 47.31 crore released to Govt. of West Bengal for flood/ bank protection works along international border with Bangladesh. (vii) Rs. 24.00 crore released to Govt. of West Bengal for de-silting of river Ichhamati along international border with Bangladesh. 5 nos. of Master Plans completed, 1 No. DPR of DDS, completion of 2% works of Barbhag DDS, 13% of Amjur DDS, 12.5% of East of Barpeta, works of Harang DDS completed, phase-I works of protection of Majuli Island from flood and erosion completed, 9.32% of Phase -II& III works of protection of Majuli island, 5.58% works of Avulsion of Dhola Hatighuli Phase -IV and works for construction of Raised Platform continued.	* Works delayed due to law & order problem in Nepal.
13.	Flood Management Programme.	To provide financial assistance to	1199.00	(i) River Management works in the	Central assistance is being provided to the State Governments on	(i) A total of 42 proposals amounting to Rs. 3564.17 crore submitted by 13 states were included for providing central assistance.	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		various state governments for river management, flood control, anti-erosion, drainage development, flood proofing works in the critical areas in the country.		<p>critical areas.</p> <p>(ii) Anti-erosion works, drainage improvement works, etc. as suggested by Task-Force-2004 on Flood Management and Erosion Control in respect of Ganga and Brahmaputra Basin states.</p> <p>(iii) Coastal erosion works in maritime states.</p> <p>(iv) De-silting/ dredging of river sections in the selected reaches.</p>	submission of detailed project proposals. The new proposals are considered by a Committee headed by Secretary (Expenditure) for release of the central assistance.	<p>(ii) Funds amounting to Rs. 1096.59 crore (including Rs. 4.64 crore for spilled over works of X plan) were released to States.</p> <p>(iii) A total of 101 schemes were completed by the State Governments during the period.</p>	
14.	Ground Water Management & Regulation	<p>i). Ground Water Management Studies to prepare ground water management plan</p> <p>ii) Ground Water exploration utilizing scientific tools viz. Remote sensing and GIS, Geophysical surveys aided by drilling to locate ground water worthy areas.</p> <p>iii) Monitoring of ground water levels from Ground water monitoring stations.</p> <p>iv) Short term</p>	100.00	<ul style="list-style-type: none"> Ground Water Management studies-1.50 Lakh Sq. Km. Ground Water Exploration - 830 Wells Ground Water Exploration through Outsourcing - 796 Monitoring of Ground Water Observation wells – 15640 Short term water supply investigations – As per request <p>Geophysical Survey a)Surface VES=2000</p>	<p>One year</p> <p>One Year</p> <p>4 times in a year</p> <p>One year</p> <p>One year</p>	<p>160325 Sq.Km. (Pre-monsoon)</p> <p>160188 Sq.Km. (Post-monsoon)</p> <p>195</p> <p>818 Wells</p> <p>250 PZ constructed through outsourcing PZ - 67 (Orissa) by CGWB PZ - 108 (Tamil Nadu up to 60 m) PZ - 75 (Tamil Nadu up to 200 m)</p> <p>15640 Monitoring of May and August, November 2010 and January, 2011 completed</p> <p>23 district reports completed</p> <p>23 GWY Books submitted & issued</p>	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		<p>water supply investigations for source finding to Central/State Govt. department</p> <p>v) Geophysical studies to selection of sites for ground water exploration and artificial recharge structures and deciphering aquifers</p> <p>vi) Chemical studies to assess ground water quality</p> <p>vii) Preparation of Reports, Maps for use by planners and administrators</p> <p>viii) Regulation of Ground Water development by Central Ground Water Authority.</p> <p>ix) Artificial recharge studies including construction of Artificial Recharge structures for replicating the same by State Govt. and other agencies.</p>		<p>& Profiling Line Km. = Need Based</p> <p>b) Sub-Surface Bore hol logging = Need Based</p> <ul style="list-style-type: none"> • Analysis of water samples – 20000 • Preparation of District reports-40 • Ground Water Year Books-23 • State Reports-7 • State Atlas-3 • Ground Water Exploration Reports-17 • State Geophysical Report-18 • State Chemical Report-18 <p>Regulation of ground water development in notified areas by CGWA</p> <p>8 Demonstrative project for Artificial Recharge studies in five states(Punjab, NT, Kerala, Arunachal Pradesh and West Bengal).</p>	<p>One year</p> <p>One year</p> <p>One year</p> <p>Two years</p> <p>Two years</p> <p>One year</p> <p>One year</p> <p>2-3 years</p>	<p>6 State reports completed</p> <p>2 State Atlases completed</p> <p>Surface VES=1842</p> <p>Sub-surface Borehole Logging=90</p> <p>Line Km.= 6.23 km</p> <p>Total=18213</p> <p>a) Basic Analysis= 14455</p> <p>b) Heavy Metal = 3192</p> <p>c) Organic= 80</p> <p>d) Specific= 486</p> <p>Regulated GW development in notified areas-Continuing</p> <p>The details of demonstrative projects on ARto GW and RWH approved and being implemented in the states of Kerala, W.B, Punjab, A.P, Aruna. P., Karnataka, Gujarat, Maharashtra, Chandigarh, M.P, Jharkhand, U.P and T.N during XI- Plan. Total 1075 structures amounting to Rs.4863.028 lakh have been approved and Rs.3347.294 lakh have been released and 364 structures have been completed.</p>	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
15.	Rajiv Gandhi National Ground Water Training & Research Institute.	Training of CGWB and other Central/ State Govt. officers and staff on ground water aspect	6.00	16 Training Courses	One year	40 training courses have been conducted successfully including one international and 815 trainees have been trained	
16.	Information, Education and Communication	(i) To create awareness for optimal sustainable development, maintenance of quality and efficient use of country's water resources to match the growing demands on this precious natural resources with active involvement of all stakeholders in order to achieve accelerated, equitable, economic development of the country. (ii) To create awareness for the urgent need for mutual cooperation and adopting integrated planning and participatory approach in management.	15.00	To create awareness among the people to provide education for sustainable development and utilization of water resources	Continuing activity	<p>During the financial year 2010-11, an amount of Rs. 15.00 crore had been allocated.</p> <p>An amount of Rs. 13,30,00,800/- has been booked/spent on various mass awareness activities including expenditure of Rs. 38,30,000/- and Rs.1,71,000/- in the form of Grant-in-Aid and Office Expenses respectively.</p> <p>Under the sub-head Advertisement and Publicity the following activities have been undertaken during 2010-11:-</p> <p>1. Painting Competition:-</p> <ul style="list-style-type: none"> * A three tier painting competition at school, state and national level was organised by MoWR in 21 States/UTs. * A total of 2,67,527 students from 5070 schools participated at the school level competition in 21 States/UTs. * The State level competition was held on 14th November 2010 in the State/UT Capitals, amongst the 50 best entries received in the State/UT. * The First, Second and Third winners of the State level competition from each State/UT were invited to participate in the National level painting competition held on 21st January, 2011. * The winners of the National Level Painting Competition were awarded a cash Prize of Rs. 1 lakh (1st prize), four second prizes of Rs.50,000/- each, eight third prizes of Rs. 25,000/- each and ten consolation prizes of Rs.10,000 each, along with a Certificates. 	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.3.2011	Remarks
1	2	3	4	5	6	7	8
		<p>(iii) To create awareness among the people about necessity of water conservation.</p> <p>(iv) To promote advocacy on the tenets of National Water Policy with focus on learning, documenting and dissemination of knowledge of water science and technology and issues concerning sustained development of water resources.</p> <p>(v) To create awareness about necessity of adopting measures for rainwater harvesting and artificial recharge of ground water to meet present and future needs of water.</p> <p>(vi) To strengthen awareness infrastructure specially campaign mechanism and support structure.</p>				<p>2. Electronic Media Campaign for mass awareness on water conservation –</p> <ul style="list-style-type: none"> * Electronic Media Campaign was launched on National, regional and DD news channels of Doordarshan w.e.f. 10.9.2010 for 70 days to telecast video spots on water conservation. * Electronic Media Campaign was launched on National News, Primary Channel/LRS(188 stations), Vividh Bharti National(40 stations) 22 FM Channels and 31 Stations of Regional News of All India Radio during w.e.f. 10.09.2010 for 54 days to broadcast audio spots on water conservation. <p>3. Print Media Campaign –</p> <ul style="list-style-type: none"> * Advertisement was released in various newspapers published from States/UTs capital and National Capital of Delhi and other places of the country on the occasion of Sadbhavana Diwas on 20.08.2010. * An advertisement was released from State capitals on the Occasion of National Integration Day on 19.11.2010. * An advertisement on the occasion of Birth Anniversary of Mahatma Gandhi and Vishwa Ahimsa Diwas on 02.10.2010 was released. <p>4. Workshops/Seminars/Conferences –</p> <ul style="list-style-type: none"> * A workshop on 'Integrated Water Resources Management' was organised from 4th to 5th October, 2010 at Shillong. * Several workshops on the water related theme have been organized by the field offices of CWC and CGWB on behalf of the Ministry. <p>5. Participation in Fairs/Exhibitions –</p> <ul style="list-style-type: none"> * Participated in Thrissur Pooram Exhibition held at Thrissur, Kerala from 3rd – 24th May, 2010. * Participated in the Science and Technology Expo held at Nainital, Uttarakhand from 4th – 6th June, 2010. 	

