



GOVERNMENT OF INDIA

OUTCOME BUDGET

2016 - 2017

**MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA
REJUVENATION**

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EXECUTIVE SUMMARY

The Outcome Budget 2016-17 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 2014-15 and financial year 2015-16 and the targeted performance during 2016-17. 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, River Development and Ganga Rejuvenation, 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 and Secretary, the Ministry is organized under the Administration wing, Finance wing and Subject Matter Wings. The Ministry has two attached offices, eight subordinate offices, 11 statutory bodies, three autonomous bodies (societies) and two public sector undertakings.
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 2016-17 and Outcome Budget 2016-17. 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 financial years 2014-15 and 2015-16.
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.
VI	It contains review of performance of statutory / autonomous bodies and public sectors undertakings under the administrative control of the Ministry.

2. 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.

3. The Website of this Ministry has been redesigned in pursuance to Guidelines for Indian Government Website (GIGW). The new Website of this Ministry has been launched by NIC on 11.06.2014.

e-Office- A Mission Mode Project is being implemented in association with NIC and DARPG under National e-Governance Plan. This will bring a remarkable change in the functioning of the Ministry as well as promoting e-Governance activities, responsiveness and transparency in the Ministry, which would further be implemented in the organizations of the Ministry as well.

4. The Central Water Commission, an attached office of MoWR, RD & GR 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 medium and selected minor irrigation projects receiving central assistance under Accelerated Irrigation Benefit & Flood Management Programme (AIBFMP). 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.

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.

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. Water and Power Consultancy Services (India) Limited and National Projects Construction Corporation Limited are the two public sector undertakings working under the administrative control of this Ministry. Ravi and Beas Waters Tribunal, Cauvery Water Disputes Tribunal, Krishna Water Disputes Tribunal, Vansadhara Water Disputes Tribunal and Mahadayi Water Disputes Tribunal are functioning to resolve the inter-state water disputes. Brahmaputra Board is engaged in Brahmaputra and Barak Basin for sustainable development of water resources to provide optimum benefit with emphasis on control of flood and bank erosion. During 2014-15, two new boards viz. Krishna and Godavari River Management Board and Polavaram Project Authority have been constituted under The Andhra Pradesh Reorganization (Amendment) Act, 2014.

5. Main activities of Central Ground Water Board are –

Aquifer Mapping: Aquifer Mapping is a multidisciplinary scientific process wherein a combination of geologic, geophysical, hydro geological, hydrological and water quality

data are integrated to characterize the quantity, quality and distribution of ground water in aquifers. Aquifer mapping at the appropriate scale has to be devised and sustainable management plan to be prepared and implemented for this common pool resource. This will help achieving drinking water security, improved irrigational facility sustainability in ground water resources development in large part of rural India and many parts of urban India. Aquifer mapping has to be taken in priority areas on 1:50,000 scale. The major activities envisaged under Aquifer mapping and preparation of Aquifer Management Plans are Compilation of existing data, Data Gap Analysis, Generation of additional data and Preparation of Aquifer Plan. Each activity has number of sub-activities and tasks and is carried out as per detail protocol for implementation.

Field Activities for Aquifer Mapping: Generation of additional data: In matter of data generation the field activities were taken up for through in-house resources in Rs. 1.30 lakh Sq Km priority areas during 2015-16. Activities of ground water management studies viz; exploratory drilling, geophysical surveys, chemical quality studies and micro-level hydrogeological surveys are taken up during the year for value addition to aquifer maps. The individual achievement of data generation activities are as follows:

Ground Water Exploration: The exploration is aimed at generation of precise demarcation of aquifer disposition and characteristics of hydrological parameters of sub-surface ground water data in the area. It is being carried out by the Board through a fleet of 84 drilling rigs (28 Direct Rotary, 48 Down the Hole and 8 Percussion Combination types).

During financial year 2015-16 (up to 31.12.2015), the Central Ground Water Board has constructed 475 wells (EW-303, OW-130, PZ-42) including 31 high yielding wells to assess the ground water potential in different hydrogeological set up.

Geophysical Studies: Geophysical studies are undertaken as an integral part of aquifer mapping and short-term water supply investigations. During 2015-16 up to 31st December, 2015. Central Ground water Board has carried out 2013 Vertical Electrical Soundings, 65.38 line kilometer resistivity profiling and geophysical logging of 89 bore holes in various parts of the country.

Water Quality Analysis: 21496 nos of water samples were analysed for the basic constituents, heavy metals (such as Cu, Zn, Fe, Mn, CO, Cd, Cr, Ni, Pb etc.), organic and specific constituents during the year 2015-16 up to 31st December, 2015.

Water Supply Investigations: The Board carries out short-term water supply investigations for Government Agencies and helps them in augmenting their water supply. Normally minimum financial implications are charged from all other departments except Defense. The Board has carried out a total of 170 investigations during this year up to 31st December, 2015.

Ground Water Regime Monitoring: The Board has monitored the ground water levels in the country through a network of about 27000 Ground Water Observation Wells for month of April/May, August 2015, November 2015 in all Regions. Additional 509 observation wells have been established to enhance the density of existing observation wells. Water Quality of the wells is monitored during pre-monsoon period.

Central Ground Water Authority: In pursuance of the order passed by the Hon'ble Supreme Court of India, Central Ground Water Board has been constituted as Central

Ground Water Authority (CGWA) under sub-section (3) of Section 3 of the Environment (Protection) Act, 1986 vide notification No. S.O. 38 (E) dated 14.01.97 for the purpose of regulation and control of ground water management and development in the country. As part of streamlining the regulatory function of “Central Ground Water Authority (CGWA)”, District Magistrates / Deputy Commissioners of revenue districts have been appointed as authorized officers for grant of permission for extraction of ground water for drinking/domestic uses in notified areas. They have been advised to process requests for grant of permission for extraction of ground water for drinking/domestic purposes in notified areas as per guidelines issued by CGWA. Central Ground Water Authority has also framed revised guidelines for grant of NOC for ground water abstraction by industries/projects in the country. Central Ground Water Authority has been entrusted with the responsibility of regulating and controlling ground water development and management in the country and issuing necessary directives for the purpose. Total notified areas are now 162.

Estimation of Ground Water Resource of the Country: The Dynamic Ground Water Resource of the country have been assessed jointly by respective state ground water departments and Central Ground Water Board under the supervision of the State Level Committees. The Dynamic Ground Water Resources assessment with reference to the base year 2011 has been computed while the assessment of “Dynamic Ground Water Resources of India” (as on 31st March, 2013) is under preparation.

6. The Information, Education and Communication Component of HRD/CB Scheme aims to undertake Mass Awareness activities of the Ministry and its organizations with a view to create awareness among various target groups about the importance of Development and Management of Water Resources in a holistic manner with due emphasis on coordinated effort to address various water related issues.

7. National Water Academy, located at Pune, is a centre of excellence in CWC for imparting training on all facets of Water Resources Development and Management covering the areas of planning, design, evaluation, construction, operation and monitoring of water resources projects, and also the application of high-end technology in water sector.

National Water Academy has also forayed into custom-designed programs meeting specific requirement of client organizations, both at its campus and off-campus at the client locations. NWA has also taken initiative into the field of ‘Distance Learning Program’ in association with World Meteorological Organization (WMO).

National Water Academy conducts about 32 training programs every year on various aspects of Water Resources Development and Management for all stakeholders. The training calendar for the annual training programs is finalized with the approval of Chairman, CWC, New Delhi. The approved training calendar is hosted on the Website of the National Water Academy (nwa.mah.nic.in) for the information of all the stakeholders. The Physical and the financial progress are reported to CWC Headquarters at every month.

8. National Water Development Agency is preparing the water balance studies, Pre-Feasibility Reports (PFR) & Feasibility Reports (FR) for Inter Basin Water Transfer Links pertaining to Himalayan & Peninsular Components under the National Perspective Plan [NPP] for Water Resources Development. The work for preparation of Detailed Project Reports (DPRs) of link proposals under NPP and PFR/FR/DPR for intra-State links was

also entrusted to NWDA. The approved budget outlay for the year 2015 – 16 was Rs. 69.00 crores. The plan outlay for the year 2016–17 is proposed as Rs. 73.50 crores.

Under Inter Basin Water Transfer links of NPP, DPRs of Ken-Betwa Link Project Phase-II, Damanganga-Pinjal Link Project were completed during 2013-14 and DPR of Par-Tapi-Narmada Link has been completed by August, 2015. Feasibility Reports of 3 links under Himalayan Component for Indian portion will remain under progress during 2015-16. Feasibility reports of 2 links will be completed during 2016-17.

Under intra-State Link Projects as proposed by States, DPRs of Burhi Gandak-Noon-Baya-Ganga Link and Kosi-Mechi Link Projects of Bihar were completed during 2013-14. DPRs of 4 links viz; Wainganga (Gosikhurd) – Nalganga (Purna Tapi) Link Project of Maharashtra, Ponnaiyar-Palar Link Project of Tamil Nadu, Barakar-Damodar-Subarnarekha Link Project of Jharkhand and Vamshadhara-Rushikulya Link Project of Odisha are under progress during 2015-16.

Under Intra-State Link Projects as proposed by States 6 PFRs have been completed in 2013-14, 2 PFRs of Intra –State Links are completed in 2014-15, 1 PFR and 1 DPR will be completed during 2015-16 and 3PFRs and 2 DPRs of Intra – State links will be completed during 2016-17.

The physical dimension of the financial budget of NWDA is regularly monitored by Ministry of Water Resources at various levels. 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 physical dimensions of the financial budget & progress of the Agency. The Governing Body of the NWDA headed by Secretary (Water Resources) reviews the programme and progress of works done twice a year. All the concerned States are represented in these committees. The feasibility reports and Executive Summary / Salient Features of Detailed Project Reports (DPRs) already completed by NWDA are available on the website of NWDA (www.nwda.gov.in) for information of general public. The Inter Basin Water Transfer programme once implemented will help in increase of irrigation area, power generation and also for supply of domestic & industrial water in water scarce areas.

9. The important activities of Sardar Sarovar Construction Advisory Committee, a subordinate office of Ministry of Water Resources, RD & GR, is to ensure efficient, economical and timely execution of Unit-I (Dam & appurtenant works) and Unit-III (Hydro-Power) works of Sardar Sarovar Project (SSP). Revised estimate of Unit-I & Unit –III of SSP at price level 2008-09 was approved by SSCAC in its 77th meeting held on 07.05.2010. The investment clearance for project estimate of SSP at price level 2008-09 for Rs. 39240.45 crore was given by Planning Commission in May 2010.

To operate River Bed Power House (6x200 MW) of Sardar Sarovar Project in pumping/reversible mode, construction of Garudeshwar Weir 12 Km. downstream of the main Dam has been taken up. The award of work of Garudeshwar Weir which is part of Unit-III works has been approved by SSCAC on 16.03.2012 in its 79th meeting. The estimated cost of Garudeshwar Weir is Rs.438.18 crore and work was awarded to lowest bidder on 4th May 2012 for Rs.2,99,43,36,391.50 to be completed in 48 months. The construction work is in progress.

10. The Ministry, during 2016-17, implemented the Plan schemes 5 major groups both (central sector and centrally sponsored schemes). For XII plan period, the activities under various programmes / schemes being implemented / monitored by the Ministry have been clubbed into 5 groups 21 central sector and 2 Centrally sponsored schemes. These

includes new central sector schemes viz. “Bodwad Parisar Sinchan Yojana” of Maharashtra, Polavaram Project Authority, Impact Assessment Study of AIBFMP, National River Conservation Plan, National Ganga Plan, Ghat works for beautification of river fronts, Water project of NCT, DPR of interlinking of Rivers and one new centrally sponsored scheme viz. Pradhan Mantri Krishi Sinchai Yojana recently included in the Budget of Ministry of Water Resources, River Development & Ganga Rejuvenation from FY 2014-15.

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 The functions of Ministry of Water Resources, River Development and Ganga Rejuvenation as per Allocation of Business Rules, are as follows:

I General

- 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 and interlinking of rivers.
- 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).

II International Aspects

- 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

1.2 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
8. Polavaram Project Authority

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
10. Krishna River Management Board
11. Godavari River Management Board

AUTONOMOUS BODIES (SOCIETIES)

1. National Water Development Agency
2. National Institute of Hydrology
3. National Mission for Clean Ganga (NMCG)

PUBLIC SECTOR UNDERTAKINGS

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

1.3 The Ministry, during 2016-17, is implementing the Plan schemes in 5 major groups both (central sector and centrally sponsored schemes). The brief overview of the Group-wise is as under :

1.3.1. **Major Irrigation Projects**

Polavaram Multi-purpose Project : The Union Cabinet in its meeting held on 1st May, 2014, approved constitution of Polavaram Project Authority (PPA) and Governing Body of PPA under Andhra Pradesh Reorganization Act, 2014 to be funded by Central Government.

Polavaram Project (also known as Indira Sagar (Polavaram) Project in the existing State of Andhra Pradesh, is a multi-purpose project with an assessed Culturable Command Area of 2.91 lakh hectares and power generation potential of 960 Mega Watt (MW). It also has a provision for supply of 23.44 Thousand Million Cubic Feet (TMC) water as delinking water supply to Vishakhapatnam city and other areas, as also industrial water supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to Krishna river basin is also envisaged.

Farakka Barrage Project: Farakka Barrage Project, with headquarters at Farakka in West Bengal, was commissioned in the year 1975 for preservation and maintenance of Kolkata Port by improving the regime and navigability of the Bhagirath-Hoogly river system. The increased upland supply from Ganga at Farakka into Bhagirathi reduces salinity and ensures sweet water supply to Kolkata and surrounding areas. The rail-cum-road bridge built across the river Ganga at Farakka establishes direct road and rail communication link to the North-Eastern States with rest of the country. The Bhagirathi/Hooghly river system, the Feeder Canal and the Navigation Lock at Farakka form part of the Haldia-Allahabad Inland Waterway (National Waterway No:1). The principal components of the Farakka Barrage Project are –

- A 2245 metre long Barrage across river Ganga, with 109 bays and a Head Regulator with 11 bays
- A 213 metre long Barrage across river Bhagirathi at Jangipur with 15 bays
- 38.38 km long Feeder Canal with carrying capacity of 1133 cumec (40,000 cusec)
- Navigation locks at Farakka and Jangipur
- Kalindri Lock Channels, Shelter Basins and other infrastructures
- Left Afflux Bundh of Farakka Barrage – 33.79 km in length, Right Afflux Bundh of Farakka Barrage – 7 km in length and afflux bundh of Jangipur Barrage – 16.31 km in length
- Two rail-cum-road bridges and two road bridges across the Feeder Canal
- A number of Regulators at different locations situated in Murshidabad and Malda Districts of West Bengal
- Bagmari Syphon at RD 48.00 of Feeder Canal and Jetties shelter basin at RD 62.532 of Feeder Canal

Main functions of Farakka Barrage Project :

- Operation and maintenance of Farakka Barrage, Jangipur Barrage, Feeder Canal, (including Bagmari siphon), Navigation Locks
- Facilitating implementation of agreement on sharing of Ganga water between India and Bangladesh
- Undertaking anti-erosion and bank protection works in enhanced jurisdiction 40 Km upstream and 80 Km downstream of Farakka Barrage

Dam Rehabilitation and Improvement Project (DRIP): As part of continuous strengthening of the dam safety activities in India, Dam Rehabilitation and Improvement Project (DRIP) has been taken up with World Bank assistance at an estimated cost of Rs. 2100.00 Crore. About 223 large dams in four states i.e. Madhya Pradesh, Orissa, Kerala and Tamil Nadu would be rehabilitated under this project. Few more States/Organisation have also been identified to join DRIP at a later stage, for which a provision of

unallocated resources had been provided in the project estimate. The project development objectives of DRIP are to:

- Improve the safety and performance of selected existing dams and associated appurtenances in a sustainable manner, and
- Strengthen the dam safety institutional setup in participating States as well as at Central level.

The objectives of DRIP are to be achieved through investments for physical and technological dam improvements, managerial upgrading of dam operations, management and maintenance, with accompanying institutional reforms. Further, it is expected that the institutional development activities will lead to an improvement in the system-wide management approach to all dams in the participating states, over and above the focus on the selected dams covered by the project. The project will thus address dam system management in a holistic manner.

The project implementation agencies for DRIP are the Water Resources Departments (WRD) of the four participating States and State Electricity Boards of Tamil Nadu and Kerala. The overall implementation of the project is being coordinated by Central Water Commission with assistance of a management and engineering consulting firm.

Out of the total project cost, 80% will be funded by the World Bank loan/credit, while 20% will be borne by respective State governments and Central Water Commission. Apart from structural and non-structural measures for rehabilitation and improvement of identified dams, the scope of project includes the development of appropriate institutional mechanisms for safe operation and maintenance of all large dams in participating states. In addition, strengthening of the institutional setup for national level dam safety surveillance and guidance would be taken up in Central Water Commission. The project has become effective from 18th April, 2012 and will be implemented over a period of six-years.

1.3.2. **Namami Gange**

The **Group of Secretaries** of the key Ministries namely (a) Water Resources, River Development and Ganga Rejuvenation, (b) Environment, Forest & Climate Change, (c) Urban Development, (d) Drinking Water and Sanitation, (e) Rural Development (f) Tourism, and (g) Shipping have been working together since June, 2014 to arrive at a comprehensive action plan. A combined report has been submitted in this regard to the Hon'ble Ministers on 28th August 2014. The report has recommended the following new comprehensive interventions needed in short, medium & long terms. The details are given below:

A. Short term interventions

- (a) Scheme for rehabilitation and up-gradation of existing Sewage Treatment Plants (STPs) along Ganga
- (b) Ensuring 100% sewerage infrastructure in identified town alongside Ganga. In situ sewage treatment in open drains
- (c) Support for preparation of Detailed Project Reports (DPRs) to prepare a shelf of projects.

- (d) River Front Management for Ghat's developments in selected cities and towns
- (e) Industrial pollution abatement in Kanpur and other cities
- (f) Action Plan for Char Dham Yatra – Public amenities, waste disposal and sanitation
- (g) Capacity building of urban local bodies
- (h) Afforestation – Conservation of Flora
- (i) Conservation of Aquatic life – special attention on Dolphin, Turtles and Ghariyals
- (j) Safe disposal of flowers and other puja material Ganga Task Force (such as, through ex-servicemen, Volunteers etc.)
- (k) GIS data and Spatial Analysis for Ganga basin
- (l) Study of communities depending on Ganga for their traditional livelihood
- (m) Ganga Monitoring Centre
- (n) Guidelines for sand mining in Ganga
- (o) Feasibility study and correction of course of Bhagirathi River in the upper stretches.
- (p) Assessment of Special Properties of Ganga Water
- (q) Communication and Public Outreach Activities etc.

B. Medium term interventions (infrastructure & non infrastructure)

Apart from the completion of the ongoing projects, following are envisaged:

- One hundred and eighteen (118) urban habitations on banks of river Ganga have been tentatively identified by the Ministry of Urban Development (MoUD) for extending coverage of sewerage infrastructure (Tentative estimated cost assessed by MoUD as Rs 51,000 crore while actual amounts will be finalized after preparation of DPRs). Secretary, MoWR, RD&GR has already requested MoUD for preparing detailed action plan in accordance with the decision taken in the meeting of Hon'ble Prime Minister held on 8th September 2014.
- MoDW&S has contemplated scheme for making all 1649 number of Gram Panchayats located on Ganga banks free from open defecation. Secretary, MoWR, RD&GR has already requested MoDW&S for preparing detailed action plan in accordance with the meeting of Hon'ble Prime Minister held on 8th September 2014.
- The MoEF & CC / CPCB is to enforce zero liquid discharge from grossly polluting industries located in all the Ganga River Basin States.
- Wetland and lake restoration in the Gangetic Basin is required to protect and restore river ecology. Management of wetlands would involve intense monitoring and better interaction and co-operation among various agencies such as state departments concerned with the environment, urban planning and development, agriculture, forestry, public interest groups, research institutions, and policy makers. A national programme namely National Plan for Conservation of Aquatic Ecosystem (NPCA) is already under implementation for management of wetlands and lakes. Collaboration with such programme can be made for the proposed restoration of wetlands and lakes in the Gangetic basin.