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1	2	3	4	5	6	7	8
						<ul style="list-style-type: none"> * Ministry and its organisations participated in IITF-2010 at New Delhi from 14th to 27th November, 2010 through erection of pavilion, models on water conservation to spread awareness amongst masses for water conservation and management. * Participated in the 14th National Exhibition on the theme of 'Striving Towards a Glorious India' held at Kolkata from 3rd to 7th September, 2010. 	
17.	Repair, renovation and restoration of water bodies.	Restore and augment the capacity of water bodies to recover and expand their irrigation potential , Improve-ment of agriculture/ horticulture productivity, Development of tourism, Cultural activities, increased availability of drinking water.	600.00 for Domestic Support.	Under RRR Scheme with domestic support one lakh water bodies will be covered with CCA of 9 lakh ha. organizations /consultants.	These schemes are being continued	<p>(i) Under the scheme of RRR of water bodies with external assistance world bank loan agreement has been signed with the States of Andhra Pradesh, Tamil Nadu, Karnataka and Orissa to cover 10887 water Bodies.</p> <p>(ii) Works under this project would continue during the year 2011-12</p>	Funds to the tune of Rs 189 crore to Andhra Pradesh, Rs 29.08 crore to Uttar Pradesh, Rs 25 crore to Bihar, Rs 75 crore to Orissa, Rs 47.47 crore to Karnataka, Rs 1.78 crore to Meghalaya and Rs 7.33 crore to Madhya Pradesh released under scheme RRR of water bodies as on 31.3.2011.

Ministry of Water Resources

PERFORMANCE OF 2011-12(up to December 2011)

(Rs. in crore)

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.12.2011	Remarks
1	2	3	4	5	6	7	8
1	Development of Water Resources Information System	(a) Creation of Watershed Atlas and development of web enabled Water Resource Information System of the country at 1:50000 scale. (b) To provide support to Water Quality Assessment Authority and implement identified studies / programme for water quality assessment (c) To develop snow melt run off model for Yamuna & Chenab basin of assesment of snow melt contribution in the river below for efficient water managment and optimum utilisation particularly during lean season. (d) Collection and publication of Water Quality data , (e)To collect data from network of hydrological observation stations for overall assessment of water resources and analysis of their characteristics (f) Monitoring of selected ongoing Major, Medium & ERM irrigation projects throughout the country including AIBP and CAD projects. (g) Fourth Minor Irrigation Census	59.00	(a) The Water Resources Information System (WRIS) website will be expanded/updated further with 30 GIS layers. (b) Observation of data for 878 hydrological observation sites and collection of other water related data to continue. (c) Long term data collection at snow observatories, G&D sites and development of snow melt runoff models. (d) Number of visits to projects for monitoring purposes. (e) Collection of field data for fourth Minor Irrigation Census 4th and processing of the same will be completed.	Activities to continue throughout the year.	(i) (a) An advance payment has been made for carrying out the work "assessment of irrigation potential by remote sensing". The work is in progress. (b) 97 No of project visits performed by CWC Monitoring Team. (ii) Expansion of INDIA WRIS i.e. second version with operationalization of 04 layers covering information related to water resources is under progress and expected to be launched by end of Dec., 2011. (iii) (a) Observation of Hydrological data including snow data and monitoring of Glacier lakes continued. (b) Collection, compilation, storage, dissemination, analysis and publication of data in the form of Water Year Books was achieved. (c) Modernisation of the system by setting video conferencing achieved. (iv) (a)Sample check study of 4th MI Census results by NIRD, Hyderabad got done (b) Study by NISG, Delhi for process and technology intervention in conduct of MI Census got done. (c) Revision of schedules, guidelines, other report in consultation with state and other user for 5th MI Census and conduct of an All India workshop got done. (d) Conduct of six regional Training workshop for state / UT officials for conduct of 5th MI Census got done. (v) Orders have been issued to provided computers and related equipments to all nodal officers of the State / Uts	

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1	2	3	4	5	6	7	8
2	Research & Development programme in Water Sector	The scheme comprises of various activities related to R&D and training in the water resources. sector These activities are being implemented by the premier research Institutes in the field of hydrology, hydraulics, soil and material sciences, i.e. NIH, CW&PRS and CSMRS and CWC. The outcomes of the programme will be improvement in efficiency of irrigation system, reduction in risk/hazard in water resources project, economic design for project and development of new / improved technology	46.19	The implementation of the scheme will help in capacity building and creation of additional facilities. The research output are generally in terms of technical report & research papers having recommendations for improved techniques for planning & design. Quantifiable deliverables are: (a) Research Reports = 231 (b) Research Papers = 279 (c) Training workshops = 30	Works to be implemented by various organizations of the Ministry.	Research / Technical reports - 218 Research papers - 203 Training and workshop - 31	
3	National Water Academy	Training for in service Engineers / Induction Engineers in Water Resources Planning, Development and Management	3.00	a) 37 Training Programmes. b) Construction of Swimming Pool		a) 28 Training Programmes completed by December, 2011 b) 65% work completed by December, 2011	
4	Dam Safety Studies and Planning	(a) Studies on various aspects of dam safety (b) Preparation and digitisation of generalized PMP atlases for Indus and Krishna Basins and Ganga & Brahmaputra basins and upgradation of Atlases prepared under DSARP (c) Setting up of Instrumentation Demonstration Centre (d) Training and	3.00	(a) Procurement of Models/Fixtures for instrumentation Demonstration Centre (b) Preparation and digitization of Generalized PMP Atlases. Consultants for Ganga Basin Brahmaputra Basin and Updation of PMP Atlases		a. CSMRS, New Delhi is in the process of procurement of instruments. b. Draft interim report of new PMP Atlas for Ganga River basin and updation of existing Atlas or Godavari & other East flowing Rivers has been submitted by RMSI Pvt. Ltd. to CWC. Comments on the report have been sent to RMSI Pvt. Ltd and compliance is awaited. c. Environmental & Social Assessment (ESA) Studies has been completed. Empowered Committee on Mulla Periyar	