C. The long term interventions

The GoS has identified in its report that the long-term vision for Rejuvenation of river Ganga would emerge from the Ganga River Basin Management Plan (GRBMP) being prepared by the Consortium of 7 IITs for restoring wholesomeness of river Ganga in terms of defining concept of ensuring Nirmal Dhara, Aviral Dhara and maintaining the ecological and geological integrity of the river. The first version of this plan is tentatively

expected to be available by the end of December, 2014. Incidentally, the possibility of determining provisional Environmental Flow (E-flow) was discussed in a Minister level meeting between MoWR, RD & GR and MoEF & CC on 21.08.2014 and it was decided that this should be explored at the Additional Secretary level in the said two ministries, duly taking necessary assistance / advice of the Convener of IIT consortium.

1.3.3. River Basin Management

National Water Mission: The National Action Plan on Climate Change (NAPCC) launched by the Government of India has identified the approach to be adopted to meet the challenges of impact of climate change through institutionalization of eight national missions which inter alia includes a 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.

River Basin Management: 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.

Investigation of Water Resources Development Scheme: The objective of the scheme is to carry out the activities related to survey, field investigation, preparation of pre-feasibility/feasibility report (FRs) & detailed project report (DPRs) of the schemes for Inter Basin Water Transfer Links, intra-State links and to carry out other studies & activities considered necessary incidental, supplementary or conducive to attainment of above objectives.

Re-structuring of CWC: Scheme is under approval stage.

Brahmaputra Board: The main objective of Brahmaputra Board are Survey, Investigation & preparation of Master Plan, DPRs for Drainage Development Schemes & DPRs for Multipurpose project, Operation & maintenance & upgradation of NEHARI, Construction of H.Q. Complex & R&M of assets created by the Board, Upgradation of IT&GIS, Climate Change Studies etc. Execution of (i) Drainage Development Schemes, (ii) Anti-erosion schemes & Flood Management Schemes, (iii) Construction of raised platform,

Flood Forecasting: The objective of the scheme is to strengthen flood forecasting and inflow forecasting network in India and develop forecast information system. Issuing flood forecasts at existing 147 level forecast and 28 inflow forecast sites covering 20 river basins so as to minimise loss of life and property by assisting relief and rescue agencies with real time forecast information. Automation of the existing network of forecast sites together with telemetry system for communication of real time data and other state of art equipments. Automation and telemetry system at 219 existing stations covering flood forecasting network of CWC.

Interlinking of Rivers: This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. Scheme is under formulation stage.

1.3.4. Water Resource Management

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.

Ground Water Management and Regulation: The activities of the Ground Water Management & Regulation Scheme are as follows-

- National Aquifer Mapping;
- Ground water exploration;
- Ground water resource assessment;
- Ground water regime monitoring;
- Artificial recharge & rainwater harvesting studies;
- Geophysical Studies;
- Hydro-chemical studies;
- Regulation of ground water development;

National Hydrology Project

Previous phases of Hydrology Project (HP) were implemented only in 13 States. This has resulted in a sectoral divide amongst the HP and non-HP States in terms of equipment, technology, applications and capacity building which have a direct impact on water resources planning, development and management. The National Hydrology Project (NHP) has been envisaged with pan-India coverage, including the Ganga and Brahmaputra Basin States which were not covered under previous phases of Hydrology Projects and as a follow-up and extension of Hydrology Project Phase-I and Phase-II. The components of NHP are summarized as follows:

Component	Name	Objectives
A	<i>In-Situ Hydro-met Monitoring Systems</i>	<i>expand and upgrade water resources monitoring systems</i>
B	<i>National Water Information System</i>	<i>develop centralized spatial data sets, including remotely sensed data and supportNational Water Informatics Centre (NWIC)</i>
C	<i>Water Resources Operation & Management Systems</i>	<i>develop Decision Support Systems (DSS) for selected river basin planning,</i>

		<i>assessments, flood forecasting etc.</i>
<i>D</i>	<i>Water Resources Institutions and Capacity Building</i>	<i>capacity building through trainings, providing, etc.</i>

Expected Outcomes : Improvement in the following areas are envisaged:

- Data storage, exchange, analysis and dissemination through National Water Informatics Centre.
- Lead time in flood forecast from 1 day to at least 3 days
- Mapping of flood inundation areas for use by the disaster management authorities
- Assessment of surface and ground water resources in a river basin for better planning & allocation for PMKSY and other schemes of Govt. of India
- Reservoir operations through seasonal yield forecast, drought management, SCADA systems, etc.
- Design of SW & GW structures, hydropower units, interlinking of rivers, Smart Cities
- Fulfilling the objectives of Digital India

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.

Irrigation Management Programme: The XII Five Year Plan Document inter alia proposed a Plan Scheme titled "Irrigation Management Programme" to incentivize States to undertake water sector reform with a total outlay of Rs. 6,000 crores. In order to formulate the said scheme, it is proposed to evolve Benchmarks for State Specific Water Sector Reforms and Methodology for Assessment of States' performance based on a suitable framework. The scheme is under formulation stage.

Human Resources Development/ Capacity Building:

a. National Water Academy: The National Water Academy (NWA) set up by the Ministry of Water Resources is envisaged to function as 'Centre of Excellence' for capacity building in Water Sector. The mandate of NWA initially was to impart training to in-service engineers of various State and Central organizations involved in the Development and Management of Water Resources. Subsequently, the mandate of NWA was widened to also cater to the training needs of other stakeholder groups of water sector. Accordingly, since October 2010, the Academy's programs are also open to Public Sector Undertakings, Private Sectors, Academic Institutions, Media Personnel, NGOs, Foreign Nationals and Individuals, thus reaching out to almost every stakeholder.

Being a premier institute, NWA conducts training programs on all aspects of water resources development and management. Initially, the NWA started with training

in technology areas, but as of now have also expanded their range to include non-technical topics like Socio, Economic and Environmental aspects of Water Resources Projects; Contractual and Financial Issues; Water related Law, and development of Soft Skills like Management Development Programs etc. NWA is also mandated to form linkages with National and International Institutions in the field of science and technology and WRD&M as a part of the overall responsibility of capacity building assigned to NWA by the Ministry. NWA has started conducting tailor-made programs for various client organizations, and also participants from foreign countries including programs at the behest of MEA.

With a view to knowledge up gradation, CWC is arranging customized Training program for its officers through IIT and other institute like Indian Institute of public Administration etc.

b. Information, Education and Communication: The objectives of the scheme are as under :-

- 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 resource with active involvement of all stakeholders in order to achieve accelerated, equitable, economic development of the country.
- To create awareness for urgent need for mutual cooperation and adopting integrated planning and participatory approach in management.
- To create awareness among the people about necessity of water conservation.
- 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.
- 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.
- To strengthen awareness infrastructure specially campaign mechanism and support structure.

c. Rajiv Gandhi Institute of Training and Research: Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWT&RI) caters to the capacity building requirements of ground water professionals of Central Ground Water Board (CGWB) and other Central and State Govt. Organisations, Academic Institutes, NGOs, PRIs etc.

d. Capacity Building Programme: The North Eastern Regional Institute of Water and Land Management (NERIWALM) is a premier Institute of North Eastern Region of India established on 23rd December, 1989 at Dolabari, Tezpur (Assam) by the North Eastern Council (NEC), Ministry of DONER, Govt. of India as an autonomous Registered Society under the Societies Registration Act 1860. The Institute has been transferred to the Ministry of Water Resources, Govt. of India w.e.f. 1st April, 2012. The uniqueness of the Institute lies on its catering the need of all the NE states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura including Sikkim for capacity building through training the farmers and functionaries in the field of water and land management. NERIWALM also undertakes research projects and studies

from time to time on issues and problems pertaining to water and land resource management in the NE region of the country.

e. Training of the Ministry of Water Resources, River Development & Ganga Rejuvenation Officers: The National Training Policy (NTP), 2012 formulated by the DOP&T has been accepted by the Government of India and circulated for implementation vide DOP&T OM No. 12021/1/2012-Trg. I dated 4th July 2012. In consonance with the National Training Policy, the Training Policy for MoWR, RD & GR has been formulated to impart training to all levels of the employees starting from lowest to the highest level to give the Ministry a cutting edge in policy decisions and implementation of Programmes as mandated in the Allocation of Business Rules. A Training Cell has been created in the Co-ordination Division of the Ministry to assist the Training Manager who will function under the administrative control of Joint Secretary (Admn). The Cell will look after all matters relating to training including both the domestic and foreign needs of the Officers/ Engineers/ Scientists/ Employees of the Ministry and also its organizations. Total allocation involved during the XII Five Year Plan will be Rs. 10.00 Crore only. As part of developing the human resources, officials of the Ministry are sent on training in various institutes to enhance their capabilities and skills.

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, River Development & Ganga Rejuvenation and (iv) e-Governance of the Ministry of Water Resources, River Development & Ganga Rejuvenation.

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 & Central Ground Water Board 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.

1.3.5. Pradhan Mantri Krishi Sinchai Yojana : AIBP and PMKSY (HKKP) (State/UT Plan)

Accelerated Irrigation Benefit & Flood Management Programme: This is the restructured Central Sponsored Scheme being included under Demand of MoWR from FY 2014-15 with total budget estimated of Rs.8992.22 Crore in accordance with the directions of Planning Commission & Ministry of Finance. This includes releases to States/UTs in respect the following sub-schemes:- (i) AIBP & National Projects, (ii) Command Area Development & Water Management, (iii) Flood Management programme and (iv) Repair, Renovation & Restoration of Water Bodies. The Budget provision for this scheme is Rs. 1000 Crore during the FY 2015-16.

AIBP & National Projects

- Creation of 32 lakh ha of new Irrigation Potential (IP) through completion of ongoing MMI projects and new MMI projects and Restoration of lost irrigation potential through ERM of old MMI projects.
- Creation of 10 lakh ha of Irrigation Potential (IP) through completion of new and ongoing surface MI projects.

CAD&WM

- To reduce the gap between irrigation potential created and fully utilize the irrigation potential created by involving the State Governments.

RRR

- To restore and augment storage capacities of water bodies, and also to recover and extend their lost irrigation potential.

PMKSY (Har Khet Ko Pani) : Accelerated Irrigation Benefit Programme (AIBP) of the ministry of Water Resources, river Development and Ganga Rejuvenation (MoWR, RD & GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR). Ministry of Rural Development (MoRD) and Minor Irrigation component of On Farm Water Management (OFWM) of National Mission on Sustainable Agriculture (NMSA) of Department of Agriculture and Cooperation (DAC). Technical requirements/ standards, pattern of assistance of various activities to be taken up under the components like AIBP, PMKSY (Har Khet Ko Pani), PMKSY (Per Drop More Crop) and PMKSY (Watershed Development) will be as per the guidelines of the respective programme component issued by the concerned Ministries/ Departments Growth in agriculture sector on sustained basis is closely linked with judicious utilization of land and water resources for sustaining production and productivity of agricultural and horticulture crops. Presently, a number of Departments/ Ministries are involved in implementation of various programmes for addressing the issues relating to development of land and water resourced. Out of about 141 million hectares of net area sown of the country covered under irrigation. Substantial dependence on rainfall makes cultivation in remaining areas a high risk and less productive profession. Empirical evidences suggest that assured/ protective irrigation/in-situ moisture conservation encourages farmers to invest more in farming technology and inputs leading to productivity enhancement and increased farm income.

The main objectives of the scheme are to achieve convergence of investments in irrigation at the field level, enhance the physical access of water on the farm and expand cultivable area under assured irrigation, improve on farm water use efficiency to reduce wastage and increase availability both in duration and extent, enhance the adoption of precision –irrigation and other water saving technologies, enhance recharge of aquifers and introduce sustainable water conservation practices, ensure the integrated development of rain fed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities, promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries, explore the feasibility of reusing treated municipal waste water for peri-urban agriculture, attract greater private investments in precision irrigation.

The major areas of intervention under these schemes will include the repair, restoration and creation of water sources including water harvesting structures, secondary & micro storage, groundwater resources, traditional water bodies (Jal

Sanchay) at village level etc. And linking with the existing distribution network and/or developing distribution network to improve potential of existing low hanging structures. Creation of small water bodies, diversion of water from source of different location where it is plenty to nearby water areas, lift irrigation from water bodies/ rivers at lower elevation, developing/strengthen distribution network where irrigation sources are already available, promotion of scientific moisture conservation and run off control measures to improve ground water recharge on watershed approach, promotion of NRM activities including regeneration of bio-mass through activities like farm forestry, horticulture, pasture development, livelihoods for assetless and weaker sections particularly women and SC/STs, promoting water efficient conveyance and field application devices, Ground water Development like tube-well, dug wells etc., encourage community irrigation and livelihood through SHGs/ registered user groups/ farmer producers organisations.

Flood Management Programme :The scheme is aimed at providing central assistance to the State Governments for undertaking critical river management and flood protection works including anti erosion, bank protection, restoration of existing works and drainage development works.

River Management Activities in Border Areas: It covers 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.

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 Barakhshetra 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 were taken up during XI Plan period.

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.

Three Bank Protection/ flood control works on Mahananda River in West Bengal along international border with Bangladesh have been completed. Ten Bank Protection works in West Bengal and two Bank Protection works in Tripura are under various stages of completion. In addition, central assistance has been provided to the state Government of Tripura for undertaking three more bank protection works along international border with Bangladesh.

During XII Plan, the scheme covers the hydrological observations and flood forecasting on common border rivers with neighbouring countries, survey & investigations for WR projects in neighbouring countries, activities of Ganga Flood Control Commission (GFCC), 100% grant-in-aid to river bank protection works on common/ border rivers with Bangladesh and Pakistan proposed by West Bengal, Tripura & J&K States and 100% grant-in-aid to Union Territories for critical flood management / anti-sea erosion works.

Impact Assessment of AIBP Project: Scheme under consideration.

Irrigation Census: Rs. 25.13 crore has been allocated under this ongoing scheme of Irrigation Census

1.3.6. **National River Conservation Plan**

This scheme is being implemented under the overall umbrella of 'Namami Gange'

CHAPTER - II

STATEMENT OF OUTLAYS & OUTCOME /TARGETS ANNUAL PLAN 2016-17

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
1	Major Irrigation Projects	Polavaram Multipurpose project		Implementation of Polavaram Project as mandated by Andhra Pradesh Reorganisation Act, 2014. Supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to Krishna river basin also envisaged.	100.00	Polavaram Project (also known as Indira Sagar (Polavaram) Project in the existing State of Andhra Pradesh, is a multi-purpose project with an assessed Culturable Command Area of 2.91 lakh hectares and power generation potential of 960 Mega Watt (MW). It also has a provision for supply of 23.44 Thousand Million Cubic Feet (TMC) water as drinking water supply to Vishakhapatnam city and other areas, as also industrial water, supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to Krishna river basin is also envisaged.	The Authority shall also ensure expeditious execution, regulation and development of the project while simultaneously ensuring implementation of adequate environmental safeguard measures and proper rehabilitation of oustees. The Authority, being under the Central Government, is expected to instill confidence in both the successor States.	No process / timelines has been set.	
		Farakka barrage project		1(a) Increasing of upland supply via Feeder Canal from River Ganga to Bhagirathi (a branch of river Ganga) through operation of Barrage/Head Regulator Gates at Farakka to improve the navigability in Bhagirathi Hooghly river system which is a part of Hooghly-Allahabad river System (National Waterway) 1.(b) Contribution in improving socio-economic development of citizens of West Bengal by way of preservation of natural resources (Land, building, orchard) through anti-erosion of river bank & flood management work as well as contribution in development of North-East States by way of maintaining road & structures across the barrage which provide direct communication link to these states.	80.00	Operation & Maintenance of Farakka Barrage and its associated structures including Feeder Canal & Jangipur Barrage and anti- erosion works at different location along Ganga/Padma/ Bhagirathi for safety of the barrage. Repair & maintenance work cannot be quantified in advance. Moreover, it is a continuing activity.	100%	1) The works are identified according to vulnerability and/ proneness of areas and executed after the approval of TAC, FBP. 2) The works are identified in the beginning of the year and the works are executed as per requirement of site condition.	Anti-erosion works are basically erosion & flood control works on river Ganga. Indeterminate nature of morphological behaviour of such alluvial rivers and uncertainty in onset of monsoon are the factors which affect these works. The O&M activities of barrage is continuing type of activity
		Dam Rehabilitation and Improvement Programme		To supervise and coordinate the implementation of Dam Rehabilitation and Improvement Project with the following Activities: (a) Rehabilitation and improvement of about 223 large dams in four states (Madhya Pradesh, Orissa, Kerala and Tamil Nadu) with World Bank funding. (b) Dam safety Institution strengthening of party States and Central Water Commission (c) Project Management DRIP is a six year project. It has become effective from 18th April 2012.	23.98				
	Water Project for NCT			This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for improving supply of water in the NCT of Delhi. The amount includes provisions for Renuka Dam.	0.02				
				Sub Total	204.00				

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
2	Namami Gange	Ghat Works for Beautification of River Front			100.00	Preparation of DPRs for identified 7 towns and 3 other towns; issuance of AAES for 5 RFD projects; Completion of 1 ongoing RFD project of Patna	Improvement of built environment along river stretches, improvement of small ghats and crematoria	One ongoing RFD project at Patna will be completed in 2016-17. Other RFD projects will be completed by 2020	
		Natioanl Ganga Plan			2150.00	Under National Ganga plan 2 infrastructure projects and 4 non infrastructure (research and biodiversity related) have been sanctioned. Treatment capacity of 40 mld and a RFD at Chandighat shall be created on implementation of these projects. During the yer 2016-17, the focus will beon development of DPRs/projects pertaining to municipal sewage treatment and river surface and ghat cleaning activities. Further studies pertaining to treated water recycling, condition assessment of existing infrastructure and exploring Annuity based PPP models in waste treatment sector shall also be undertaken	The projects and activities under this plan include pollution abatement measures for different sources of pollution, river front development, Afforestation and conservation of aquatic life, Communication and public outreach, water quality monitoring etc. and enforcement of standards and other policy initiatives for ensuring Aviral and Nirmal Ganga.	Timeline for completion of projects under NGRBA including the projects proposed under 'Namami Gange' has been has been indicated for the year 2020 to abate pollution of river Ganga, particularly through the interventions to be made under short and medium term action plans.	
				Sub Total	2250.00				
3	River Basin Management	Implementation of National Water Mission			25.00	1. National water mission directorate (5 crores), 2. Preparation of state specific action plans (15 crores), 3. Human Resources Development and capacity building (6 crores) and setting up of National Bureau of Water use efficiency (NBWUE) (11 crores) 4. Baseline studies (15 crores), 5. Preparation of demonstrative/benchmarking projects (24 crores)	1. National Water Mission Directorate is established 2. Preparation of state specific actioin plans. Twelve states, Andhra Pradesh, Telangana,"West Bengal, Uttrakhnd, Gujarat, Assam, Chattisgarh, Karnataka, Madhya Pradesh, Tamil Nadu , Maharashtra and odisha have been requested to prepare their SSAPs in the 1srt phase. 3.Human Resource Development and capacity building are being undertaken in coordination with national level institutes like NIRD and PR, LBSNAA, RGNGWTRI, CWRDM, TISS, NWA etc. NWM-TISS water project is bein g implemented. Setting up of NAtional Bureau of Water Use Efficiency(NBWUE). A proposal for setting up of NBWUE is under process in the ministry. The Ministry has in principle approved the proposal of baseline studies for water useefficiency of 25 majorOedium projects int he states of Maharashtra , Andhra PRadesh,		