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1	2	3	4	5	6	7	8
		Development of special propose packages on Dam Safety.				Dam reports to Supreme Court only. d. Three Training have been completed and two training may be held.	
5.	Hydrology Project	To extend and promote the sustained and effective use of the Hydrological Information System by all implementing agencies concerned with water resources planning and management in 13 States and 8 Central agencies	80.00	Implementation of the project components, i.e. institutional strengthening, vertical extension with Hydrological Design Aids (HDA), DSS-Planning (DSS-P), DSS-Real Time (DSS-RT) and 41 Purpose Driven Studies and horizontal expansion including PDS in new States, with support of 4 major consultancies in place in Hydrology Project.	The planned activities are to be implemented through the Central Agencies, viz. PCS (MoWR), BBMB, CWC, CGWB, CWPRS, CPCB, IMD and NIH till June, 2012.	(a) The project is being implemented with the assistance of 4 major consultancies. (b) DSS-P: Developed Generic Model customised in 6 out of 9 States as per their needs. 11 officers have undergone training at DHI, Denmark. (c) Model development for DSS-RT is in final stage. The Contract for procurement and installation of Real Time- Data Acquisition System equipments is likely to be awarded in January 2012. (d) HDA-SW: Inception Reports of all 3 Modules accepted and development of software for 3 modules is under progress.	
6.	Investigation of Water Resources Development Schemes	Carrying of investigation in respect of identified projects for water resources development	54.00	Investigation and preparation of project report for identified project to continue.	The works of investigation/preparation of project report are covered in more than one year and are carried over to following years	a) The work on investigation of Water Resources Projects including ILR projects is continued. The work for preparation of DPR of Par Tapi Narmada & Daman Ganga Pinjal Links continued. b) S&I works in Indian Territory for preparation of FR in respect of 1 links under Himalayan Component of NPP completed. c) PFR of 6 Intra state links completed.	
7.	Pagladiya Dam Project	Flood Control, Irrigation & Ancillary Power Generation	0.01	Zirat survey to be completed.	Activities to be implemented by Brahmaputra Board	Nil	Due to non completion of the Zirat survey by the Govt. of Assam the work held up. Only normal R&M works continued. Efforts are on to remove the stalemate condition of the project.
8.	River Basin Organisation/ Authority	The scheme is to encourage formulation of River Basin Organisation with the primary objective of providing a forum to all the co-basin states for	4.00	The creation of RBO has to be preceded by consultations with State Governments. Process of consultations was to be initiated during this year. A token provision has been kept		Ministry has sent proposal to the concerned states for constitution of the RBO for Mahanandi & Godavari rivers. The concurrence of the all concerned state Government has not been received. The matters is being pursued with the concerned	

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		taking up necessary studies and evaluation etc., with a view to identify the most appropriate alternative for optimum utilisation of resources and meeting the aspirations of all state-holders.		in this regard.		states.	
9.	Infrastructure Development Scheme	1. To procure land and construct office & residential buildings for the Ministry of Water Resources and its attached/ subordinate organizations and 2. Provision of necessary infrastructure for implementation of IT Plan in MoWR, CWC and CGWB.	28.40	(i) Acquisition of Land (ii) Construction of office/residential buildings (iii) Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database in field offices with Headquarters to facilitate e-governance and training of personnel in I.T. facilities.	As acquisition of Land & Buildings is a time consuming process involving various agencies, some of the targeted works have spilled over to next year.	Procurement of consumables and peripherals, AMC of IT equipment, expansion of Local Area Network, procurement of servicer, training on IT aspects has been completed in Ministry (Proper) and CWC. Work of office buildings of CWC at Burla, Asansol, Guwahati, Jammu, and Coimbatore will be completed. Construct of building of CGWB at Bangalore, Bhubneshwar, Guwahati, Bhopal and Raipur.	There is a risk of spill over due to the fact that acquisition of land and construction of buildings is a time consuming process involving various Central & State Govt. authorities.
10.	Flood Forecasting.	To maintain the network of Hydrological observations sites across the country by CWC covering 20 river basins to provide timely flood forecasts at 175 stations to the local administration.	36.00	Collection of real time data, its analysis and issue of flood forecasts. Around 6000 forecasts are issued every year.	Implemented by Central Water Commission throughout the year.	A total of 5662 forecasts were issued.	
11.	Farakka Barrage Project.	(i) Maintenance of Farakka Barrage Project and its appurtenant structure including feeder canal, Jangipur Barrage etc. (ii) Anti-erosion works for protection of banks along river Ganga and its tributaries to train the river along main barrage.	70.40	(i) Maintenance of Farakka Barrage Project & its appurtenant structure including feeder canal, Jangipur Barrage etc. (ii) Erosion control in the extended jurisdiction of FBP from 40 km u/s to 80 km d/s of Farakka Barrage to save land, crops, orchards, public buildings etc. along river Ganga-Padma.	Implemented by Farakka Barrage Project. Activities continued throughout the year.	(i) Maintenance of Farakka Barrage & its appurtenant structures & anti-erosion works along river Ganga – Padma & its tributaries were taken up as per requirement. (ii) Anti-erosion works in a length of about 2300 m amounting to Rs. 35.00 Crore were executed.	
12.	River Management Activities and	Hydrological observations and investigations of Water	188.00	(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh,	Implemented by Central Water Commission, Ganga Flood Control Commission,	(i) Survey & Investigation of Pancheswar and Saptakosi projects* (in Nepal) continued.	* Works delayed due to law & order problem in Nepal.

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1	2	3	4	5	6	7	8
	Work Related to Border Areas	Resources Projects with neighboring countries besides river management works on common/border rivers. Flood control, Anti-erosion & Drainage development works by Brahmaputra Board. Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).		and (ii) Preparation of Joint Detailed Project Reports (DPR). (iii) Breach closure of left afflux bund of Kosi barrage in Nepal. (iv) Anti-erosion & Flood protection works of Majuli Island. (v) Transmission of flood related data from / to neighboring countries, (vi) Development works on common/border rivers	Brahmaputra Board and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal & Jammu & Kashmir.	(ii) Flood related data transmitted to Bangladesh. (iii) Joint Hydrological observations on river Ganga with Bangladesh continued as per Treaty of 1996. (iv) Anti-erosion & Flood protection works of Majuli Island continued. (v) Rs. 14.52 crore released to Govt. of Tripura for flood protection works along international border with Bangladesh. 10 flood/ bank protection works in West Bengal and 2 flood/ bank protection works in Tripura are in progress. (vi) Work of dredging of river Ichamati along international border with Bangladesh completed. 2 Nos Master Plans, 1 No. DPR of DDS , Execution of East of Barpeta-completed, 1.13% works of Barbhag DDS, 2% works of Amjur DDS, 4.68% of phase-II & III works of protection of Majuli Island, completion of 3.26% of Avulsion of Brahmaputra at Dhola Hatighuli Phase- IV works, completion of construction of 2 Nos.of raised platform.	
13.	Flood Management Programme.	To provide financial assistance to various state governments for river management, flood control, anti-erosion, drainage development, flood proofing works in the critical areas in the country.	1199.00	(i) River Management works in the critical areas by raising, strengthening and extension of embankments. (ii) Anti-erosion works, drainage improvement works, etc. as suggested by Task-Force-2004 on Flood Management and Erosion Control in respect of Ganga and Brahmaputra Basin states. (iii) Coastal erosion works in maritime states. (iv) De-silting/ dredging of river sections in the selected reaches.	Central assistance provided to the State Governments on submission of detailed project proposals. An Empowered Committee under the chairmanship of Secretary (Expenditure), Ministry of Finance constituted on 26.02.2008 for examining and approving of the proposals.	(i) A total of 61 proposals amounting to Rs. 906.72 crore submitted by 14 states were included for providing central assistance. Further, 12 new proposals amounting to Rs. 133.99 from 5 states has been considered during 8 th meeting of Empowered Committee held on 15.12.2011. (ii) Funds amounting to Rs. 472.40 crore were released to States. (iii) A total of 231 schemes were completed by the State Governments up to 30 th November,2011	

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14.	Ground Water Management & Regulation	<p>i). Ground Water Management Studies to prepare ground water management plan</p> <p>ii) Ground Water exploration utilizing scientific tools viz. Remote sensing and GIS, Geophysical surveys aided by drilling to locate ground water worthy areas.</p> <p>iii) Monitoring of ground water levels from Ground water monitoring stations.</p> <p>iv). Short term water supply investigations for source finding to Central/State Govt. department</p> <p>v). Geophysical studies to selection of sites for ground water exploration and artificial recharge structures and deciphering aquifers</p> <p>vi) Chemical studies to assess ground water quality</p> <p>vii) Preparation of Reports, Maps for use by planners and administrators</p> <p>viii) Regulation of Ground</p>	120.00	<ul style="list-style-type: none"> Ground Water Management studies-1.50 Lakh Sq.Km. Ground Water Exploration - 800 Wells Ground Water Exploration through Outsourcing - 796 Monitoring of Ground Water Observation wells - 15640 Short term water supply investigations – As per request Geophysical Survey <ul style="list-style-type: none"> a)Surface VES=2000 & Profiling Line Km. = Need Based b) Sub-Surface Bore hol logging = Need Based Analysis of water samples – 20000 Preparation of District reports – 40 Ground Water Year Books = 23 State Reports – 11 State Atlas - 3 Ground Water Exploration Reports – 17 State Geophysical Report- 14 State Chemical Report -18 	<p>One year</p> <p>One Year</p> <p>4 times in a year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p> <p>One year</p>	<p>1.70 Lakh Sq.Km. (Pre-monsoon)</p> <p>1.19 Lakh Sq.km. covered in post-monsoon</p> <p>140 495 Wells</p> <p>453 wells completed through outsourcing</p> <p>15640</p> <p>Measurement of April, August and November, 2011 completed</p> <p>1 district reports completed & rests are in progress</p> <p>16 Ground Water Year Books completed & rests are in progress</p> <p>1 State Report submitted</p> <p>Under progress</p> <p>a)Surface VES – 1161 Profile.= 1.8 LKM.</p> <p>b) Sub surface Bore hole logging – 35</p> <p>Analyzed water samples- 14619</p>	