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
							Telangana and North Eastern States. The work is to be carried out through WALMI, Aurangabad, WALAMTARI, Hyderabad, NERIWALAM, Tejpur in two phases. 5. Preparation of demonstrative/benchmarking projects. NWM has initiated actions for undertaking demonstration projects in irrigation sector in consultation with State Government.		
		River Basin Organisation			0.01	----	-----	-----	-----
		Restructuring of CWC			0.01	----	-----	-----	-----
		IWRSD-NWDA		To carry out activities related to survey, field investigations in respect of preparation of Detailed Project Reports (DPRs), Feasibility Reports (FRs) of river link proposals & preparation of Prefeasibility Reports (PFRs) / FRs/ DPRs of intra - State link proposals and activities considered incidental, supplementary or conducive to attainment of above objectives.	69.58	(a) Survey & Investigations for preparation of Feasibility Report under Inter Basin Water Transfer Proposals (i) Himalayan component 1. Manas – Sankosh – Tista – Ganga (M – S – T – G) 2. Sone dam-STG link (ii) Peninsular Component 1. Mahanadi (Baramul)- GODavari link (Revised FR) (b)Preparation of DPR of IBWT links (New*) Himalayan Component (1) Manas-Santosh-Tista-Ganga (M-S-T-G) (2) Ganga-Damodar-Subarnrekha link (3) Sarada-Yamuna link (c) Preparation of Prefeasibility reports of intra-State link proposals, as proposed by State Govts. (i) Two links (d) Preparation of DPR of intra-State links (i) Wainganga (GOSikhurd)- Nalganaga (Purna Tapi) link of Maharashtra (ii) Barakar-Dmaodar-Subarnarekha link of Jharkhand (iii) Vamsadhara- Rushikulya link of Odisha (iv) Damanganga-Sabarmati-Chorwad link (e) Post DPR work of Ken-Betwa Phase-I & II, Damanganga-Pinjal and Par-Tapi-Narmada, IBWT links & kosi- Mechi, Burhi Gandak- Noon- Baya-Ganag intra - State Links (f) Work of special Committee for ILR and th studies as suggested by the Special Committee	Survey & Investigations and preparation of FRs, PFRs and DPRs in respect of Inter Basin Water Transfer link projects and intra-State link projects.	(i) 1. June 2016 (i) 2. March 2017 (ii)1. March 2017 (b)1. March 2019 (b)2. March 2019 (b)3. March 2019 (c)1. March 2017 (d)1. March 2017 (d)2. March 2017 (d)3. March 2017 (d)4. December 2018 (e) ongoing works (f) Ongoing works	Permission is required from neighbouring countries of Nepal and Bhutan for carrying out survey & investigations in their territories for Manas-Sankosh-Tista-Ganga and Kosi- Ga'hagra links. NWDA through MoWR is pursuing the matter with MEA for expediting the dilogue with neighbouring countries. In view of this, the target due of completion for all the Himalayan links may not be fixed. NWDA has carried out alternative studies of Manas-Sankosh-Tista-Ganga link to avoid Jogighopa – Tista – Farakka (Alternative to M–S–T–G).
									In the alternative proposal of M-S-T-G link Manas Tiger Reserve and Buxa Tiger Reserve and other Forests will be avoided. Therefore, NWDA is doing alternative alignment of MSTG link which merges both MSTG and JTF alignments.

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
		IWRSD-CWC		Preparation of DPR of identified water resources projects for making investment decisions towards project implementation with a view of development of country's water resources.	24.00	Preparation of DPR of Kalez Khola, Sikkim. Continuation of survey & investigation of Kalez Khola, Sonai & Rukni Irrigation Schemes. Survey & Investigation of new projects in NER (Tlawang in Mizoram), Sikkim (Tarum Chu HEP, Kali Khola), Berinium HEP, J&K, HP and funding of national project Gypsa to continue.	DPR of one projects will be completed and investigations and studies in respect of remaining will continue.	Activities to continue throughout the year as a part of programme to be completed during 12th Plan.	For Some dam- STG link Suirvey and investigation work is under progress. Link involve Naxal infested area, therefore the work may be delayed. A DPR normally takes 3-4 years for preparation
		Brahmaputra Board		1. 'Survey & Investigation' and Preparation of- o Master Plan o DPRs for Drainage Development Schemes o DPRs for Multipurpose project 2. Execution of Anti-erosion schemes & Flood Management Schemes 3. Execution of Drainage Development Schemes 4. Construction of raised platforms 5. Feasibility studies of channelisation of river Brahmaputra 6. Operation and maintenance and upgradation of NEHARI 7. Construction of HQ complex and R&M of assets created by the board.	80.00	1. 'Survey & Investigation' and Preparation of- o 3 Master Plans o DPRs of DDS o DPR of Simsang MP Project 2. Execution of Anti-erosion schemes & Flood Management Schemes 3. Protection of Majuli Island- □ Phase -IV- 5% 4. Avulsion of Brahmaputra at Dhola Hatighuli- Phase- IV -Balance additional works Phase- V -2% 5. Balat Village, Meghalaya, phase II works 6. Mankachar, Kalairalga, Assam- 40% 7. Masalabari area, Assam- 80% 8. Execution of Drainage Development Schemes o 25% works of Barbhag DDS o 30% works of Amjur DDS o 50% of Jengrai 25% of Demow DDS 9. Construction of new raised platforms 10. Feasibility stuides of channelisation of River Brahmaputra 11. Operation and maintenance and upgradation of NEHARI 12. Construction of HQ complex and R&M of assets created by the board.	1. 'Survey & Investigation' and Preparation of- o 3 Master Plans o DPRs of DDS o DPR of Simsang MP Project 2. Execution of Anti-erosion schemes & Flood Management Schemes 3. Protection of Majuli Island- □ Phase -IV- 5% 4. Avulsion of Brahmaputra at Dhola Hatighuli- Phase- IV -Balance additional works Phase- V -2% 5. Balat Village, Meghalaya, phase II works 6. Mankachar, Kalairalga, Assam- 40% 7. Masalabari area, Assam- 80% 8. Execution of Drainage Development Schemes o 25% works of Barbhag DDS o 30% works of Amjur DDS o 50% of Jengrai 25% of Demow DDS	Activities implemented by Brahmaputra Board	Execution of schemes depends on timely communication of approval of 'Administrative Approval' and 'Expenditure Sanction', 'Techno-economic clearance' and 'Investment clearance'.
							9. Construction of new raised platforms 10. Feasibility stuides of channelisation of River Brahmaputra 11. Operation and maintenance and upgradation of NEHARI 12. Construction of HQ complex and R&M of assets created by the board.		
		Flood Forecasting		1) Issuing flood forecasts at existing 147 level forecast and 28 inflow forecast sites covering 20 river basins so as to minimise loss of life and property by assisting relief and rescue agencies with real time forecast information. 2) Automation of the existing network of forecast sites together with telemetry system for communication of real time data and other state of art equipments. 3) Automation and telemetry system at 219 existing stations covering flood forecasting network of CWC.	60.00	1) Collection of real time data, compilation and formulation of flood and inflow forecast and its dissemination to user agencies to continue. 2) Automation of existing flood forecast sites together with telemetry system for communication of real time data and other state of art equipments.	Flood Forecasts will be issued by CWC which helps in State authorities in undertaking flood mitigation works and save lives and property	Works will be continued throughout the year as a part of programme to be completed during 12th Plan	Late approval of SFC proposal by the government towards modernisation of CWC flood forecasting activities and expansion of flood forecasting network, inundation forecasting and collaboration with best-in-field practising global agencies.

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
		Interlinking of rivers		This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for preparation of Detailed Project Report for Inter-linking of Rivers.	1.00	As the scheme is new, no further project details are available.			
				Sub Total	259.60				
4	Water Resource Management	Irrigation Management Programme		Incentivising States for improvement in irrigation management.	0.01	1. Evolution of framework for incentivising states for improvement in irrigation management 2. Approval of scheme- EFC Memo Approval of Scheme - Cabinet Note 3. Release of incentives to State Govts. 4.	Incentivising States for improvement in irrigation management will result in increased water use efficiency, participatory irrigation management better utilization of irrigation infrastructure.	A questionnaire and base paper for Irrigation Management Programme has been forwarded to all the State Govts./ UTs for obtaining their comments/ information. After receiving their comments, the detailed plan for the scheme will be prepared.	
		HRD/Capacity Building	(A) HRD/Capacity Building Programme- NERI WALMIs	The objective of the Institute is to provide capacity building activities and for undertaking technical services to the line departments in order to improve the agricultural production.	5.00	The institute will Organize training programmes during the FY 2016-17 for farmers and functionaries of Water Users Associations etc.	During 2016-17 it is proposed to conduct 60 training programmes (approximately, 15 in each quarter). Besides, workshops/seminars/ Conferences on Water Land Management will also be convened on issues and problems pertaining to water and land resource management in the North Eastern Region	Whole year	<ul style="list-style-type: none"> Lack of centres for regular interactions at the state level. Non arrival /reporting of adequate number of trainees in some of the courses.
			(B) HRD/Capacity Building Programme- NWA		7.00				
			(C) HRD/Capacity Building Programme- RGI	Capacity building of professional, sub professionals and other stakeholders in the field of groundwater	8.00	1. Tier 1- 44 2- 17 house)-100 2. Tier 3. Tier 3(in 4. Tier 4- 225	1. Tier I- 650 persons Trained GW Professionals 2. Tier II-320 GW Professionals 3. Tier III – 10,000 Trained sub professional 4. 22,500 Trained sub professional Total of 33470 persons	1 st April 16 to 31 st March 2017	The success 225 Tier III training will depend on the success of tendering process for outsourcing

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			(D) HRD/Capacity Building Programme- IEC	To generate awareness amongst the masses about the importance of water and need for its conservation.	10.00	ii. Organization of Painting Competition at Schools/ States and National level in the country. ii. Awareness on water conservation through Doordarshan, All India Radio and Private T.V. & Radio Channels . iii. Short films & documentaries to generate awareness among masses. iv. Mass awareness programmes / workshops through CGWB and CWC. v. Publicity through print media/ traditional media, printing and distribution of banners, posters etc. vi. Outdoor Publicity through Display of backlit translites at selected sites/ Erection of hoardings. Display on Metro trains /trains /buses. vii. Participation in Exhibition at prominent places like India International Trade Fair, Indian Science Congress etc. viii. Celebration of India Water Week. ix. Mass awareness activities in Tribal areas under the Tribal Sub Plan. x. Organisation of Special days. xi. Preparation of Media-Plan, Developing themes, slogans, logos and creatives etc.	Publicity and awareness about water resources sector with emphasis on water conservation and management.	Activities will be conducted throughout the year as per Annual Action Plan.	
			(E) HRD/Capacity Building Programme- Training of MoWR Officers	To train officers of the Ministry in institutions located in India and abroad in different fields as per the mandate given to MoWR.	2.00	(i) Organizing orientation training for officers/ officials who are newly posted. (ii) Deputing officers/ officials on induction training on selection/ recruitment in the Ministry. (iii) Deputing officers/ officials on mid-career training at various levels/stages in their career. (iv) Conducting in-house/ on the job training at workplace. (v) Deputing officials/ officers for thematic training like leadership development, stress management, ethics and values, finance administration, etc.	Human Resource Development through enhancement of domain knowledge with a view to improving efficiency in the tasks.	The training of the officers/ officials will be conducted round the year as per the Training policy of the Ministry	
		Infrastructure Development	CGWB(IT)	1. Design & Development of Web based Applications for e-Governance activities 2. Procurement of 300 PCs & Peripherals. 3. Networking in Regional Offices.	20.00	1. Design & Development of Web based Applications for e-Governance activities. 2. Procurement of 300 PCs & Peripherals. 3. Networking in Regional Offices. 4. Training, O&M.	1. Design & Development of work flow applications for e-Governance activities. 2. IT Infrastructure and network would be created for e-Governance activities in CGWB Office.	3 years for item No. 1 and 1 year for item No. 2,3 & 4.	Subject to approval and expenditure sanction by the Ministry

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			CGWB(L&B)	<p>1.Construction of Building for Regional & Divisional Office Including Workshop & Store at Guwahati. (Civil + Electrical).</p> <p>2.Construction of Building for Divisional Store & Workshop at Bangalore.</p> <p>3.Construction of Staff Qtrs for the employee of CGWB at Bhubaneswar.</p> <p>4.Construction of Building for office Store & Workshop for Div-XII, Bhopal.</p> <p>5.Construction of Building for Regional & Divisional Office at Ahmedabad.</p> <p>6.Construction of Building for Divisional Office, Workshop & Store of CGWB, Div-II at Ambala.</p> <p>7.Construction of Boundary wall, Building for Office workshop & Store for Regional & Division at Jammu.</p> <p>8.Construction of Building for RGNWTRI (RGI) at Raipur.</p> <p>9.Construction of Building for Divisional Workshop & Store at Chennai.</p> <p>10.Construction of Building for Divisional Office, Workshop & Store at Jodhpur.</p>		<p>Item 1 : Regional and Divisional Office at Guwahati.</p> <p>Item 2: Divisional Store and Workshop at Bangalore.</p> <p>Item 3: Staff Qtrs. for the employee of CGWB at Bhubaneswar.</p> <p>Item 4: Divisional Store and Workshop for Division-XII at Bhopal.</p> <p>Item 5: Regional & Divisional Office at Ahmedabad.</p> <p>Item 6: Divisional Office, Workshop & Store Division-II at Ambala.</p> <p>Item 7: Boundary Wall, building for Office, Workshop & Store for Region & Division at Jammu.</p> <p>Item 8: Boundary Wall and Building for RGNWTRI (RGI) at Raipur.</p> <p>Item 9: Building for Divisional Workshop & Store at Chennai.</p> <p>Item 10: Building for Divisional Workshop & Store at Jodhpur.</p>	<p>Item 1 : 1.00</p> <p>Item 2: 0.00</p> <p>Item 3: 0.00</p> <p>Item 4: 0.00</p> <p>Item 5: 2.00</p> <p>Item 6: 2.00</p> <p>Item 7: 3.20</p> <p>Item 8: 6.70</p> <p>Item 9: 2.00</p> <p>Item 10: 4.40</p>	<p>Item 1 : 1-2 years</p> <p>Item 2: -</p> <p>Item 3: 5 years</p> <p>Item 4: -</p> <p>Item 5: 1-2 years</p> <p>Item 6: 1-2 years</p> <p>Item 7: 1-2 years</p> <p>Item 8: 5 years</p> <p>Item 9: 1 years</p> <p>Item 10: 1-2 years</p>	<p>Item 1 : The CPWD has stated that main building work completed and development works like roads, filtration plant & horticulture work etc is in progress. The CPWD also stated that this is not the last payment as some works are still under progress. Final expenditure will be communicated after completing all the works.</p> <p>Item 2: Construction Work completed.</p> <p>Item 3: MoA has been signed and DPR is under consideration of CGWB.</p> <p>Item 4: Construction Work completed.</p> <p>Item 5: Minor change in MoA is under consideration of CGWB and MoWR.</p> <p>Item</p> <p>6: Revised estimate and MoA submitted to Ministry for approval.</p> <p>Item 7: Revised estimate and MoA submitted to Ministry for approval.</p> <p>Item 8: Proposal for Expenditure Sanction of Rs.6.70 Crore in favour of NPCC Ltd. has been sent to Ministry. In turn, the Ministry is of the view that location of the Institute at Raipur is difficult from point of view of reach. Therefore, Ministry has proposed to set up the Institute at Pune or Faridabad. The availability of land at Faridabad (Adjoining the existing building) has been appraised to Ministry.</p>

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			CWC (Land & Building)	To procure land and construction of office/residential buildings for CWC for providing decent, honorable better and healthy working condition to its staff.		1) Acquisition of land and construction of non-residential and residential building for CWC at various locations all over India. 2) Modernisation of CWC HQ at New Delhi will continue. 3) Construction of hutments for CWC site locations.	Land acquisition of Hutments at several Sites and for Office cum residential Complex at Hyderabad/ Schar. Office buildings at different locations along with modernization of CWC HQ. Constn. of Boundary wall at Itanagar.	Majority of works are being implemented by CPWD/ NPCC/ CWC.	The CWPRS, Pune has requested to CGWB to send formal request for transfer of 30,000 sq.mtrs of land to CGWB for C/o RGI building at Pune. Item 9: Revised estimate and MoA submitted by NPCC which is under examination of CGWB. Item 10: Revised estimate and MoA is still awaited from NPCC.
			Infrastructure Development-e-Governance Scheme of MoWR(Proper)	To strengthen the working environment with a view to providing of prompt, responsive and transparent governance. Dissemination of citizen centric information on the water related issues.		(i) Implementation of Human Resources Management System, Project Monitoring System and other e-Governance initiatives/ softwares etc. (ii) Hardware and software costs, server /service charges, Digital signatures, Recurring Charges and miscellaneous IT/ e-Governance tools etc.	(i) Development of HRMS and Project Monitoring system/ Application Software (AIBP, RRRs, FMP, National Projects and Ground water projects etc.) (ii) Hardware: Server machines and accessories (Scanners, Multifunction Printers etc.) and computers consumables for e-Governance application launching.	As per NIC/concerned agency proposal By March, 2017	Implementation of HRMS and PMS/ MIS has been identified as a part of ongoing e-Governance Plan.
			Infrastructure Development-IT, MoWR(Proper)	To Procurement of Computers, printers, Scanners, laptop, UPS, Multifunction Machine, Digital copiers etc., Consumable Items		Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database to facilitate e-Gov	Procurement of Desktop Computers and peripherals, Purchase of Photocopier Machines, Scanner, AMC of IT equipment, photocopier Machines, UPS implementation of e-Office	Procurement of Desktop Computers and peripherals, Purchase of Photocopier Machines, Scanner, Change of XP is a time consuming process, AMC of IT equipment, photocopier Machines, UPS implementation of e-Office	Procurement of Desktop Computers and peripherals, Purchase of Photocopier Machines, Scanner, AMC of IT equipment, photocopier Machines, UPS
			Infrastructure Land Building MoWR (Proper)				Renovation of offices		
Development of Water Resources information System					84.87				

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1	2	3	4	5	6	7	8	9	10
			(A) Hydrological Observations and Monitoring System						
			Upgradation of existing HO Stations and Setting of new HO Sites	1) Continuation of Hydrological Observations activities including snow hydrology, water quality and monitoring of Glacial lakes, 2) Expansion and modernisation of hydrological observation network with state of art technique and equipments, 3) Collection compilation storage, Dissemination, analysis and publication of Data in form of Water Year Book		Observation of data at 878 sites and data collection at G&D sites and snow observation sites for various uses etc. to continue. expansion of data observation network through establishment of new stations.	Works are of continuing nature and to be continued on routine basis. River Flow data for 878 hydro-meteorological stations for use in water resource management. Creation of database of hydro-meteorological data throughout the country for common rivers with neighbouring countries and with the States of desired quality and frequency for use in planning and development of water resources	Data/ periodical observation of hydro-meteorological, snow observation, Water quality parameters as per established procedures and protocol to continue throughout the year.	Expansion of network by adding new stations is dependent upon new work charged staff (2551 nos) to be sanctioned under this scheme. Similarly, supervisory staff (under Restructuring of CWC scheme) is also required to be made available for manning the new sites on regular basis. Approval to procure field inspection vehicles for increasing mobility of CWC field officers and staff working at remote locations.
			Collection of Storage data on the major reservoirs in the country	Collect reservoir storage status on real time basis of 120 reservoirs whose live storage is proposed to be monitored by CWC		Installation of water level automated sensors and telemetry system on 66 reservoirs	Real time status of major reservoirs in country	The activities to continue throughout the year as part of program to be completed in 12th Plan period.	
			Developing Coastal Management Information System (CMIS)	Operational Coastal Management Information System to help in determining causes of erosion/ sediment transportation /defining sediment cell/sediment budgeting etc along maritime coastline to enable planning of coastal protection schemes Data collection and documentation (6 sites) Collection, Analysis, Processing and Integration of Coastal Data into WRIS Strengthening of CPDAC/it's sub-committees, Field visits, Training/Study Tours, Technology Transfer, Strengthening of Beach Erosion Dte. as a Centre of excellence , Preparation of Manual, guidelines, Workshop / Seminar etc.		Opening of three site and data collection Organizing meeting of CPDAC and its sub-committees. Strengthening of Beach Erosion Directorate	Coastal data for three sites for use in project planning.	Activities to continue throughout the year	Draft tripartite MoU among IIT Madras (project executioner), CWC (Project owner) and State governments (project facilitator) is awaiting approval of government. Project implementation will follow requisites approvals.
			(B) Irrigation Census						