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1	2	3	4	5	6	7	8
		Water development by Central Ground Water Authority ix) Artificial recharge studies including construction of Artificial Recharge structures for replicating the same by State Govt. and other agencies.		Regulation of ground water development in notified areas by CGWA Demonstrative project for Artificial Recharge studies in identified thrust areas covering O.E. /Critical / Urban area.	Continuing 2-3 years	Continuing- Regulation of ground water development in 82 notified areas by CGWA. 59 Artificial Recharge Projects with target of 413 structures covering 14 States have been approved with the cost of Rs.35.29 Cr. and Rs.31.23 Cr. including Rs.6.51 crore for second installments has been released. 204 Artificial Recharge structures have been completed. 568 Artificial Recharge structures have been completed during XI Plan.	
15.	Rajiv Gandhi National Ground Water Training & Research Institute.	Training of CGWB and other Central/ State Govt. officers and staff on ground water aspect	3.00	39 Training Courses	One year	23 training courses have been completed. 409 trainees have been trained.	
16.	Information, Education and Communication	(i) To create awareness for optimal sustainable development, maintenance of quality and efficient use of country's water resources to match the growing demands on this precious natural resources with active involvement of all stakeholders in order to achieve accelerated, equitable, economic development of the country. (ii) To create awareness for the urgent need for mutual cooperation and adopting integrated planning and participatory approach in management.	25.00	To create awareness among the people to provide education for sustainable development and utilization of water resources	Continuing activity	During the financial year 2011-12 upto December 2011, sanctions have been issued for an amount of Rs. 14.33 crore out of the budgetary allocation of Rs. 18 crore (RE). An amount of Rs. 13,52,53,065/- has been spent on various mass awareness activities including expenditure of Rs. 5,00,000/- in the form of Grant-in-Aid. Under the Tribal Sub Plan for spreading awareness in Tribal areas a sum of Rs.80,00,000/- has been placed with CWC and CGWB. Under the sub-head Advertisement and Publicity the following activities have been undertaken:- 1. Painting Competition:- * A three tier painting competition at school, state and national level was organised by MoWR in 29 States/UTs. * A total of 16,05,346 students from 23,475 schools participated at the school level competition in 29 States/UTs. • The State level competition was held on 14 th November 2011 in the State/UT Capitals, amongst the 50 best entries received in the State/UT.	

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		<p>(iii) To create awareness among the people about necessity of water conservation.</p> <p>(iv) To promote advocacy on the tenets of National Water Policy with focus on learning, documenting and dissemination of knowledge of water science and technology and issues concerning sustained development of water resources.</p> <p>(v) To create awareness about necessity of adopting measures for rainwater harvesting and artificial recharge of ground water to meet present and future needs of water.</p> <p>(vi) To strengthen awareness infrastructure specially campaign mechanism and support structure.</p>				<p>* The First, Second and Third winners of the State level competition from each State/UT will be invited to participate in the National level painting competition to be held on 21st January, 2012.</p> <p>2. Electronic Media Campaign for mass awareness on water conservation –</p> <p>* Electronic Media Campaign was launched on National and DD news channels and 13 Regional Channels and Delhi LPT of Doordarshan w.e.f. 20.06.2011 to 18.08.2011 for 60 days to telecast video spots on water conservation and free bonus air time for a period of 69 days w. e. f. 1.10.2011 to 08.12.2011.</p> <p>* Electronic Media Campaign was launched on National News, Primary Channel/LRS(188 stations), Vivid Bharti National(37 stations) 22 FM Channels and 31 Stations of Regional News of All India Radio w. e. f. 20.06.2011 to 01.08.2011 for 43 days to broadcast audio spots on water conservation.</p> <p>• Digital Campaign was launched in Cinema halls across the country for a period of 14 days from 11.11.2011 to 24.11.2011.</p> <p>* Presently, video spots of 30 seconds on water conservation for 130 days and a documentary film on FPARP of 22 Minutes and 8 seconds, once a week for 16 weeks w. e. f. 15.12.2011 to 22.04.2012 are being telecasted on Lok Sabha Television.</p> <p>3. Print Media Campaign –</p> <p>* Advertisement in national dailies & vernacular newspapers seeking nominations for the “Bhoomijal Savardhan Puruskar and “Rasthriya Jal Puruskar 2010.</p> <p>* An advertisement was released from State capitals on the Occasion of National Integration Day on 19.11.2011.</p>	

S. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t. Col (5) as on 31.12.2011	Remarks
1	2	3	4	5	6	7	8
						<p>4. Workshops/Seminars/Conferences – * Grant-in-aid to “ Non- Violent Alternatives” for organizing a conference on “River Waters” from 18th to 20th November, 2011 at Delhi. * Grant-in-aid to CII, New Delhi for organizing their annual flagship event 17th Technology Summit Technology and & Platform from 22-23rd November 2011 at Hotel Lalit, New Delhi.</p> <p>5. Participation in Fairs/Exhibitions – * Ministry and its organizations participated in IITF-2011 at New Delhi from 14th to 27th November, 2011 through erection of pavilion, models on water conservation to spread awareness amongst masses for water conservation and management. * Participation in International conclave on “Climate Change” 2011 held at Hyderabad from 12-14 October 2011.</p> <p>6. Under Tribal Sub- Plan- * Mass Awareness activity by CWC and CGWB on behalf of Ministry for implementing the Tribal Sub-plan for IEC activities in Tribal areas.</p>	
17.	Repair, renovation and restoration of water bodies.	(i) To restore and augment the capacity of water bodies. (ii) To recover and expand their irrigation potential. (iii) improvement of agriculture / horticulture productivity (iv) Development of tourism, cultural activities, increased availability of drinking water.	684.00 Crore for Domestic Support.	i)To monitor the progress in respect district projects identified for implementation. (ii)To evaluate the performance of the scheme as and when completed. (iii) Release of funds to state Govt. on the basis of DPRs received from them. (iv) Concurrent evaluation of the programme where the scheme is under implementation.	These schemes are being continued	Rs 731.4 crore already released to Orissa, Karnataka, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Bihar, Meghalaya, Maharashtra, Gujarat, Chhatisgarh, Rajasthan and Haryana.	Further release is expected to Bihar, Uttar Pradesh, Karnataka, Andhra Pradesh, Meghalaya, Maharashtra, Gujarat, Chhatisgarh, Rajasthan and Haryana.

ACCELERATED IRRIGATION BENEFITS PROGRAMME & NATIONAL PROJECT

The Accelerated Irrigation Benefits Programme(AIBP) was launched during 1996-97 to give 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 and create additional irrigation potential in the country. The Surface Minor Irrigation Schemes of North-Eastern States, Hilly States of Sikkim, Uttaranchal, Jammu and Kashmir, Himachal Pradesh and Koraput, Bolangir and Kalahandi Districts of Orissa 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. 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 (including undivided Koraput, Bolangir and Kalahandi districts of Orissa) are provided to the selected projects. 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.51553.253 cores as CLA/Grant under AIBP since inception of this programme till date for 292 major/medium irrigation projects and 13098 Surface minor irrigation schemes. After commencement of this Programme 134 major/medium and 9150 Surface MI Schemes have so far been completed. An additional irrigation potential of 5.486 million hectare has been created through major/medium irrigation projects and an irrigation potential of 0.454 million hectares has been created through Surface MI Schemes upto March, 2009. Irrigation potential of 9.82 lakh hectares has been created during 2009-10 up to March 2010.

As per the prevailing AIBP guidelines, projects benefiting drought prone/tribal area, projects included in the Prime Minister's relief package for agrarian distress districts of Maharashtra, Karnataka, Andhra Pradesh and Kerala and projects in the States having irrigation development below national average could be included in AIBP in relaxation to one to one criteria of inclusion of new project under AIBP. Of the 65 major/medium projects initially included in the Prime Minister's relief package for agrarian distressed districts of Andhra Pradesh, Karnataka, Kerala and Maharashtra, so far 40 projects have been funded under AIBP. The grant released so far for these projects is Rs.5978.915 crore.

A Budget allocation of Rs.9750 crore was made by the Ministry of Finance for AIBP for 2011-12 which includes Rs.1450 crore for National Projects, against which, an amount of Rs.2238.627 crore has been released as grant under AIBP.

NATIONAL PROJECTS

The Union Cabinet in its meeting held on 7th February 2008 has given its 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 falling in the following selection criteria:

- (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 interlinking 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

Ministry of Water Resources has finalized modalities of funding and guidelines for implementation of scheme of National Projects in consultation with 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 Kandi Project of Punjab and Teesta Barrage Project of West Bengal have been funded under the scheme of National Projects. Gosikhurd Project has been provided grant amounting to Rs.2582.94 crore during 2008-09 to 2010-11 till date. Shahpur kandi Project has been provided grant amounting to Rs.26.036 crore during 2009-10 and 2010-11. Teesta Barrage Project started receiving funding under the scheme of national project during 2010-11 and grant amounting to Rs.81.00 crore has been provided for the project.

Statement of Outlays & Outcomes/Targets (2012-13)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Annual Plan 2012-13 (Proposed)	Quantifiable Deliverables	Process/ Timelines	Remarks
1	2	3	4	5	6	7
	Accelerated Irrigation Benefits Programme (AIBP)	To complete ongoing irrigation/multipurpose projects in advanced stage of construction and which are beyond the resources capability of State Government in a time bound manner with a view to a) create additional irrigation potential and b) derive envisaged benefits from these projects.	Rs.17000 crore (Rs. 14000 crore for AIBP and Rs. 3000 crore for National Projects).	Irrigation potential of 1.2 million hectares is targeted for creation and 10 major /medium projects are targeted for completion.	Irrigation potential of 1.2 million hectares to be create and 10 major/ medium projects to be completed	The projects included in the AIBP are to be executed by respective State Governmen t.