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			Rationalization of Minor Irrigation Statistics (RMIS)	Conduct of 5th Minor Irrigation Census in the country using traditional methodology.		1.Release of 40% (Second Instalment) of Census funds to States after completion of field work by States/UTs and receipt of Utilisation Certificates for first instalment from States/UTs. 2.Training to States/UTs for data entry/validation using software developed by NIC. 3.Data entry/ validation by States/UTs. 4.Receipt of Census data & Scrutiny of Census data at Central level	1.Completion of field work (including inspection & scrutiny)of Minor Irrigation Census by States/ UTs. 2.Organisation of Data processing Workshop for the States/UTs at Central level. 3. Generation of tables for those States which would have finished fieldwork /data entry and validation in 2015-16. 4. Data entry/validation using software by these States. 5. Web publication of National level tables.	Various phases of 5th Minor Irrigation Census (i.e.Field work, data entry, validation) will continue in different stages in States/UTs during the year.	1)Release of funds will depend on timely submission of UC for 1st instalment, adequate budget provision and timely completion of field work by States/UTs. 2)Timely development of software by NIC. 3)Timely completion of data entry/validation by State/UTs and submission of data to the Ministry 4) Release of 3rd instalment will depend on receipt of UC for 2nd instalment & validated data from States/UTs.
			Census of Major and Medium Irrigation Projects	Collection of census data (Phase-II) at outlet level of 8 projects covered in the Phase-I through outsourcing		Data at the outlet level to be collected through outsourcing during Phase-II in respect of 8 projects (pilot basis) covered in Phase-I	The compiled data of Phase-II of Pilot Census will be integrated in INDIA WRIS portal	Will be decided at the time of award of work	CWC is presently engaged in retendering for the proposal of outsourcing the work for Pilot Census (Phase-II).
			(C)Water Quality Assessment Authority and Monitoring System	To provide Secretarial assistance to WQAA		Uniform Protocol on Water Quality Monitoring	Uniform Protocol on Water Quality Monitoring	Continuing Activity	

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			(D)Strengthening of Monitoring Unit in CWC	Monitoring of major and medium irrigation and multipurpose projects so that they are completed as per scheduled timelines To develop information system of the water resources projects and related subject at the national level Evaluation of IP creation using remote sensing techniques		Monitoring of major and medium projects and monitoring of reports. Pilot study using the BHUVAN portal as per NRSC user manual to develop in-house capability in CWC for using satellite imagery and potential assessment study in future similar to NRSC with the imaginary having better resolution than that of CARTOSAT- I & II. Online proposal monitoring system (AIBP-PMS), entry of AIBP proposal online by authorised project authorities of state govts., modifications necessary, if any.	General/ AIBP Monitoring of Major/Medium/ERM Projects The work of Remote Sensing based evaluation of IP creation will continue by getting the work done through NRSC or by in-house capability for analysis of satellite data aquired from NRSC data centres Training by NRSC for CWC ffciers for pilot study of 13 identified projects to develop in-house capability Web enabled online monitoring system - Monitoring of project by field visits will also be supplemented with a web based online monitoring system linking the state govt. monitoring offices/ project offices in respect of major/medium/ERM projects receiving AIBP assistance with the regional offices of CWC as well as the CWC head quarters for better monitoring of ongoing activities on the project.	The activities are continuing during the Plan period.	Based on the Pilot study made on BHUVAN Portal with available CARTOSAT- I & in certain cases CARTOSAT-II imagery, most of the field directorate asserted that the digitisation of minor-subminor and gaps therein can not be digitised. It has been asseted that the digitisation by Google Earth is better option as supplementry monitoring machanism. However,if higher resolution multispectral imageries are uploaded in the Bhuwan Portal, the better results may be processed.
			(E)Data Bank and Information System						
			Web-enabled Water Resources Information System & Setting up of National Water Informatics Centre (NWIC)	Creation of Watershed Atlas and development of web enabled Water Resouces Information system of the country at 1:50000 scale Reassessment of basin wise water availability for planning of national water resources		(i) Upgradation aand refinement of INDIA WRIS portal (ii) The work of Reasessment of Water Availability of 19 Nos. of basins in the country (iii) Training of CWC officers by NRSC for analysis of imageries and use of data for reassessment studies.	'Single Window' source of updated data on water resources & allied themes; and provide value added products and services to all stake holders	The activities are continuing during the Plan period.	The studies for basin wise reassessment of Water availability" is underway and presently is held up foor want of approval of revised proposals necessitated due to revision in cost of softwares and hardwares proposed to be procured. After Creation of NWIC under National Hydrology Project during 2016-17, the India-WRIS project will be funded under NHP Scheme.
			Up-gradation and Modernization of Library Information Bureau in CWC	Enhancement of CWC professional knowledge base by providing them with best of literature on the subject by upgrading the facilities in library and modernisation of library information system		Up-gradation & Modernization CWC Library & Information Bureau	up-gradation as well as enhancement of the knowledge of CWC officials in the field of water related sector	The activities are continuing during the Plan period.	

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			Software Management in CWC	Enhancing e-governance capabilities with web based custom-made softwares in CWC. Up-grade and strengthen the hardware/ software/ network resources for CWC-HQ and field offices		Up-grade and strengthen the hardware / software / network resources for CWC-HQ and field offices	Enhance e-governance capabilities with web based custom-made softwares. Up-grade and strengthen the hardware/ software/ network resources for CWC-HQ and field offices	Continuing process	
		Ground Water Management and Regulation	(A) Aquifer Mapping (A1) Data Generation		303.39	<p>1). Construction of Exploratory and Observation Wells through Inhouse- 750 wells 2).Geophysical survey through inhouse</p> <ul style="list-style-type: none"> • VES-2000 Nos • Borehole Logging-200 Nos <p>3). Construction of Arsenic free Exploratory wells and Observation wells in Balia & Gazipur district, U.P through outsourcing- Total 72 wells(Continuing from 2015-16) 4). Advance Geophysical techniques including Heliborne Survey in Allahabad & Kaushambi district, U.P through outsourcing</p> <ul style="list-style-type: none"> • Electrical Resistivity Tomography(ERT)-28 Line Km. • Heliborne Geophysics(TEM and Magnetic)- 2600 Line Km. • Ground Base TEM-75 Nos <p>5). Construction of Arsenic free Exploratory wells and Observation wells in Arsenic affected areas of Bihar, West Bengal and Jharkhand through outsourcing- 167 wells 6). Construction of Exploratory and Observation wells in Punjab, Haryana, Rajasthan, A.P. Telengana, Karnataka, Tamil Nadu and Gujarat States through outsourcing-3187 wells 7). Chemical analysis of Water samples in Gujarat, M.P, Orissa, Punjab, Haryana, U.P, H.P, A.P.Telangana, Bihar, Jharkhand, Chattisgarh & Kerala through outsourcing-6043 Nos</p>	<p>1.Integration/Validation of Data generated through various activities of Exploration, Geophysical, Chemical, hydrological, remote sensing & Aquifer Response modelling</p> <p>2.The Ultimate Outcome is Aquifer Maps and Management Plan</p>	1st April 2016 to 31st March,2017	
						<p>8) Conducting VES in Gujarat, Tamil Nadu, A.P, Telangana, & Karnataka through outsourcing- 3569 Nos</p> <p>9). Hydrogeological Data Generation in 11 districts of Bundelkhand through outsourcing :-</p> <ul style="list-style-type: none"> • Exploratory Drilling-493 wells • VES-2100 nos • Borehole logging-100 nos • 2D Imaging- 133 Nos • Ground TEM-73 nos • Chemical Analysis of Water Samples-9300 nos 10) Data Generation by Drilling of Exploratory wells, VES, Chemical analysis of Water samples in remaining area of 12th plan through outsourcing(under finalisation) 			
			A2). Participatory Ground Water Management			Ground Water Management Programme facilitation and Participatory Outreach programmes for Delivery to the End Users	To facilitate the stakeholders at grass root level with the outcome of ground water management	1st April 2016 to 31st March,2017	

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			B. Ground Water Monitoring	i. Monitoring a hydrograph networks stations a. Monitoring a hydrograph networks stations for water level and water quality(nos) b. Establishment of additional wells (nos) ii. Water Quality Sampling Analysis (nos) iii. Technical assistance to organisations for water supply source investigations(nos) iv)Regulation of Ground Water development by Central Ground Water Authority v)Awareness for ground water conservation & rainwater harvesting etc – Nos(Need Based) Vi)Organizing National Ground Water Congress, Workshops, Seminars, Painting Competition etc vii)Ground Water Resources Assessment viii)Preparation of Reports, Maps for dissemination of Scientific information		Monitoring 22339 wells 4 times in a year 2000 nos 20000 Nos samples Need Based Regulation of ground water in notified areas. Need Based Need Based Dynamic Ground Water Resources Assessment (as on 31st March 2013) State Report-10 Nos Ground Water Year Books-24	1)Depiction of ground water regime and long term trends of the country will be produced. 2) Ground water quality of aquifers will be determined for potable and other uses. 3) Assistance to concerned organizations for tapping more ground water for their water supply requirement 4)Regulation of ground water development and management in the country will result in arresting the trend of depletion. 5) For creating awareness regarding conservation of rainwater for sustainable management of water resources 6)For sharing of views, knowledge and ideas in matter of ground water development and management 7)For assessment of ground water resources for better management 8)Compilation of works and data generated for utilization by stakeholders.	1st April 2016 to 31st March,2017	
			C. Procurement of Machinery and equipment			Procurement of Rigs & Compressors, scientific instruments and softwares	For making in-house arrangement to generate improved and accurate data acquisition facility		
		National Hydrology Project		i) Establish a system for timely and reliable water resources data acquisition, storage, collation and management. ii) Capacity building of the State and Central sector organisations in water resources management	165.00	To develop systems for informed decision making through Decision Support Systems (DSS) for water resources assessment, flood management, reservoir operations, drought management, etc.	i) reduction of flood and drought losses in the country, especially in the agricultural sector of the economy ii) improved water resources planning and management in the country following river basin approach	It is envisaged that the Project would be completed in 8 Years i.e. from 2015-16 to 2023-24.	EFC Notes has been approved by the DEA, Ministry of Finance on 16.10.2015 and Cabinet Note has been supported by all the concerned Ministries.
		Research and Development Water Resources		Objective of the scheme is to find practical solutions to the Country's water resources related problems and to improve available technology, engineering methods, procedures, and to create/upgrade research facilities, benchmarking of the research institutions of the premier organisation under MoWR,RD&GR	55.00	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.	Research/Technical reports - 200 Research papers - 260 Training and workshop - 61	The work is to be implemented by Apex/ Research Organisations of the Ministry.	
				Sub Total	660.27				

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5	Pradhan Mantri Krishi Sinchai Yojana: AIBP and HKKP	Accelerated Irrigation Benefit Program		Grant is released to State Governments under AIBP to complete ongoing Major, Medium & Minor irrigation/multipurpose projects in advanced stage of construction and which are beyond the resource capability of State Government in a time bound manner with a view to (A) Create additional irrigation potential and (B) Derive envisage benefits from these projects.	1000.00	The Funds are projected for 149 on going projects and also for national projects.	Targeted Irrigation Potential -15.22-----Hactar.	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	The projects included in the AIBP are to be executed by respective State Govts. The time for completion of Major/Medium Irrigation Scheme is 5 years including the year of inclusion under AIBP.
		Har Khet Ko Pani (PMKSY)			500.00	Scheme transferred to Min of Agriculture. Some components are implemented by MoWR,RD &GR. . Scheme under approval stage.			
			SMI	Grants released to the respect states for SMI projects creating below 2000 hact Irrigation Potential.		Irrigation Potential of 0.50 million hectares is targeted for creation	Targeted Irrigation Potential is 0.5 Hactar.	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	
			RRR	Grant is Released to State Governments for Repair. Renovation and Restoration of Water Bodies.		Grants released to State Governments as per thier Demands. Quantifiable Outputs are:- (i) Irrigation Potential of 0.40 million hectares is targeted for creation (ii) Central assistance released.	(i) Ground Water Recharge, (ii) All round socio-economic development of people. (iii) Enhancement of avaiability of drinking water	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Progress depends on receipt of proposals in complete respect from the States.
			CAD	Grant is released to State Governments under CADWM Programme. At least 10% of the total Culturable Command Area (CCA) of each new project is to be covered under micro irrigation during XII Plan.		Grants released to State Governments as per their demands. Quantifiable outputs are: (i) Irrigation Potential of 3.5 million hectares is targeted for creation. (ii) Central assistance released.	Coverage of Culturable Command Area (CCA) for utilisation of irrigation (i) Irrigation potential of 3.5 million hectares is targeted for creation. (ii) Central assistance released.	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Progress depends on receipt of proposals in complete respect from the States.
			GW			SMD for ground water MI schemein Ground Water Wing of MOWR RD &GR			
		Impact Assessment Studies of AIBP Project		To carry out impact assessment studies of Projects under AIBP	1.00	To carry out impact assessment studies of AIBP projects.		Whole year	
		Flood Management Programme		To provide financial assistance to various State Governments for works related to river management, flood control, anti-erosion, drainage development, flood proofing, restoration of damaged flood management works and anti-sea erosion in critical areas in the country, catchment area treatment and related DPRs.	150.00	(i) Rriver management works in critical areas (ii) Anti-erosion works, drainage development works (iii) Anti-sea erosion works in critical areas in the country	The activity will help the States in reducing damages due to flood, river bank ersion, coastal erosion and reduction of sediment erosion in selected river catchments.	The central assistance will be provided for projects as per guidelines. The project completion schedule would be generally 2 to 4 years.	Timely submission of projects by States which have secured all mandatory clearances.

Sl. No.	Name of Group / Scheme	Name of Component	Component sub-heading	Objective/Outcome	Finalized BE (2016-17)	Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks/Risk factors
1	2	3	4	5	6	7	8	9	10
		River Management Activities and works 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 and anti sea erosion works, Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).	200.00	(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and (ii) Transmission of flood related data from / to neighboring countries (iii) Preparation of Joint Detailed Project Reports (DPR) by PDA & undertaking pre-construction works for Pancheswar Multipurpose Project. Preparation of DPR by JPO for Sapta Kosi High dam including Sunkosi diversion cum storage scheme & Kamla dam project. (iv) Development works on common/border rivers. (v) Anti-erosion and anti sea erosion works of UTs. (vi) Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).	(i) Mitigating the recurring flood problems, bank protection works in Indo-Bangladesh border, Indo-Pakistan border and Union Territory would be carried out. The works are would be in West Bengal, Tripura, UP, J&K, Punjab, HP and UTs. Flood Mangement works on Indian side in Bangladesh & Pakistan sectors as well as UTs covering the States of West Bengal, Tripura, Assam UP, J&K, Punjab and UTs are proposed to be carried out for mitigation of flood damages & erosion control in the concerned areas. (ii) The DPR for Pancheswar Multi purpose project would help in drawing programme for implementation of the project & pre-construction works viz approach roads/ buildings etc would help in undertaking main project activities.	Implemented by Central Water Commission, Ganga Flood Control Commission, and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal, Jammu & Kashmir, Punjab, Himachal Pradesh, Uttrakhand and UTs.	Timely submission of projects by States which have secured all mandatory clearances.
		Irrigation Census			25.13				
				Sub Total	1876.13				
6		National river Conservation Plan			250.00	Under this component (WB and JICA-Varanasi) 28 infrastructure projects and 7 projects pertaining to institutional development and project implementation support have already been sanctioned. These projects target STP capacity creation of 511.7 mld against which 20 mld has already been created. During 2016-17, sewage treatment capacity of 14 mld has been targeted under NGRBA. Under JICA assisted Yamuna Action plan at Delhi 10 projects will be sanctioned targetting rehabilitation of 950 mld STP capacity. Under htis component (NgRBA-Non EAP) 52 infrastructure projects have been sanctioned. These projects target STP capcity creation of 290.53 mld against which 107.75 mld has already been created. During 2016-17, sewage treatment capacity 125.23 mld has been targeted under NGRBA NON EAP component. Under NRCP component 155 mld STP capcity (including rehabilitation) is likely to be commissioned by 2016-17 at Haryana on Yamuna. The ongoing non EAP projects on Ganga & its tributaries are recently transferred from MoEF&CC to MoWR, RD & GR and under implementation.	The projects and activities under this plan include pollution abatement measures for different sources of pollution, river front development, Afforestation and conservation of aquatic life, Communication and public outreach, water quality monitoring etc. and enforcement of standards and other policy initiatives for ensuring Aviral and Nirmal Ganga.	Projects identified under NGRBA program are scheduled to be completed by 2020. Projects under JICA assisted Yamuna Action Plan III are scheduled to be completed by 2018.	
				Grand Total	5500.00				

CHAPTER – III

REFORM MEASURES AND POLICY INITIATIVES

3.1. Review of National Water Policy:

Review of National Water Policy: National Water Policy was first formulated in 1987 which was subsequently reviewed and a revised National Water Policy was adopted in the year 2002. In pursuance of the strategies identified in National Water Mission Document as well as deliberations in National Water Board, Ministry of Water Resources, River Development and Ganga Rejuvenation initiated the process of review of National Water Policy, 2002.

A series of consultation meetings were held with Members of Parliament; Academia, Experts and Professionals; Non-Governmental Organizations; representatives of the Corporate Sector; and representatives of Panchayati Raj Institutions. The National Water Board considered the Revised Draft National Water Policy (2012) at its 14th meeting held on 7th June, 2012. The draft policy was also discussed with the Consultative Committee of Parliament. The Draft National Water Policy (2012) was deliberated by the National Water Resources Council (NWRC) at its 6th meeting on 28th December, 2012 at VigyanBhawan, New Delhi under the Chairmanship of Hon'ble Prime Minister of India, wherein the National Water Policy (2012) was adopted as per deliberations.

National Water Framework Law: A National Water Framework Law would lead the way for essential legislation on water governance in every State of the Union and devolution of necessary authority to the lower tiers of government to deal with the local water situation. For the preparation of Draft Water Framework Act, a Drafting Committee headed by Dr. Y. K. Alagh was constituted on 3rd July, 2012. The Report of the Committee was submitted in May, 2013. The Report was placed before the National Forum of Water Resources / Irrigation Ministers of States at its first Meeting held in New Delhi on 29.05.2013 and also provided to the States/UTs. The same was also placed on the Ministry of Water Resources, River Development and Ganga Rejuvenation website for comments. A Committee has been constituted to examine the draft National Water Framework Law.

National Forum of Water Resources and Irrigation Ministers of States:

Such a forum is expected to be the instrument for sharing of ideas and facilitating support to new and innovative ideas for better water governance. Accordingly, a National Forum of Water Resources and Irrigation Ministers of States has been constituted on 14th December, 2012 for sharing ideas, facilitating support to new and innovative ideas and evolving consensus for better water governance in the country.

Hydro-meteorological Data Dissemination Policy:The objective of the policy is to facilitate the access to Government of India owned shareable data and information through a network all over the country in a proactive and periodically updatable manner, within the framework of various related policies, Acts and rules of Government of India, thereby permitting a wider accessibility and use of public data and information. The Ministry of Water Resources, River Development and Ganga Rejuvenation has formulated a Hydro-meteorological Data Dissemination Policy and the same is being followed. The policy has been published in 2013 with the approval of Hon'ble Minister (WR). The entire unclassified data have been uploaded on India WRIS portal. The Policy is under review.

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

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

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

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

Meanwhile, considering the importance of implementation of dam safety procedure, a new draft of the Dam Safety Bill (2014) seeking national level applicability (under entry 56 or entry 97 of List-I of Seventh Schedule of Constitution of India) of the bill was prepared afresh by the CWC and currently the file is under consideration of the Ministry of Law & Justice for its legal opinion for introducing the Dam Safety Bill under entry 56/97 of List-I of Seventh Schedule of Constitution of India instead of Art 252 (which has very limited applicability.)

3.3 National Water Mission:

The NWM outlay for implementation of the various activities during FY-2016-17 includes: NWM Directorate, Baseline studies, Formulation of State Specific Action Plans

(SSAPs), HRD & Capacity Building, Establishment of demonstration projects and setting up of National Bureau of Water Use Efficiency (NBWUE). The status of various activities of the NWM Scheme is as under: -

3.3.1. National Water Mission Directorate:

The Directorate consists of Additional Secretary & Mission Director, NWM and two Advisors (Coordination & Monitoring and Technical) in the rank of Joint Secretary to the Government of India. The Mission Secretariat is functioning from 2nd Floor, Block III, CGO Complex, Lodhi Road, New Delhi. Five Consultants (Experts and recently retired from Central Government), four Young Professionals and one Executive Assistant have joined NWM in 2015. One Consultant and one Young Professional have been assigned activities related to all the five goals (Goal I to Goal V). Inter-Sectoral Advisory Group (ISAG) meetings of all the five goals will be organized during the year, 2016-17. The main activities of NWM are as under:-

- (1) Development of NWM web portal:-** The work of NWM web portal has been assigned to NIC/NICSI and the work is being carried out by the experts from NIC/NICSI in association with NWM. Management Information System is also being developed simultaneously and will be available in the Web Portal (proposed domain name: nationalwatermission.gov.in). The main emphasis in the web portal is integration of information in respect of surface water, ground water and waste water and various activities of NWM as listed in the Mission Document.
- (2) Convention on Participatory Irrigation Management (PIM):-** The National Convention of Water Users Associations (WUA) and two regional conventions were held during 2015-16. Three more regional conventions of WUA's on Participatory Irrigation Management will be organised during 2016-17. The main objective of PIM North Regional convention was to promote equitable distribution of water, creating awareness about conservation of water, minimizing wastage, depletion of ground water table and adopting on-farm water efficient techniques etc. in the command areas.
- (3) NWM has identified eight river basins (Mahanadi, Mahi, Luni, Tapi, Sutlej, Sabarmati, Subarnarekha and western flowing rivers from Tadri to Kanyakumari) for study of impact of climate change in association with research institutes like IITs, NITs, IISc. and IITM under the R & D scheme of the Ministry.**

3.3.2. Preparation of State Specific Action Plans (SSAP) for water sector

It may be mentioned that formulation of State specific Action Plan is a prerequisite for addressing the impact of climate change on water resources in all the States / UTs and it has been proposed to undertake the preparation of State Specific Action Plans for Climate Change in a participatory manner with the active involvement of State governments and other stakeholders involved in water conservation and management.

National Water Mission has initiated actions to prepare State Specific Action Plan (SSAP) for water sector linking with State Action Plans for Climate Change. It is proposed that State-wise/Union Territory wise SSAP for water sector covering irrigation, agriculture, domestic water supply, industrial water supply and waste water utilization in respect of all the States/UTs. The SSAP will present situation of water resources development and management, water governance,

Institutional arrangements, water related policies, cross-boundary issues, agreements etc., Status Report on the State/Union Territory, problems/issues related to all the aspects of water resources specific to the State, and identify a set of probable solutions to address the key issues/problem areas giving pros and cons of the solutions. The State specific Action Plans would essentially consist of:

- (a) Preparation of Status report on present situation of water resources development and management, water governance, Institutional arrangements, water related policies, cross-boundary issues and agreements etc of the State/Union Territory. The document should also define problems/issues related to all the aspects of water resources specific to the State.
- (b) Identifying a set of probable solutions to address the key issues/problem areas giving pros and cons of the solutions.
- (c) Preparation of detailed Action Plan for each of the Strategy/activity identified in the NWM to be implemented by the State/Union Territory.

Twelve States namely, Andhra Pradesh, Telangana, West Bengal, Uttarakhand, Gujarat, Assam, Chhattisgarh, Karnataka, Madhya Pradesh, Maharashtra, Odisha and Tamil Nadu have been requested to prepare their State Specific Action Plans, in the 1st phase. These State Governments have been requested to identify an agency/organization for preparation of SSAP in a meeting held on 18.09.2015 under the chairmanship of AS & MD, NWM. It is proposed that North-Eastern Research Institute of Water and Land Management (NERIWALM), Tezpur, Assam under the Ministry of Water Resources, River Development & Ganga Rejuvenation has been proposed as the nodal agency for coordination, monitoring and release of funds to the selected State agencies for preparation of SSAP.

Provision of Rs.20.00 crore for SSAP has been approved in the scheme “Implementation of National Water Mission”. NWM proposes to offer technical guidance to all the states/UTs through the regional offices of CWC and CGWB at the State level. NWM has proposed to provide financial assistance for preparation of SSAP for water sector Rs. 50 lakh for major/big State and Rs. 30 lakh for small State/UTs).

3.3.3. A) Human resource development/and capacity building/Awareness creation.

The Goal II of the National Water Mission, “Promotion of Citizen and State Action for Water Conservation, Augmentation and Preservation” envisages sensitization and capacity building of Panchayati Raj Institutions, Urban Local Bodies, Water User Associations and other primary stakeholders. Under this goal, the mission document calls for the involvement of NGOs, PRI and local bodies.

NWM has entered into MOU with TISS-Mumbai; NIRD-Hyderabad for one year each and ICAR-IIWM—Bhubaneshwar for two years to undertake sensitization, training and capacity building programmes in water resources management, augmentation and conservation. NWM is in the process of preparation on Guidelines for organizing HRD / training / capacity building / mass awareness programmes.

Monthly meetings are being held with TISS officials to discuss issues on smooth execution of NWM-TISS water project in which TISS has been assigned to develop suitable website, facilitate engagement of NGOs/VOs. TISS has been advised to address strategies of other goals as well and their work plan is being examined by NWM. Besides these, TISS shall also conduct a National Workshop for NGOs/VOs. Durign the FY 2016-

17 about 25 training/awareness programmes will be organised in co-ordination with various organisations.

3.3.3. B) Establishment of National Bureau of Water Use Efficiency (NBWUE)

The Ministry of Water Resources, River Development & Ganga Rejuvenation has proposed setting up of “National Bureau of Water Use Efficiency” (NBWUE). The EFC meeting was held on 22.07.2013 under the Chairmanship of Finance Secretary and Secretary (Expenditure). EFC has recommended Rs.50 crore for setting up of NBWUE. The NBWUE will function as an autonomous authority under the administrative control of Ministry of Water Resources, River Development & Ganga Rejuvenation. NWM has prepared a proposal for creation of NBWUE through notification under Section 3 (3) of the Environment (Protection) Act, 1986. A draft Cabinet Note has been circulated to the concerned Ministries/Departments for inter-Ministerial consultations in the month of May, 2015. The various Ministries/ Departments supported the proposal but Ministry of Environment & Forests and PMO has made some observations on creation of NBWUE which are being addressed.

3.3.4. Baseline study of major/medium water resource projects to get information on the present status of water use efficiency.

There is a provision of Rs.36 crore in the NWM scheme for undertaking baseline studies. It is mentioned that “Increasing water use efficiency by 20%” is the fourth and important goal of National Water Mission. Therefore, there is a need for undertaking baseline studies to know about the present status of water use efficiency of the projects and all usages of water. For irrigation projects, Central Water Commission has already identified 138 Major and 73 Medium Irrigation Projects for water use efficiency/baseline study. The Ministry has in-principle approved the proposal of Baseline Studies for water uses efficiency of 25 Major-Medium projects in the States of Maharashtra, Andhra Pradesh, Telangana and North-Eastern States. The work is to be carried out through WALMI, Aurangabad, WALAMTARI, Hyderabad and NERIWALM, Tezpur in two phases.

Five Projects in Phase-I	Rs. 182.42 lakh
Twenty Projects in Phase-II	Rs. 646.44 lakh
Total cost	Rs.828.86 lakh

It is stated that in the first phase for 5 projects, (Pahumara - Assam, Loktak – Manipur, Arunavati - Maharashtra, Rallapadu - Andhra Pradesh and Peddavadu-Telangana) an amount of Rs. 182.42 lakh is proposed to be incurred and release of first installment @ 40% as advance payment.

The remaining 20 Major-Medium irrigation projects in the States of Andhra Pradesh, Telangana, Maharashtra, Assam and Manipur are proposed to be undertaken at an estimated cost of Rs.646.44 lakh. 40% advance payment (Rs.258.58 lakh) is to be released as first installment.

NERIWALM, Tezpur - Kaliabor lift irrigation, Rupahi medium irrigation and Sukla irrigation in the State of Assam.

WALAMTARI, Hyderabad – Torrigadda Medium Irrigation, Thatipudi Medium Irrigation, Guntur Channel Medium Irrigation, Vengalarayasagar Medium Irrigation, Taliperu Medium Irrigation, Sathnalla Medium Irrigation, Musi Medium Irrigation in the State of Andhra Pradesh and Vattivagu Medium Irrigation in the State of Telangana.

WALMI, Aurangabad – Bor Irrigation, Girna Major Irrigation, Karpara Medium Irrigation, Palkhed Irrigation, Panzara Major Irrigation and 4 more projects in the State of Maharashtra.

More projects in irrigation, domestic water supply and industry shall be undertaken during 2016-17.

3.3.5. Preparation of Demonstration Projects:-

EFC meeting held on 22.07.2013 on the proposal of Implementation of National Water Mission Scheme has recommended Rs.50 crore for preparation of detailed project reports for demonstration and benchmarking of projects. NWM has proposed to undertake demonstration project proposals in water sectors namely, irrigation, industry, domestic water supply and re-cycle and re-use of water. These demonstrative projects shall be aimed at increasing water use efficiency in different water sectors including state-of-the-art technologies. It may be mentioned that Increase in water use efficiency can be achieved by implementing various engineering and non-engineering measures. For increasing water use efficiency in irrigation sector, the various measures to be adopted are: use of Micro-irrigation methods, drip, sprinkler irrigation methods, Implementing water supply on volumetric basis, Promotion of Participatory Irrigation Management (PIM), creation of Water Users Association to collect water charges and maintain water resources infrastructure, Promoting conjunctive use of surface and ground water including re-use of irrigation drainage water etc. NWM has identified the following irrigation projects for preparation of DPR. For taking up of these projects, more funds shall be requested in Supplementary Grants stage.

Sl. No.	State	Project
1.	Telangana	Kaddam Project (CCA-27519 ha.)
2.	Maharashtra	Khekranala Project (CCA-3810 ha.)
3.	Rajasthan	Chambal Project (CCA-2,29,000 ha.)
4.	Rajasthan	Indira Gandhi Nahar Project stage II, Lift Scheme (CCA-3,20,000 ha.)
5.	Punjab	Project for renovation of Kokari distributary, Abohar Branch, Sirhind Canal System (CCA-28,756 ha.)
6.	Haryana	Project for renovation of the Hisar Major Distributary Sub-system of the WJC system (CCA-21,270 ha.)

For other areas, NWM proposed to undertake demonstration projects in association with NIH, Roorkee, CPWD, NEERI, Nagpur and CSRI, Bhavnagar, Gujarat on the re-cycle and re-use and improving water quality. The names of the project proposals are given below:-

- (1) **NIH, Roorkee** – Grey water to blue water at Roorkee – Rs. 1.34 crore
- (2) **CPWD** – Re-cycle and re-use of water – Supplying, Installation, Testing and commissioning of Sewage Treatment Plant having capacity 300 KLD Based on MBR Technology at CGO Complex, Lodhi Road, New Delhi – cost: Rs.2.70 crore
- (3) **CSIR-** Central Salt and Marine Chemical Research Institute, Bhavnagar, Gujarat – Development Testing and installation of Innovative water de-salination and purification

unit at fifteen identified saline sites/villages in Gujarat, Andhra Pradesh and Tamil Nadu - cost: Rs.1.29 crore.

- (4) **CSIR-NEERI, Nagpur** – Integrated Waste Water Treatment plan of a city (Bhubaneswar), Odisha – cost: under process.
- (5) **Delhi Jal Board** –Modernisation and Renovation of STP of exiting Project at Mehrauli area, New Delhi for re-cycle and re-use of water – cost: under process.

3.4 **National Water Development Agency:** 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 of intra-State links viz. BurhiGandak-Noon-Baya-Ganga &Kosi-Mechi link of Bihar State during 2011-12 after approval of revised EFC Memo of XIth Plan period and work of 2 links (one of Maharashtra and one of Tamil Nadu) taken up during 2012-13. DPR of two more intra-State links (one of Jharkhand and one of Odisha) has been initiated during 2014-15.

Special Committee for Interlinking of Rivers headed by Hon'ble Minister (WR, RD&GR) has been constituted vide Gazette notification dated 23rd September, 2014 as per the direction of Hon'ble Supreme Court of India. Till now 7 meetings of this Committee have been held on 17.10.2014, 06.01.2015, 19.03.2015, 14.05.2015, 13.07.2015, 15.09.2015 and 18.11.2015 respectively at New Delhi. The Special Committee for ILR is reviewing progress of ILR once in two months regularly. The Minister/Principal Secretary of the concurring States are the members in the Special Committee.

Special Committee for Interlinking of Rivers has constituted four specific sub-committees; (i) Sub-committee for comprehensive evaluation of various studies/reports (ii) Sub- Committee for system studies for identification of most appropriate alternate plan, (iii) Sub-Committee for consensus building through negotiations and arriving at agreement between concerned States and (iv) Sub – Committee for restructuring of National Water Development Agency.

The Sub-Committee for Restructuring of National Water Development Agency held 7 meetings and submitted its Report to Hon'ble Minister (WR, RD & GR) and Chairperson, Special Committee on 21.09.2015.

The Union Cabinet while approving the constitution of Special Committee for ILR in its meeting held on 24th July, 2014 directed that a committee comprising of experts be constituted to look into the issues relating to inter linking of rivers. In compliance to the direction of Union Cabinet, MoWR, RD & GR vide O.M. dated 13th April, 2015 has constituted a Task Force for Interlinking of Rivers (TF-ILR) under the Chairmanship of Shri B.N. Navalawala, Chief Adviser, MoWR, RD&GR. The tenure of Task Force is 2 years or till further order whichever is earlier. The Task Force will assist the Special Committee for ILR and MoWR, RD&GR regarding the implementation of ILR Programme. The two meetings of the Task Force have been held on 23rd April, 2015 and 5th November, 2015 respectively.

3.5. **Irrigation Management Programme:** The XIIth Five Year Plan Document inter alia proposed a Plan Scheme titled “Irrigation Management Programme” to incentivize States to undertake water sector reform with a total outlay of Rs. 6,000 crores. In order to formulate the said scheme, it is proposed to evolve Benchmarks for State Specific Water Sector Reforms and Methodology for Assessment of States’ performance based on a suitable framework.

A questionnaire for “Evolving Benchmark for State Specific Water Sector Reforms and Methodology for Assessment of States’ performance Based on A Suitable Framework” has been finalized. The same has been forwarded to the States for comments. Further action in the matter would be taken on receipt of response/comments from the States.

Jal Kranti Abhiyan: Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India, New Delhi is celebrating “Jal Kranti Abhiyan” during the year 2015-16 in the country in order to consolidate water conservation and management in the country through a holistic and integrated approach involving all stakeholders, making it a mass movement. The Abhiyan has been launched country wide on 5th June, 2015 and special inauguration programmes were held at Jaipur, Shimla and Jhansi.

Five major activities are being undertaken under the Jal Kranti Abhiyan. They are :

1. Jal Gram Yojana
2. Development of Model Command Area
3. Pollution abatement
4. Mass Awareness Programme
5. Other Activities

3.6 **International Cooperation:** India has been implementing the Indus Water Treaty signed between India and Pakistan under the aegis of World Bank under International cooperation.

a. Indus Waters Treaty 1960

- Tours of inspection and meetings of Permanent Indus Commission
- Collection and supply of data to Pakistan –
 1. supply of daily Gauge & Discharge data of observed and listed sites of Indus Basin rivers to Pakistan
 2. supply of Irrigated Crop Area Statistics for the Western Rivers of Indus Basin for Kharif and Rabi seasons on District wise/ Tehsil wise
 3. communication of Flood warning messages to Pakistan from 1st July to 10th of Oct every year on rivers Chenab, Jammu Tawi, Ravi and Sutlej.

4. Supply of Information of Hydro Electric (H.E.) & Storage Projects on Western Rivers as per Treaty, data collection from projects, analysis of consistency, review & supply.

- Clearance of projects of Indus Basin from Treaty angle.
- Dealing with issues raised on projects from Treaty angle from time to time. Currently active:
- Works in connection with Secretary level meeting with Pakistan for talks with Govt. level.
- Interaction with L&T, PAI Divisions of Ministry of External Affairs on issues arising under Treaty.
- Meetings related to review of progress of Projects in J&K etc. from Treaty Angle and other matters arising from time to time.
- Issues in harnessing Western Rivers upto permissible limits under Treaty
- Issues in the optimal utilization of waters of Eastern Rivers.
- Analysis of data from Pakistan to the extent needed from time to time

b. Inter-State water related issues of Indus basin

- Inter-State issues among Punjab, Haryana and Rajasthan – Shahpurkandi project, Restoration of 0.6 MAF of Rajasthan's share of surplus Ravi Beas waters, Transfer of Control of Headworks at Ropar, Ferozepur and Harike, BML-Hansi Branch - Butana Branch Multipurpose Link channel, Sutlej-Yamuna Link (SYL) Canal, Presidential Reference on Punjab termination of Agreements Act, 2004 etc.
- Central Assistance for emergent counter protective works of rivers Ravi and Sutlej, works related to the Monitoring Committee thereof.
- Matters relating Indira Gandhi Nahar Board.
- Matters relating to Bhakra Beas Management Board –
- Northern Zonal Council meetings relating to inter-state issues of Indus Basin
- Resettlement of Pong Dam oustees – High Level Committee and Sub-Committee meetings

c. Ghaggar Standing Committee, associated Ghaggar matters.

d. Bilateral Cooperation with Australia:

The Governments of India and Australia entered into a Memorandum of Understanding (MoU) in the field of water resources management on 10th November, 2009. The MoU envisages that both the sides will work to enhance cooperation in the field of water resources management and development through sharing of policy and technical experience on water management, both surface and ground water and particularly the river basin management and impact of climate change on water resources. The MoU has been renewed on 5-9-2014 for another five years.

A Joint Working Group (JWG) having equal number of members from both the sides was constituted to monitor the engagements being carried out in fulfillment of the above MoU. The JWG developed/finalised an Action Plan for fulfillment of objectives of

the above MoU during its first meeting on 19.11.2012 in New Delhi. One major activity identified in the Action Plan was to collaboratively develop a Project Plan for Integrated Water Resources Management (IWRM), drawing together key policy, scientific and information inputs for a river basin in India.

Under the JWG, Australia is sharing its experiences in IWRM and planning with India. The Basin of Brahmani-Baitarni River of Odisha, Jharkhand and Chhattisgarh was selected for development of IWRM which involves specialists from Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO), eWater and other Australian organizations working with Indian counterparts.