												ANNEXURE -IV		
STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET VIS-À-VIS XI PLAN OUTLAY														
												(Rs. in Crore/Net)		
Sector/Orgn/ Scheme	XI Plan Outlay	Heads of Accounts	B.E. 2007-08	Actual 2007-08	B.E. 2008-09	Actual 2008-09	B.E. 2009-10	Actual 2009-10	B.E. 2010-11	Actual 2010-11	B.E. 2011-12	R.E. 2011-12	Actual Dec'2011	
Major & Medium Irrigation														
1. National Water Academy	15.00	2701	2.00	1.86	2.30	2.37	2.60	2.53	4.00	2.94	3.00	4.00	2.77	
2. Research & Development Programme	260.00	2701	30.00	33.28	60.00	39.81	52.00	32.85	54.00	41.38	46.19	37.00	21.94	
3. Hydrology Project	180.00	2701	33.00	6.98	44.00	9.92	38.10	21.54	53.00	27.22	80.00	50.00	14.60	
4. Development of Water Resources Information	200.00	2701	30.00	18.65	46.00	45.58	70.00	63.10	66.00	39.43	59.00	59.00	28.58	
5. Infrastructure Development	**	2701	4.00	1.33	5.00	2.06	1.00	1.28	3.00	2.82	3.00	2.15	1.40	
6. Investigation of Water Resources Development	260.00	2701	30.00	25.09	37.00	36.17	42.00	37.01	54.00	44.27	54.00	54.00	35.77	
7. Information, Education and Communication	90.00	2701	2.00	1.32	13.00	9.08	12.00	10.85	15.00	13.30	25.00	18.00	8.63	
8. Dam Safety Studies and Planning	10.00	2701	1.00	0.48	1.60	0.80	1.00	0.34	1.50	1.10	3.00	2.00	0.87	
9. River Basin Organisation/Authority	50.00	2701	0.50	0.00	1.00	0.00	0.50	0.00	0.50	0.00	4.00	0.00	0.00	
Total: Major and Medium Irrigation	1065.00		132.50	88.99	209.90	145.79	219.20	169.50	251.00	172.46	277.19	226.15	114.56	
Minor Irrigation														
Surface Water Schemes														
10. Ground Water Management and Regulation	460.00	2702	62.00	48.11	95.00	54.37	70.00	68.82	100.00	80.92	120.00	132.00	79.46	
11. Rajiv Gandhi NGWT&RI	25.00	2702	1.50	0.60	2.10	0.64	2.00	1.78	6.00	3.19	3.00	3.60	3.00	
12. Infrastructure Development	**	4702	4.55	1.27	7.00	2.07	4.50	2.15	10.50	6.86	11.40	7.85	3.40	
Total: Minor Irrigation	485.00		68.05	49.98	104.10	57.08	76.50	72.75	116.50	90.97	134.40	143.45	85.86	
13. Command Area Development Programme	\$\$	2705	300.00	277.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total: CAD & WM			300.00	277.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Flood Control Sector														
14. Flood Forecasting	130.00	2711	16.00	13.91	23.00	13.68	25.00	17.38	36.00	24.02	36.00	36.00	19.25	
15. Infrastructure Development	**	4711	3.45	1.54	26.00	6.56	9.50	4.25	15.00	9.48	14.00	5.00	1.40	
16. River Management Activities and works related to Border Rivers	601.00	2711	46.00	51.44	160.00	176.09	199.30	159.46	199.00	179.52	188.00	138.00	81.42	
17. Pagladia Dam Project	500.00	2552	1.00	1.35	2.00	0.00	0.50	0.00	0.50	0.00	0.01	0.00	0.00	
Total: Flood Control Sector	1231.00		66.45	68.24	211.00	196.33	234.30	181.09	250.50	213.02	238.01	179.00	102.07	
Transport Sector														
18. Farakka Barrage Project	350.00	5075	33.00	30.99	75.00	54.03	70.00	68.95	82.00	44.02	70.40	71.40	55.23	
EAT													-0.38	
** Total allocation for XI Plan	115.00													
\$\$ Scheme has been transferred to State Sector w.e.f. 2008-09														
Grant Total	3246.00		600.00	516.04	600.00	453.23	600.00	492.29	700.00	520.47	720.00	620.00	357.34	

ANNEXURE -V
STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET
FOR FINANCIAL YEAR 2012-13.

(Rs. in Crore/Net)

Sector / Orgn / Scheme	Heads of Accounts	B.E. 2012-13
Major & Medium Irrigation		
1. Research & Development Programme	2701	100.00
2. Development of Water Resources Information System	2701	84.99
3. Infrastructure Development	2701	3.20
4. Hydrology Project	2701	70.00
5. Human Resource Development/Capacity Building	2701	85.00
6. River Basin Management	2701	110.00
7. Implementation of National Water Mission	2701	200.00
8. Irrigation Management Programme	2701	100.00
9. Dam Rehabilitation and Improvement Programme (DRIP)	2701	24.00
Total: Major and Medium Irrigation		777.19
Minor Irrigation		
Surface Water Schemes		
10. Ground Water Management and Regulation	2702	318.00
11. Human Resource Development/Capacity Building	2702	15.00
12. Infrastructure Development	4702	39.80
13. Development of Water Resources Information System	2702	0.01
Total: Minor Irrigation		372.81
Flood Control Sector		
14. Flood Forecasting	2711	48.00
15. Infrastructure Development	4711	12.00
16. River Management Activities and works related to Border Rivers	2711	125.00
17. River Basin Management	2711	90.00
Total: Flood Control Sector		275.00
Transport Sector		
18. Farakka Barrage Project	5075	75.00
Grant Total		1500.00