The second formal meeting of the JWG took place in Australia from 29th April to 3rd May, 2013 during which policy experience in water reform was shared by Australia. Detailed action plan for the next two years was finalized during this meeting. Thereafter, a two-day executive master class (workshop) by Australian water experts for senior level officers of the Ministry and concerned organisations to discuss pathways to river basin reforms and efficient water use as well as preparation of IWRM plan for Brahmani-Baitarni Basin was organised at CWC on 30-31 October, 2013. Thereafter, a two-week training at National Water Academy, Pune on eWater was also organized by the Australian water experts during 18-29 November, 2013 in which engineers/officials from CWC, CGWB, NIH and IMD participated. Australian Water Experts undertook a field-visit to Brahmani-Baitarni Rivers Basin in Odisha and Jharkhand during 10-13 March, 2014 as a part of preparation of IWRM Plan for this River Basin. Thereafter, a follow-up meeting was chaired by Secretary (WR) at New Delhi with the visiting delegation in which the representatives of the States concerned and members of JWG also took part.

The third meeting of JWG was held at New Delhi on 19th January, 2015 to discuss the progress achieved so far in IWRM plan for Brahmani-Baitarni Basin, its future road-map. The proposal of Australia to offer their expertise in rejuvenation of River Ganga was also discussed.

e. Bilateral Cooperation with other countries

Ministry of Water Resources has signed Memoranda of Understanding with other countries also for bilateral cooperation in the field of water resources management and development. A Memorandum of Understanding (MoU) on cooperation in the field of water resources development and management between Hon'ble Minister for Water Resources and Hon'ble Minister for Agriculture and Animal Resources, Republic of Rwanda was signed on 22nd January, 2013 at New Delhi. Thereafter, a Joint Commission having three members from each side has been constituted to carry out the likely engagements of the MoU.

- i) During 17th India-Iran Joint Commission Meeting held in Tehran, an MoU for bilateral cooperation in water resources management was signed on 4th May, 2013. At present, the process of formation of Joint Working Group is underway.
- ii) During the visit of Hon'ble Prime Minister of Iraq to India in August, 2013, a Memorandum of Understanding between the Government of India and the Government of Iraq on bilateral cooperation in water resources development and management was signed on 23rd August, 2013 at New Delhi. A Joint Working Group having equal number of members from both the sides has been constituted in September, 2014 to implement the MoU.

- iii) During the visit of Finance Minister of Republic of Fiji to India, a Memorandum of Understanding for bilateral cooperation with Fiji in the field of Water Resources Management was signed by Secretary (WR) and High Commissioner of Fiji to India on 12-2-2014 at New Delhi. The constitution of Joint Working Group is under process.
- iv) During the India-Bahrain High Level Joint Commission Meeting at New Delhi, a MoU with Bahrain for bilateral cooperation in the field of water resources development and management has since been signed on 22nd February, 2015.
- v) MoUs with Hungary and Morocco for bilateral cooperation in water resources are also under consideration.
- vi) Draft MoU proposed to be signed between India and Israel on cooperation in the field of water resources development and management has been approved by the Cabinet on 2.12.2015. Ministry of External Affairs (MEA) has been requested, vide Ministry's letter dated 17.12.2016 to take up the matter with the Israeli side for early signing of the MoU.

3.7 Central Water and Power Research Station (CWPRS) - A brief description highlighting the objectives and achievements during 2014-15 & 2015-16 (achievement upto 31st December-2015) and the work plan for 2015-16, are given below:

A) R&D in Water Sector, Ministry of Water Resources, River Development and Ganga Rejuvenation - R&D in apex organizations – CWPRS component.

Objectives:

Under XIIth Plan scheme “R&D Programmes in Water Sector”, CWPRS has mainly aimed at strengthening and modernization of its laboratories, instruments, and infrastructure facilities. Other major items include ICT, Training and Dissemination, Basic Research and Mathematical Modelling Software.

Activities during 2014-15:

During 2014-15, with a budget outlay of Rs 9.00 Crore, the major activities undertaken included.

Establishment - (Training & Basic Research) (Rs.10.45 Lakh)

Infrastructure - For development of Tidal Basin facility for Estuarine & Tidal hydrodynamic studies by renovation of existing hangar (Rs.0.45 Crore), Development of experimental facility for studying the Spillways & Energy Dissipators (Rs.0.059 Crore), Renovation of various office-cum-laboratory buildings, boundary wall, roads, special repairs to residential and office buildings and horticulture works etc (Rs.2.13 Crore)

Stores & Machinery - for stores & machinery containing Procurement of Digital Gauges to measure water level (0.063 Cr.), Procurement of Water Heater System for simulation of thermal discharges (0.265 Cr.), Procurement of i) Software for Remote sensing/GIS ii) Workstation for Remote sensing/GIS (0.45 Cr.), Batteries and cables of specifications for Ground Penetrating Radar system (0.04 Cr.), Mathematical Modelling Software-Procurement of software's LITPCK, MIKE21 (0.223 Crore), Procurement of filter

assembly (0.004 Cr.), Procurement of LAN switches and software.(0.282 Cr.), Geotechnical Permeameter (0.010 Cr.), Procurement of CFD software FLOW3D (advanced training and one year AMC of software) (0.014 Cr.)

Operating cost – Expenses for operating cost for Electrical usage charges, expenses towards domestic/ foreign travel, security of office/ staff colony premises, outsourcing of security and house-keeping tasks etc (1.19 Crore)

Activities during 2015-16:

During 2015-16, with a budget outlay of Rs 11.65 Crore, the major activities undertaken included up to 31st December 2015. (Expenditure till December 2015 is Rs.8.58 Crore

Establishment - (Training & Basic Research) (Rs.0.27 Crore)

Infrastructure – (9.05 Crore)

Construction of Hanger/office building and centralized experimental facility for River Engineering and sedimentation mitigation studies (2.15 Crore). Construction of sump and pump house for development of Tidal basin facility for Estuarine & Tidal hydrodynamic studies (0.30 Crore).Construction of Hanger, model tray and water pumping system for Tehermal dispersion studies (1.05 Crore).Construction of 2D Spillway model for basic research in spillway and energy dissipaters division (0.20). Renovation of various office-cum-laboratory buildings, boundary wall, roads, special repairs to residential and office buildings, sewage lines and horticulture works, Renovation of residential quarters etc. (5.35 Crore),

Stores & Machinery – (Rs.1.30 Crore)

Upgradation & Modernization of Laboratories by procurement of latest equipment and Mathematical Modeling Software- and instrument Procurement like Digital micro earthquake recorder, Force Transducer, Water quality monitor sensor and along with digital compound microscope, Mike 11 Software, Digital Still camera computer peripherals etc.(Rs 1.30 Crore)

Operating cost – (1.03 Crore)

Expenses towards Electrical bills, Domestic/ Foreign travels, Telephone bills, Security and Internet charges etc. (Rs.1.03 Crore).

Work Plan 2016-17:

The XIIth plan started from April 2012 with the total outlay of Rs.72 Crore. Out of which a provision of Rs.15.00 Crore is made for 2016-17, which includes

Establishment: Rs. 0.55 Crore for establishment (Training & Basic Research).

Infrastructure:

Rs.9.33 Crore for infrastructure development containing Centralized Experimental facility for River Engineering and sediment mitigation studies (Rs.4.17 Crore), Construction of office building for Centralized facility for River Engineering Studies(Rs.3.00 Crore.) Renovation of various office-cum-laboratory buildings, boundary wall, roads, special repairs to residential and office buildings and horticulture works (Rs.2.16 Crore).

Stores & machinery:

Rs. 3.00 Crore for stores & machinery containing Procurement of Laboratory equipments and Mathematical modeling softwares. Like Procurement of Cyclic Triaxial soil test system (Rs. 0.47 Crore). Procurement of Geotextile tensile testing machine (Rs.0.32 Crore), UDEC 2D and 3DEC software (Rs.0.32 Crore). Procurement of CAD software (Rs. 0.10 Crore), Centralized facility for River Engineering Studies (Rs 0.29 Crore), Well Logging Unit (Rs 1.5 Crore).

Operating cost:

Rs 2.12 Crore for operating cost for Electrical usage charges, expenses towards domestic/ foreign travel, security of office/ staff colony premises, outsourcing of security and house-keeping tasks

B) National Hydrology Project**Objectives:**

CWPRS is performing a role of facilitator in R&D, training, and studies involving special technical support within the overall framework of World Bank aided National Hydrology Project (NHP),

Activities during 2015-2016:

During 2015-16, following activities have been carried out

- Project implementation plan has been prepared.
- Cost tables for NHP amounting Rs.56.26 crore has been prepared.
- Approval for the project is under process.

Work Plan for 2016-2017:

The following activities are proposed under the forthcoming Hydrology Project-3 (which is spanned over 8 Years i.e. 2015 – 2023 and the approval for the PIP is obtained) during 2015-2016

- Construction of Hydromet instrumentation Laboratory for training of Water Level measurement, Velocity measurement, FCS, Communication systems, software development, Computer laboratory so as to support State IAs
- Purpose-driven studies for Water Resources Development, Management and Planning using HP data relevant to implementing agencies addressing vital issues such as Water availability, Water Quality, Hydrological Drought, Un-gauged basins etc. based on the needs of the states.
- Procurement of office/ training equipment for institutional strengthening.
- CWPRS proposes to form a part of the team for customization and implementation of DSS(P) in various states and also in capacity building measures for sustainable DSS(P) & DSS-RT.
- Preparation for HP-III for up gradation of research facilities in CWPRS including institutional strengthening, capacity building, training infrastructure facilities under the overall framework of WB aided Hydrology Project-3.

C) Dissemination of Technical Know-how - The mandate of CWPRS inter-alia includes dissemination of technical know-how by publishing research papers in national/ international journals, seminars/ conferences/ workshops, etc., organizing training courses/ workshops, publishing technical memoranda, delivering lectures and participation in technical committee meetings, etc. The physical targets (actual) during 2014-15, achievements during 2015-16 and physical targets in respect of various activities for 2016-17 is given in the table below.

3.8. Central Ground Water Board - Implementation of web based workflow applications in all the offices of CGWB would help in e-Governance and would introduce transparency in all the activities.

3.9. NWA does conduct mass awareness activities as a part of capacity building. In 2014-15, Workshops/ Programs for school teachers, Officials of Gram Panchayat, NGO's and Media Personals to spread messages on Water Conservations has been envisaged.

3.10. Pradhan MantriKrishiSinchaiYojana (PMKSY) has been launched in July, 2015 under which there are various activities taken up under components AIBP, PMKSY (Her KhetKoPani), PMKSY (Per drop per crop) and PMKSY (Watershed Development). Ministry of Water Resources, River Development & Ganga Rejuvenation provides Central Assistance to different State Governments for completion of different Irrigation Projects.

Growth in agriculture sector on sustained basis is closely linked with judicious utilization of land and water resources for sustaining production and productivity of agricultural and horticulture crops. Presently, a number of Departments / Ministries are involved in implementation of various programmes for addressing the issues relating to development of land and water resources. Out of about 141 million hectares of net area sown of the country about 65 million hectare presently covered under irrigation, Substantial dependence on rain falls makes cultivation in remaining areas is a high risk and less productive profession. Empirical evidences suggest that assured / protective irrigation / insitu moisture conservation encourages farmers to invest more in farming technology and inputs leading to productivity enhancement and increased farm income.

The working, objective and components of PMKSY are as follows:

Pradhan MantriKrishiSinchaiYojana (PMKSY)

The new scheme to provide the irrigation and related facilities by integrated efforts of MoWR, RD & GR, Department of Land Resources and Department of Agriculture & Cooperation. It also aims that integrated and convergence of other schemes which may benefit in providing irrigation facilities e.g. MGNREGA, RKVY etc. The scheme was formulated for the year 2015-16 to 2019-20 with a combined outlay of central share as Rs.50000 crore. Out of which Rs.21010 crore was allocated to MoWR, RD & GR.

Ministry of WR, RD & GR has been entrusted with two main components of PMKSY e.g. AIBP and PMKSY-WR.(HKKP)

Accelerated Irrigation Benefit Programme

The scheme emphasises on completion of all ongoing projects at the earliest barring inclusion of any new project under AIBP. Further, 46 projects are again prioritised to complete in 3 or 4 years for which adequate budget provisions are to be made in addition to the budget already allocated.

Under PMKSY (HKKP), there are four major components.

1. CADWM
2. RRR
3. SMI
4. Ground Water

The main objective of the scheme are as follows:

- a) Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans).
- b) Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (HarKhetKoPani).
- c) Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent.
- d) Enhance the adoption of precision-irrigation and other water saving technologies (more crop per drop).
- e) Enhance recharge of aquifers and introduce sustainable water conservation practices.
- f) Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.

- g) Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
- h) Explore the feasibility of reusing treated municipal water water for peri-urban agriculture, and
- i) Attract greater private investments in precision irrigation.

3.11. Sardar Sarovar Construction Advisory Committee (SSCAC) was set up in accordance with the directions of the Narmada Water Disputes Tribunal (NWDT) by the erstwhile Ministry of Irrigation (now Ministry of Water Resources, RD & GR) under its Resolution dated 4th September 1980 to ensure efficient, economical and timely execution of Unit-I (Dam & Appurtenant works) and Unit-III (Hydro-Power) works of Sardar Sarovar Project (SSP) and it started functioning from 1st December 1980. The Advisory Committee is headed by the Secretary, Union Ministry of Water Resources as its Chairman and has its Members from the Government of India and the Party States. Secretary, SSCAC is Member Secretary of SSCAC. The Committee is having a whole-time Secretary of the rank of Joint Secretary/Chief Engineer assisted by Deputy Secretary, Assistant Secretaries and other subordinate staff for its Secretariat work. The headquarters of the SSCAC Secretariat is located at Vadodara (Gujarat).

The SSCAC has a Permanent Standing Committee (PSC) to serve as a sub-group for scrutinizing estimates, tender documents, construction programme, project progress, etc. The PSC also functions as “Claims Committee” to consider the claims of contractors that may be beyond the powers of the project authorities.

The SSCAC deliberates on the various points concerned with the programme/progress of construction of Sardar Sarovar Project, estimate, claims etc. during the regular meetings.

SARDAR SAROVAR CONSTRUCTION ADVISORY COMMITTEE (SSCAC) MEETING:

The 83rd meeting of the SSCAC was held on 26th June 2015 at New Delhi. The major issues discussed are as follows:

- *Insurance Coverage for Sardar Sarovar Power Houses.*
- *Real Time Data Acquisition System (RTDAS) and commissioning of Water Management System.*
- *Share Cost of SSCAC Secretariat*
- *Payment of Share Cost of SSP by the Party States.*
- *Brief report on the proceedings of the 108th, 109th and 110th meeting of PSC of SSCAC.*
- *Annual Development Plan 2015-16 for Unit-I and Unit-III works of SSP*

- *Claim put forth by M/S. Jaiprakash Associates (JPA) on account of Shortfall in Concrete Progress during the various seasons from 1993-94 to 1997-98 due to the restrictions imposed in raising the spillway of Sardar Sarovar Dam.*
- *Meeting of Dam Safety Panel for Sardar Sarovar Project*
- *Review of the progress of Unit-I and Unit-III works of Sardar Sarovar Project: Raising the height of Sardar Sarovar Dam above Crest level (i.e. 121.92m).*
- *Audit of SSCAC*
- *Time extension and revision of rates for the civil works of underground River Bed Power House and main Dam works of SSP”.*

PERMANENT STANDING COMMITTEE (PSC) MEETINGS:

The Sardar Sarovar Construction Advisory Committee (SSCAC) has a Permanent Standing Committee (PSC), with the Executive Member, Narmada Control Authority as the Chairman, and representatives from the Ministry of Water Resources, Central Water Commission, Central Electricity Authority and all the four party States are Members. The Secretary, SSCAC is Member Secretary of the PSC.

110th meeting of PSC of SSCAC were held on *09th April 2015* at New Delhi . The major issues discussed *are as follows:*

- *Closure of contract with M/s. BHEL for work package-I & II of EMC*
- *Insurance Coverage for Sardar Sarovar Project Power Houses.*
- *Review of the progress of work of Unit-I and Unit-III of Sardar Sarovar Project.*
- *Raising the height of Sardar Sarovar Dam above Crest Level (i.e. EL 121.92m)*
- *Meeting of Dam Safety Panel for Sardar Sarovar Project.*
- *Construction of Garudeshwar Weir of SSP.*
- *Payment of share cost of SSCAC Secretariat.*
- *Refurbishing and restoring of Radial Gates & its appurtenant parts along with its handling for Sardar Sarovar Project.*
- *Annual Development Plan for 2015-2016 of unit-I (Dam & Appurtenant works) & unit-III (Hydro Power works) of Sardar Sarovar Project.*
- *Payment of Share Cost of Sardar Sarovar Project by the Party States.*
- *Closure of contract awarded to M/s Intrax for work package IV of EMC of NCA.*

SSCAC is a subordinate office of the Union Ministry of Water Resources, RD & GR. The expenditure incurred by the SSCAC Secretariat is borne equally on the four Party States of Sardar Sarovar Project namely Gujarat, Madhya Pradesh, Maharashtra and Rajasthan. Initially, the expenditure is reflected in the Union budget under the Ministry of Water Resources, RD & GR and ‘Non-Plan’ expenditure which is subsequently reimbursed from the party states.

In SSCAC, all Group 'A' posts are filled by officers from the Central Water Engineering (Group-A) Services cadre on transfer basis. All Group 'B', & 'C' posts are filled by persons taken on deputation from the departments of States/Central Government or from its Undertaking.

Since implementation of RTI Act, 2005 the information is made available on the official website www.sscac.gov.in, for general public. Citizen's Charter of SSCAC is also made available on the official website.

CHAPTER - IV

REVIEW OF PAST PERFORMANCE

4.1 The relevant information regarding performance during 2014-15 and 2015-16 (up to December, 2015) against the targets already set is given at **Annexure-I** and **Annexure-II** respectively.

4.2 The Flagship Programmes of this Ministry namely, 'Pradhan Mantri Krishi Sinchai Yojna' (PMKSY) and 'Namami Gange' 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 in **Annexure-IV** and XII Plan outlay with Annual Plan for 2016-17 is in **Annexure-V** and **Annexure-VI**.

TREND OF EXPENDITURE IN FY 2015-16:

5.2 Budget Estimate for the annual plan of this Ministry for the year 2015-16 was Rs. 3607.00 crores which was increased to Rs. 6431.49 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.2113.75 crores has been incurred upto December 2015 which works out to 58.60% and 32.87% with reference to B.E and R.E 2015-16 respectively.

5.3 The grant of Ministry of Water Resources for FY 15-16 is classified into five Sectors. The Sector-wise distribution of approved plan outlay (both BE/RE) and expenditure up to December 2015 under different Sectors are summarized below:

(Rs in crore)			
Sector	B.E. 2015-16	R.E. 2015-16	Exp. upto December 2015
Medium Irrigation	2445.19	5167.12	1395.94
Minor Irrigation	179.01	172.66	82.18
Flood Control	232.80	357.71	141.55
Transport Sector	100.00	84.00	60.08
Ecology and Environment	650.00	650.00	434.00
Total	3607.00	6431.49	2113.75

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 during the year 2016-17:

Major Irrigation Projects

1. Polavaram Project Authority
2. Farakka Barrage Project
3. Dam Rehabilitation & Improvement Programme
4. Water Project of NCT

Namami Gange

5. Ghat works for beautification of river fronts
6. National Ganga Plan

River Basin Management

7. Implementation of National Water Mission
8. River Basin Organisation
9. Restructuring of CWC
10. IWRSD-NWDA
11. IWRSD-CWC
12. Brahmaputra Board
13. Flood Forecasting
14. DPR for Interlinking of rivers

Water Resource Management

15. Development of Water Resources Information System
16. Ground Water Management and Regulation
17. National Hydrology Project
18. Research and Development Water Resources
19. Irrigation Management Programme
20. HRD/Capacity Building
21. Infrastructure Development

Pradhan Mantri Krishi Sinchai Yojana: AIBP and HKKP (State/UT Plan)

22. Accelerated Irrigation Benefit Programme
23. Har Khet Ko Pani (PMKSY)
24. Impact assessment studies of AIBP Project
25. Flood Management Programme
26. River Management Activities and works related to Border Rivers
27. Irrigation Census

28. National River Conservation Plan

5.7 A comparative table showing Budget allocated and spent for last 2 years is explained in Tables A, B & C. 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 - D.

5.9. Details of Normal Savings under Plan Schemes of MoWR, RD & GR are given in Table – E.

5.10. Details of Under/Non-utilisation/Surrenders under Plan Schemes of MoWR, RD & GR are given in Table – F.

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

(Rupees in crore)

Sl No	Sector/ Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
I.	Secretariat-Economic Services						
1.	Ministry of Water Resources	0.00	39.04	0.00	46.35	0.00	47.81
2.	Ravi-Beas Waters Tribunal	0.00	0.37	0.00	0.44	0.00	0.40
3.	Cauvery Water Disputes Tribunal	0.00	2.39	0.00	2.89	0.00	2.05
4.	Krishna Water Disputes Tribunal	0.00	1.98	0.00	2.20	0.00	2.63
5.	Vansadhara Water Dispute Tribunal	0.00	3.57	0.00	4.35	0.00	4.13
6.	Mahadayi Water Disputes Tribunal	0.00	2.61	0.00	2.80	0.00	2.39
	Total : Secretariat-Economic Services	0.00	49.96	0.00	59.03	0.00	59.41
II.	Medium Irrigation						
	Central Water Commission						
1.	Direction & Administration	0.00	31.13	0.00	33.82	0.00	33.36
2.	Data Collection	0.00	94.16	0.00	97.84	0.00	93.48
3.	Training	0.00	0.28	0.00	0.48	0.00	0.28
4.	Research	0.00	2.36	0.00	2.80	0.00	2.35
5.	Survey & Investigation	0.00	9.34	0.00	10.29	0.00	7.76
6.	Consultancy	0.00	30.44	0.00	32.80	0.00	30.28
7.	Contribution to international bodies	0.00	0.00	0.00	0.01	0.00	0.01
8.	Seminars and conferences on water resources on water.						
9.	Exhibition and Trade Fair	0.00	0.17	0.00	0.20	0.00	0.20

SI No .	Sector/ Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
10.	Modernization of equipment CWC Offset Press	0.00	0.27	0.00	0.38	0.00	0.69
11.	Cell for monitoring externally aided projects	0.00	0.49	0.00	1.01	0.00	0.97
12.	Water Planning Wing	0.00	2.05	0.00	2.49	0.00	2.97
13.	Hydrological observations in Chenab basin	0.00	2.43	0.00	3.04	0.00	2.89
	Total : CWC	0.00	173.12	0.00	185.16	0.00	175.24
14.	Central Soil and Materials Research Station	0.00	10.96	0.00	11.85	0.00	11.89
15.	Central Water & Power Research Station	0.00	42.11	0.00	50.33	0.00	48.62
16.	National Institute of Hydrology	0.00	14.42	0.00	15.43	0.00	18.10
17.	Sardar Sarovar Construction Advisory Committee	0.00	0.93	0.00	1.02	0.00	0.82
18.	Bansagar Control Board	0.00	0.31	0.00	0.36	0.00	0.36
19.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	1.00	0.00	0.90
20.	Upper Yamuna River Board	0.00	0.67	0.00	2.34	0.00	0.64
21.	Krishna River Management Board	0.00	1.00	0.00	0.00	0.00	0.00
22.	Godavari River Management Board	0.00	1.00	0.00	0.00	0.00	0.00
23.	Research and Development Programme	31.95	0.00	30.00	0.00	54.60	0.00
24.	Development of Water Resources Information System	81.53	0.00	80.99	0.00	75.33	0.00
25.	Hydrology Project	24.85	0.00	10.00	0.00	2.00	0.00
26.	Infrastructure Development	1.89	0.00	1.00	0.00	1.00	0.00
27.	HRD/	21.44	0.00	22.00	0.00	12.30	0.00

SI No .	Sector/ Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
	Capacity Building						
28.	River Basin Management	75.54	0.00	45.20	0.00	87.00	0.00
29.	Implementati on of National Water Mission	1.29	0.00	20.00	0.00	9.00	0.00
30.	Irrigation Management Programme	0.00	0.00	1.00	0.00	0.00	0.00
31.	Dam Rehabilitation and Improvement Programme	13.71	0.00	29.00	0.00	16.00	0.00
32.	Bodwad Parisar Sinchan Yojana	66.66	0.00	1.00	0.00	0.00	0.00
33.	AIBFMP (Impact Assessment Studies)	0.03	0.00	5.00	0.00	0.13	0.00
34.	Accelerated Irrigation Benefit Programme & Flood Management Programme (Centrally Sponsored Scheme)	3261.04	0.00	1000.00	0.00	3009.76	0.00
35.	Polavaram Project Authority	250.00	0.00	100.00	0.00	400.00	0.00
36.	DPR for Interlinking of rivers	0.00	0.00	100.00	0.00	0.00	0.00
37.	Pradhan Mantri Krishi Sinchai Yojana	0.00	0.00	1000.00	0.00	1500.00	0.00
	Total: Medium Irrigation	3829.93	244.52	2445.19	267.49	5167.12	256.57
III.	Minor Irrigation						
1.	Central Ground Water Board	0.00	145.09	0.00	152.06	0.00	154.13
2.	Ground Water Management and Regulation	125.29	0.00	163.00	0.00	163.00	0.00
3.	Development of Water Resources Information System	0.00	0.00	0.01	0.00	0.01	0.00
4.	Infrastructure Development	3.55	0.00	9.00	0.00	3.00	0.00

SI No .	Sector/ Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
5.	HRD/ Capacity Building	5.46	0.00	7.00	0.00	6.65	0.00
	Total : Minor Irrigation	134.30	145.09	179.01	152.06	172.66	154.13
IV.	Flood Control						
1.	Central Water Commission	0.00	81.16	0.00	89.37	0.00	81.70
2.	Payment to Govt. of Bhutan for maintenance of flood forecasting and warning centres	0.00	0.39	0.00	1.04	0.00	1.03
3.	Strengthening and modernization of flood forecasting and hydrological network in Brahmaputra and Barak Basin	0.00	3.08	0.00	1.13	0.00	3.76
	Total : CWC	0.00	84.63	0.00	91.54	0.00	86.49
4.	Emergent Flood Protection Measures in Eastern and Western Sectors	0.00	0.00	0.00	0.10	0.00	1.00
5.	Flood Forecasting	28.65	0.00	50.00	0.00	35.00	0.00
6.	River Management Activities and Works related to Border Areas	93.66	0.00	102.00	0.00	240.56	0.00
7.	Infrastructure Development	12.20	0.00	7.00	0.00	4.00	0.00
8.	River Basin Management	80.00	0.00	73.80	0.00	78.15	0.00
	Total : Flood Control	214.51	84.63	232.80	91.64	357.71	87.49
V.	Other Transport Services						
1.	Farakka Barrage Project	79.39	38.85	100.00	45.13	84.00	34.18
2.	Jangipur Barrage	0.00	2.22	0.00	2.60	0.00	2.35
3.	Feeder Canal	0.00	6.95	0.00	7.48	0.00	6.81
	Total :	79.39	48.02	100.00	55.21	84.00	43.34

SI No .	Sector/ Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
	Transport Services						
VI	Ecology and Environment						
1.	National River Conservation Plan	337.46	0.00	550.00	0.00	550.00	0.00
2.	National Ganga Plan	0.00	0.00	2100.00	0.00	1000.00	0.00
2a	Less amount met from NCEF			-2100.00	0.00	-1000.00	0.00
3.	Ghat works for beautification of river fronts	0.00	0.00	100.00	0.00	100.00	0.00
4.	Water projects of NCT	320.00	0.00	0.00	0.00	0.00	0.00
	Total : Ecology and Environment	657.46	0.00	650.00	0.00	650.00	0.00
	TOTAL: (I to VI) \$	4915.59	572.22	3607.00	625.43	6431.49	600.94
	GRAND TOTAL	4915.59	572.22	3607.00	625.43	6431.49	600.94

Source of financing: \$ Demand No.107 – Ministry of Water Resources for 2015-2016

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

(Rupees in crore)

Sl. No	Sector/Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
A.	DIRECT EXPENDITURE						
1.	Secretariat-Economic Services	0.00	49.96	0.00	59.03	0.00	59.41
2.	Central Water Commission: - Medium Irrigation	0.00	173.12	0.00	185.16	0.00	175.24
	-Flood Control	0.00	84.63	0.00	91.54	0.00	86.49
3.	Central Soil & Materials Research Station	0.00	10.96	0.00	11.85	0.00	11.89
4.	Central Water & Power Research Station	0.00	42.11	0.00	50.33	0.00	48.62
5.	Central Ground Water Board	0.00	145.09	0.00	152.06	0.00	154.13
6.	Farakka Barrage Project	79.39	48.02	100.00	55.21	84.00	43.34
7.	Boards and Committees	0.00	3.91	0.00	3.72	0.00	1.82
	Total : Direct Expenditure	79.39	557.80	100.00	608.90	84.00	580.94
B.	RELEASES						
(a)	Grants to Autonomous Bodies						
1.	National Institute of Hydrology	0.00	14.42	0.00	15.43	0.00	18.10
2.	Research & Development Programme - Medium Irrigation	31.95	0.00	30.00	0.00	54.60	0.00
	Sub-Total (a)	31.95	14.42	30.00	15.43	54.60	18.10
(b)	Assistance to States for Flood Control/anti-erosion works						
1.	Emergent Flood Protection measures in Eastern and Western Sectors	0.00	0.00	0.00	0.10	0.00	1.00
	Sub-Total(b : Assistance to States for flood control/anti-erosion works	0.00	0.00	0.00	0.10	0.00	1.00
(c)	State Irrigation						

Sl. No	Sector/Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
	Schemes						
1.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	1.00	0.00	0.90
	TOTAL: RELEASES (a) to (c)	31.95	14.42	30.00	16.53	54.60	20.00
	Total : (A+B)*	111.34	572.22	130.00	625.43	138.60	600.94
C	OTHER PLAN SCHEMES						
	Medium Irrigations						
1.	Development of Water Resources Information System	81.53	0.00	80.99	0.00	75.33	0.00
2.	Hydrology Project	24.85	0.00	10.00	0.00	2.00	0.00
3.	Infrastructure Development	1.89	0.00	1.00	0.00	1.00	0.00
4.	Human Resource Development/ Capacity Building	21.44	0.00	22.00	0.00	12.30	0.00
5.	River Basin Management	75.54	0.00	45.20	0.00	87.00	0.00
6.	Implementation of National Water Mission	1.29	0.00	20.00	0.00	9.00	0.00
7.	Irrigation Management Programme	0.00	0.00	1.00	0.00	0.00	0.00
8.	Dam Rehabilitation and Improvement Programme (DRIP)	13.71	0.00	29.00	0.00	16.00	0.00
9.	Bodwad Parisar Sinchan Yojana	66.66	0.00	1.00	0.00	0.00	0.00
10.	Accelerated Irrigation Benefit & Flood Management Programme	3261.04	0.00	1000.00	0.00	3009.76	0.00
11.	Impact Assessment Studies of AIBFMP	0.03	0.00	5.00	0.00	0.13	0.00
12.	Polavaram Project Authority	250.00	0.00	100.00	0.00	400.00	0.00
13.	DPR for Interlinking of rivers	0.00	0.00	100.00	0.00	0.00	0.00
14.	Pradhan Mantri Krishi Sinchai Yojana	0.00	0.00	1000.00	0.00	1500.00	0.00
	Total – Medium Irrigation	3797.98	0.00	2415.19	0.00	5112.52	0.00
	Minor Irrigation						
1.	Ground Water Management and Regulation	125.29	0.00	163.00	0.00	163.00	0.00
2.	Development of Water Resources Information System	0.00	0.00	0.01	0.00	0.01	0.00
3.	Infrastructure Development	3.55	0.00	9.00	0.00	3.00	0.00
4.	Human Resource	5.46	0.00	7.00	0.00	6.65	0.00

Sl. No	Sector/Organisation /Scheme	Actuals 2014-15		BE 2015-16		RE 2015-16	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1.	2.	3.	4.	5.	6.	7.	8.
	Development/ Capacity Building						
	Total – MI	134.30	0.00	179.01	0.00	172.66	0.00
	Flood Control						
1.	Flood Forecasting	28.65	0.00	50.00	0.00	35.00	0.00
2.	River Management Activities and Works related to Border Areas	93.66	0.00	102.00	0.00	240.56	0.00
3.	Infrastructure Development	12.20	0.00	7.00	0.00	4.00	0.00
4.	River Basin Management	80.00	0.00	73.80	0.00	78.15	0.00
	Total - FC	214.51	0.00	232.80	0.00	357.71	0.00
	Ecology and Environment						
1.	National River Conservation Plan	337.46	0.00	550.00	0.00	550.00	0.00
2.	National Ganga Plan	0.00	0.00	2100.00	0.00	1000.00	0.00
	Less amount met from NCEF			-2100.00		-1000.00	0.00
3.	Ghat works for beautification of river fronts	0.00	0.00	100.00	0.00	100.00	0.00
4.	Water projects of NCT	320.00	0.00	0.00	0.00	0.00	0.00
	Total- Ecology and Environment	657.46	0.00	650.00	0.00	650.00	0.00
	Total: Other Plan Schemes	4804.25	0.00	3477.00	0.00	6292.89	0.00
	Total –(A+B+C)*	4915.59	572.22	3607.00	625.43	6431.49	600.94
	GRANT TOTAL (A+B+C)	4915.59	572.22	3607.00	625.43	6431.49	600.94

Source of financing: * Demand No.107 – Ministry of Water Resources for 2015-2016

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

(Rupees in Crore)

Sl. No.	Name of Schemes/Programme	BE 2016-17		Total BE 2016-17
		Plan	Non-Plan	
1.	2.	3.	4.	5.
I.	Secretariat - Economic Services	0.00	61.70	61.70
II.	Attached, Subordinate and other Offices			
1.	Central Water Commission	0.00	312.90	312.90
2.	Central Soil and Material Research Station	0.00	12.37	12.37
3.	Central Water and Power Research Station	0.00	52.24	52.24
4.	Sardar Sarovar Construction Advisory Committee	0.00	1.00	1.00
5.	Bansagar Control Board	0.00	0.40	0.40
6.	Upper Yamuna River Board	0.00	2.40	2.40
7.	Central Ground Water Board	0.00	171.80	171.80
8.	National Institute of Hydrology	0.00	19.00	19.00
	Total: Attached, Subordinate and other Offices	0.00	572.11	572.11
III.	Major Irrigation Projects			
1.	Polavaram Multipurpose Project	100.00	0.00	100.00
2.	Farakka Barrage Project	80.00	63.40	143.40
3.	Dam Rehabilitation and Improvement Programme			
	a) EAP component	19.20	0.00	19.20
	b) Programme Component	4.78	0.00	4.78
4.	Emergent Flood Protection works in eastern and western sectors	0.00	3.00	3.00
5.	Water Project of NCT	0.02	0.00	0.02
	Total: Major Irrigation Projects	204.00	66.40	270.40
IV.	Namami Gange			
1.	National Ganga Plan	2150.00	0.00	2150.00
2.	Ghat Works for Beautification of River Front	100.00	0.00	100.00
	Total: Namami Gange	2250.00	0.00	2250.00
V.	River Basin Management			
1.	National Water Mission	25.00	0.00	25.00
2.	River Basin Management	173.60	0.00	173.60
3.	Flood Forecasting	60.00	0.00	60.00
4.	Interlinking of Rivers	1.00	0.00	1.00
	Total: River Basin Management	259.60	0.00	259.60
VI.	Water Resource Management			
1.	Development of Water Resources Information System	84.87	0.00	84.87
2.	Ground Water Management and Regulation	303.39	0.00	303.39
3.	National Hydrology Project			
	a) EAP component	77.50	0.00	77.50

Sl. No.	Name of Schemes/Programme	BE 2016-17		Total BE 2016-17
		Plan	Non-Plan	
1.	2.	3.	4.	5.
	b) Programme Component	87.50	0.00	87.50
4.	Research and Development Programme	55.00	0.00	55.00
5.	Irrigation Management Programme	0.01	0.00	0.01
6.	HRD/Capacity Building Programme	32.00	0.00	32.00
7.	Infrastructure Development	20.00	0.00	20.00
	Total: Water Resource Management	660.27	0.00	660.27
VII.	Pradhan Mantri Krishi Sinchai Yojana: AIBP and PMKSY (HKKP) (State/UT Plan)			
1.	Accelerated Irrigation Benefit Program (AIBP)	1000.00	0.00	1000.00
2.	PMKSY (Har Khet Ko Pani)	500.00	0.00	500.00
3.	Impact Assessment Studies	1.00	0.00	1.00
4.	Assistance for Sutlej Yamuna Link Canal Project	0.00	1.00	1.00
5.	Flood Management Programme	150.00	0.00	150.00
6.	River Management Activities and Works related to Border Areas	200.00	0.00	200.00
7.	Irrigation Census	25.13	0.00	25.13
	Total: Pradhan Mantri Krishi Sinchai Yojana: AIBP and PMKSY (HKKP) (State/UT Plan)	1876.13	1.00	1877.13
VIII.	National River Conservation Plan			
	a) EAP component	130.00	0.00	130.00
	b) Programme Component	120.00	0.00	120.00
	Total: National River Conservation Plan	250.00	0.00	250.00
	Grand Total: (I to VIII)	5500.00	701.21	6201.21

TABLE – D

**UTILISATION CERTIFICATES OUTSTANDING IN RESPECT OF GRANTS/
LOANS RELEASED UPTO 31.3.2015**

Position as on 31.12.2015

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

I. Information related to unspent balances and pending UCs (Autonomous Bodies & State Govt.)

(` in Crores)

Particulars	As on 01.04. 2012	As on 01.04. 2013	As on 30.09. 2013	As on 31.12. 2013	As on 31.03. 2014	As on 31.12.2014	As on 31.03. 2015	As on 31.12. 2015
Unspent Balances	181.79	205.59	158.08	1379.73	1446.25	1462.91	1462.37	251.68
Pending Ucs (In Numbers)	327	285	260	259	264	241	241	252 ##
Pending Ucs	66.18	52.01	37.61	971.37	978.47	975.74	975.74	251.68

information pertains to only autonomous bodies & CAD wing (upto 31.03.15)

II. Information related to unspent balances and pending UCs (State Govt.)

(` in rores)

Particulars	As on 01.04.2012	As on 01.04.2013	As on 30.09.2013	As on 31.12. 2013	As on 31.03. 2014	As on 31.12. 2014	As on 31.03.2015	As on 31.12.2 015
Unspent Balances	14.99	14.02	17.12	1238.77	1236.44	1236.36	1235.82	149.62
Pending Ucs (In Numbers)	7	6	6	5	7	3	3	##3
Pending Ucs	14.99	14.02	14.02	947.78	947.85	947.53	947.53	149.62

information pertains to CAD wing upto 31.03.15 and no iformation was given by Ganga wing on no. of UCs

**III. Information related to unspent balances and pending UCs
(Autonomous Bodies)**

(` in Crores)

Particulars	As on 01.04. 2012	As on 01.04. 2013	As on 30.09. 2013	As on 31.12. 2013	As on 31.03. 2014	As on 31.12.2014	As on 31.03.2015	As on 31.12.15
Unspent Balances	166.8	191.57	140.96	140.96	209.82	226.55	226.55	102.06
Pending Ucs (In Numbers)	320	279	254	254	257	238	238	249
Pending Ucs	51.19	37.99	23.59	23.59	30.63	28.21	28.21	102.06

Important Note:

- Information of number of outstanding UCs*
- 1 from Ganga Wing not received.
 - 2 No information received from CAD Wing

Table-E**Details of Normal Savings under Plan Schemes of MoWR, RD & GR****(Rs. In Crore/Net)**

Sl. No.	Name of Scheme	BE 2014-15	Expenditure during 2014-15	Savings
1	Ground Water Management and Regulation	325.00	125.29	199.71
2	River Basin Management	250.00	155.54	94.46
3	River Management Activities and works related to Border Rivers	175.00	93.66	81.34
4	Research & Development	50.00	31.95	18.05
5	HRD/Capacity Building	50.00	26.90	23.10
6	Development of Water Resources Information System	225.40	81.53	143.87
7	Farakkar Barrage Project	150.00	79.39	70.61
8	Hydrology Project	31.38	24.85	6.53
9	Infrastructure Development	80.00	17.64	62.36
10	Flood Forecasting	100.00	28.65	71.35
11	Dam Rehabilitation & Improvement Programme	30.00	13.71	16.29
12	Bodwad Parisar Sinchan Yojana	200.00	66.66	133.34
13	Polavaram Project Authority	250.00	250.00	0.00
14	National River Conservation Plan	537.00	337.46	199.54
15	For Water Projects for NCT	500.00	320.00	180.00
16	Accelerated Irrigation Benefit & Flood Management Programme (AIBFMP)	8992.22	3261.04	5731.18
17	Implementation of National Water Mission	40.00	1.29	38.71
18	Impact Assessment Studies of Project (AIBFMP)	50.00	0.03	49.97
	Grand Total	12036.00	4915.59	7120.41

Table-F

Details of Under/Non-utilisation/Surrenders under Plan Schemes of MoWR, RD & GR

(Rs. In Crore/Net)

Sl. No.	Name of Scheme	BE 2014-15	Expenditure during 2014-15	Savings
1	Irrigation Management Programme	1.00	0.00	1.00
2 (a)	National Ganga Plan	1500.00	0.00	1500.00
(b)	met from balance under NCEF	-1500.00	0.00	-1500.00
3	DPR for Interlinking of Rivers	100.00	0.00	100.00
4	Ghat works for beatification of River Fronts	100.00	0.00	100.00
5	Pradhan Mantri Krishi Sinchai Yojana	1000.00	0.00	1000.00
	Grand Total	1201.00	0.00	1201.00

CHAPTER - VI

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

STATUTORY BODIES:

6.1 BRAHMAPUTRA BOARD:

6.1.1 Constitution of Brahmaputra Board - Brahmaputra Board was constituted in the year 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 and improvement of drainage in Brahmaputra and Barak Valley and related matters i.e. development of Water Resources in the region. It started functioning since January 11, 1982 with headquarters at Guwahati, Assam. The jurisdiction of Brahmaputra Board spreads in Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and West Bengal (Northern Part falling in Brahmaputra Basin).

6.1.2 Composition - Brahmaputra Board consists of the Chairman, Vice-Chairman, General Manager as full time Members, Financial Adviser as Ex-officio member and 17 part time Members - representing 7 States of the North Eastern Region (NER), North Eastern Council (NEC), concerned Ministries of Government of India namely Water Resources, Finance, Agriculture, Power, Surface Transport and Organizations of Government of India, namely Central Water Commission (CWC), Central Electricity Authority (CEA), India Meteorological Department (IMD) and Geological Survey of India (GSI). Some Members - Adviser (North East), Planning Commission, Government of India, Chief Engineer (Brahmaputra & Barak Basin Organization), Central Water Commission, Secretary, Irrigation and Waterways Department, Government of West Bengal, Secretary, Irrigation and Flood Control Department, Government of Sikkim and Secretary, Development of North Eastern Region (DoNER), Government of India participate in the meetings of Brahmaputra Board as special invitees.

6.1.3 Main functions

- (a) Undertaking 'Survey & Investigations' in Brahmaputra & Barak Valley and preparation of Master Plans for control of floods, bank erosion and improvement of drainage in the Brahmaputra & Barak Valley and activities connected therewith, including development and utilization of water resources of the Brahmaputra Valley for irrigation, hydropower, navigation and other beneficial purposes;
- (b) Formulation of programme, in consultation with State Government(s), for construction / implementation, in phases, of dams and other projects identified in the Master Plans, approved by Government of India;
- (c) Preparation of Detailed Project Reports and estimates including apportionment of cost among States in respect of the dams and other projects;

- (d) Finalization of standards and specifications for construction, operation and maintenance of such dams and other projects and;
- (e) Construction, operation and maintenance of Multipurpose and other Water Resources Projects, identified in the Master Plans, on approval of Government of India.

6.1.4 Activities

- (a) Preparation of 3 (three) Sub-basin Master Plans - Bugi, Dareng and Umsohryngkew – has been taken up by Brahmaputra Board during the year 2013-14 and data could be collected from the concerned State and Central Government Organizations in last part of the year 2013-14 and completed the Master Plan of Umsohryngkew and Dareng. Sub-basin Master plan of Bugi will be completed in 2016-17.
The southern portion of Mizoram has been included in the jurisdiction of Brahmaputra Board. However, Master Plans for rivers falling in this area namely Tuichong and Kaladain have not been initiated. The area is of national importance from the point of view of sea connectivity through Myanmar besides other issues viz. Power, irrigation, flood control, soil erosion. Preparation of Master Plans for these two basins is taken up in the current financial year.

Further, Master Plan of Brahmaputra Basin was prepared since 1986 and detailing of these Master Plans with updated data using modern tools are the raised demand of all forum. It is proposed to collect all the data using with latest technological tools. Master plans are proposed to up-date from this year.

- (b) The field investigations for preparation of Detailed Project Reports in respect of 2(two) Multi-Purpose Projects are continued. The DPR of Noa-Dihing Multipurpose Project and Kulsu Multipurpose Project have been completed in 2014 and submitted to Ministry of Water Resources, RD&GR and it is under appraisal of Central Water Commission for techno-economic clearance.
- (c) The Brahmaputra Board took up flood protection and anti-erosion works at Majuli Island in the year 2003-04. Activities were taken up first under ‘Immediate Measures’ at an expenditure of ` 6.09 crore and completed in the year 2004-05. These works were followed by protection works under Phase –I. Works envisaged under Phase-I was completed in April, 2011. The total expenditure under Phase –I was ` 52.63 crore. In between, prior to initiation of works under Phase-II & III, some urgent protection measures were undertaken as ‘Emergent Works’ at the cost of ` 4.75 crore. Works under Phase-II & III at estimated cost of ` 115.99 crore are in execution and physical progress of 90.61% have been achieved at an expenditure of ` 111.82 crore. A scheme formulated as per recommendation of Standing Committee of Experts on Majuli Island during its 8th visit amounting to ` 213.61 crore are under appraisal of CWC. On receipt of ‘Techno-economic Clearance’, ‘Administrative Approval’ & ‘Expenditure Sanction’ work will be started.

(d) Restoration of original channels of Lohit and Dibang Rivers was entrusted to Brahmaputra Board. Works were planned to be executed in phases. Restoration works started in the year 2003-04. Works under Phase –I (₹ 9.65 crore), Phase –II (₹ 3.76 crore) and Phase –III (₹ 8.45 crore) were completed. Works under Phase-IV for ₹ 54.43 crore are under execution and physical progress of about 99.80% has been achieved at an expenditure ₹ 52.65 crore up to November 2015 and targeted to complete by May 2015. For Conversion of the existing tie bund across the spill channel of river Dibang from chainage 480.00 m to chainage 2550.00 m in to a full-fledged embankment at Bahbari and Restoration of original channels of Dibang and Lohit Rivers at Dhola-Hatighuli at an estimated cost of ₹ 383.18 crore under Phase-V has been formulated based upon recommendations of 8th visit of Standing Committee of Experts. The DPR is under appraisal in Central Water Commission. Activities envisaged under Phase-V proposals are planned to be implemented during XII Five Year Plan. On receipt of ‘Administrative Approval’ & ‘Expenditure Sanction’ work will be started.

(e) Protection of Mankachar, Kalair-alga international Border area from erosion of river Brahmaputra- Estimated cost Rs. 23.79 crore-

Erosion at Mankachar, Kalair-alga international Border area from erosion of river Brahmaputra are very acute and numbers of VIP references were received to protect the area from erosion of river Brahmaputra in the state of Assam. Accordingly DPR for protection of the area has been formulated. Techno-economic clearances was also received and included to execute the scheme in the EFC proposal under the ‘River basin Management’ scheme during XII Five Year Plan. Administrative Approval and expenditure sanction was received on July 11, 2014 for ₹. 23.79 crore. Work order for construction and laying of RCC porcupine is in progress. Allotment of the work of pitching the bank of Brahmaputra by boulder will be started soon.

In the meantime the erosion of Brahmaputra washed away 470m boarder road in July 2015. BSF operations is hampered due to breach.

Brahmaputra Basin Master Plan did not envisage any specific problem in this reach of Brahmaputra though it is clearly stated “no reach of Brahmaputra can be depended upon for firm bank except where there are rock outcrops”.

Out of 44,028 Porcupines to be casted, 15944 porcupines have been casted till 1st week of December 2015. Chairman and VC visited the erosion affected sites on 16/10/2015.

(f) **Protection of Balat Village in Meghalaya on River Umngi- Estimated cost Rs. 10.18 crore**

On request from government of Meghalaya, the DPR for protection of Balat village from erosion of river Umngi in Meghalaya was prepared and cleared for Rs10.18 crore as per actual field requirement. Administrative Approval and Expenditure sanction was accorded for Rs. 5.63 crore on 27.11.2014 for phase – I work. The work are in progress and 54.12% of Phase –I works have been completed till

November 2015 with an expenditure of Rs. 1.41 crore. It is targeted to complete the phase –I work by March 2016.

(g) **Protection of Maslabari International Border area of Dhubri District from erosion of river Brahmaputra- Estimated cost Rs. 5.76 crore**

Erosion at above mentioned areas is very acute and numbers of VIP references were received to protect the area from erosion of river Brahmaputra along with Mankachar, Kalair-Alga area. Separate DPR for “Protection of Maslabari International Border area of Dhubri District from erosion of river Brahmaputra” was formulated and Techno-economic clearance was accorded for Rs. 5.76 crore. The Ministry of Water Resources accorded approval to initiate some essential works relating to Masalabari International Border area of Dhubri district from the fund allocated for the scheme Protection of Mankachar, Kalair-alga international Border area from erosion of river Brahmaputra” of Rs. 23.79 crore. Tender for execution of this work has been invited.

(h) 4 (four) Drainage Development Schemes - Barbhag (Estimated cost - ` 14.80 crore), Amjur (Estimated cost - ` 14.15 crore), Jengrai (Estimated cost - ` 5.23 crore-Revised) and Jakaichuk (Estimated cost- ` 2.96 crore) are in progress. The physical achievements attained under these schemes are 50.59%, 33.50%, 27% and 93% respectively.

(i) Brahmaputra Board has also been entrusted with ‘Monitoring’ of schemes under Flood Management Programme of Ministry of Water Resources, Government of India. Based upon recommendations of Brahmaputra Board, financial assistance in respect of these schemes were provided to States and also a substantial number of schemes has been appraised and cleared by Brahmaputra Board for implementation during XII Five Year Plan. State wise details of FMP schemes pertaining to the jurisdiction of Brahmaputra Board

(Rs. in crore)

State	No of Scheme	Estimated Cost	Central Share	State Share	Central Share Released upto 31.03.12	No of schemes completed during XI Plan	No of schemes spilled over to XII Plan	Spill over Central Share	Schemes approved in XII Plan	Central Share released
Arunachal Pradesh	21	224.68	202.21	22.47	78.77	11	10	123.44	0	16.83
Assam	100	1146.79	1032.12	114.67	744.9	77	23	287.22	41	35.92
Manipur	22	109.34	98.41	10.93	65.03	20	2	33.37		6.45
Meghalaya	0	-	-	-	-	-	-	-		0
Mizoram	2	9.13	8.22	0.91	3.4	Nil	2	4.82		0

Nagaland	11	49.35	44.42	4.93	28.96	9	2	15.46	3	13.08
Tripura	11	26.57	23.91	2.66	20.91	4	7	3		0
Sikkim	28	165.59	149.03	16.56	82.86	21	7	66.17	17	8.15
West Bengal	6	22.33	16.75	5.58	13.39	6	0	3.36		0
Total	201	1753.78	1575.07	178.71	1038.22	148	53	536.84	61	80.43

6.1.5 Monitoring mechanism - Progress of all field activities are submitted to headquarter every month and forwarded to MoWR, RD&GR as a consolidated report in subsequent month. Further, performance appraisal of activities of Brahmaputra Board on quarterly basis is submitted to Ministry.

6.1.6 Public Information System - The Action Plan and Quarterly Performance Appraisal of Brahmaputra Board have been uploaded in the website of Brahmaputra Board regular basis.

FINANCIAL OUTLAYS

(Rs. in Crore)

Sl. No	Name of the Schemes/ Activity											Remarks			
		XI Plan Outlay	XI Plan Actual	XII Plan Outlay	B.E 2013-14	R.E. 2013-14	Actual Expenditure 2013-14	B.E 2014-15	R.E. 2014-15	Actual Expenditure 2014-15	BE 2015-16		R.E. 2015-16	Actual Expenditure 2015-16 till Nov'15	BE 2016-17
1	River Management Activities and Works related to Border Rivers during XI Plan	350.00	296.90												
2	River Basin Management during XII Plan			528.00	100.00	85.00	87.92	143.00	80.00	70.06	73.80	88.59 (proposed)	49.56	93.81	Activities of Brahmaputra Board have been transferred from the scheme "River Management Activities and Works related to Border areas" to the scheme "River Basin Management" during XII Five Year Plan.

6.2. Ravi and Beas Waters Tribunal

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 of the third Member on 10.06.03, the Tribunal was holding regular 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

The Cauvery Water Disputes Tribunal (CWDT) was constituted by the Govt. of India on 02nd June, 1990 consisting of the Hon'ble Chairman and two Members to adjudicate the Water Disputes regarding the Inter-State River Cauvery and the river vally 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.

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 Court sitting was held on 10.07.2007. The Hon'ble Tribunal after observing the party State 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.

The Tribunal accordingly took up the petitions of the Party States for consideration on 10th July, 2007. In this order the Tribunal inter-alia observed as under: -

“it appears that State of Karnataka, State of Tamil Nadu and the State of Kerala filed Special Leave Petition against the aforesaid decision of this Tribunal dated 05th February, 2007 before the Hon'ble Supreme Court. The Supreme Court has granted Special Leave. The appeals are pending. According to us, in this background, these applications under Section 5(3) of the said Act should be listed for orders after disposal of the appeals by the Hon'ble Supreme Court”.

It is may be mentioned here that Civil Appeal No 2453 of 2007 of the State of Karnataka versus State of Tamil Nadu and other alongwith Civil Appeal No. 2454 of 2007 and Civil Appeal No. 2456 of 2007 of the State of Kerala and State of Tamil Nadu respectively came up for preliminary hearing before the Hon'ble Supreme Court of India on 28.07.2008, 12.05.2009, 06.05.2010 but decision could not be arrived at. The matter was again listed before the three judge's bench on 22nd September, 2011 wherein it was ordered to list along with civil appeal in the third week of October, 2011. The appeal which was listed on 18th October, 2011, the Hon'ble Court mentioned that the Learned Sr. Counsels appearing for the parties submit that oral arguments in these appeals are likely to take more than six regular hearing days. In view of the submission, subject to orders of the Hon'ble Chief Justice of India, let the appeal be listed for final disposal before the appropriate bench in the month of February 2012. "However, it could not be listed in February, 2012. In the meantime, the Supreme Court heard Cauvery issues in IA I of 2013, IA 5 & 6 of 2012 under OS 3 of 2002 on 04.1.2013, 04.02.2013, 07.2.2013 and finally on 25.2.2013 and directed Central Government to publish final award of CWDT dated 05.2.2007 as early as possible, but in no case later than February 20, 2013 and disposed of IA I of 2013, IA 5 & 6 of 2012 in OS 3 of 2002 alongwith contempt petition of 2013 in IA No. I of 2013. Further, it was directed to list 2453 of 2007 alongiwith connected matter and OS 3 of 2001 and OS 3 of 2002 for final hearing on AUGUST 6, 2013. ACCORDINGLY, Central Government has published final award of CWDT dated 05.2.2007 vide its notification dated 19.02.2013 in official Gazette".

IA No.6 in civil appeal No. 2456 of 2007 was taken up in the Hon'ble Supreme Court on 1.7.2013 and ordered for listing the consideration on 5th July, 2013 by giving time up to 4th July,2013 for putting up response by the rejoinder. The case was again taken up on 5th July, 2013, it was ordered the rejoinder-Affidavit may be filed by the state of Tamil Nadu within three weeks and list the same on 5th August, 2013.

The case was taken up on 5th August, 2013 wherein it was ordered that having regards to good rains, Learned Senior Council for the state of Tamil Nadu is not desirous of pressing IA No. 6 of 2013 and accordingly it was ordered to list the appeal on 15th Jan, 2014.

The original suit 3 of 2002 was taken up by the Hon'ble Supreme Court on 3.12.2013 and it was ordered that the case is connected to original suit 03/2001 and in the next date for listing the case is 15.1.2014 on 15.01.2014 Hon'ble Supreme Court directed for listing of case on 12.03.2014 and further for listing of case on 25.11.2014 which is further listed for 20.01.2015 and then 10.02.2015,22.09.2015, 03.11.2015 and is likely to be listed on 12.01.2016.

On joined the Hon'ble Chairman on 21st May, 2014, the CMP No. 01/2012 was taken up on 15th July, 2014 in the Tribunal, wherein the Tribunal vide order dated 15.07.2014 desired that the State of Tamil Nadu may file a fresh application or press I.A. No. 11 filed by it in the Hon'ble Supreme Court in Civil Appeal No. 2453 of 2007 and get an appropriate direction that this Tribunal may proceed with the application under Section 5(3) of the Act 1956.

Expenditure incurred by the Tribunal: -

i)	Expenditure incurred by the Tribunal during for 2014-15	2,38,840,26
ii)	Cumulative expenditure upto 3/15	24,65,86,538
iii)	Budget Allocation for 2015-16.	2,89,00,000
iv)	Expenditure from 4/15 to 12/15	1,76,29,334
v)	Cumulative Expenditure upto 31/12/15	26,42,15,877

6.4 Krishna Water Disputes Tribunal

The Krishna Water Disputes Tribunal (KWDT) was constituted on 2nd April, 2004 for adjudication of the dispute amongst the States of Andhra Pradesh, Karnataka and Maharashtra relating to sharing of waters of inter-state river Krishna and river valleys thereof . In the Writ Petition No. 408, Hon'ble Supreme Court has ordered that the effective date of constitution of the Tribunal will be 01.02.2006. Consequently, the term of the Tribunal was extended upto 31.12.2010 as per provisions of ISRWD Act, 1956.

The report and the decision by the Tribunal under Section 5(2) of the Act was pronounced on 30-12-2010..

Thereafter the Party States i.e. Andhra Pradesh, Karnataka, Maharashtra and also the Central Government had filed their reference applications under Section 5(3) of the Act to the Tribunal on 29th March, 2011 . Subsequently, replies and rejoinders were filed by the Party States and the Central Govt. The Tribunal concluded the hearing of the arguments advanced by the State Governments and Central Govt. vide order dated 30.08.2013.

The order on references were pronounced by the Tribunal on 29.11.2013 by way of its Further Report under Section 5(3) of the Act and forwarded the same to the Central Govt. and the respective Party States .

In term of Section 12 of the Inter State River Water Disputes Act, 1956 Central Government could dissolve the Tribunal after it has forwarded its report and as soon as the Central Government is satisfied that no further reference to the Tribunal in the matter would be necessary but as per Section 89 of the Andhra Pradesh Re-organization Act, 2014 (6 of 2014) the term of KWDT is required to be extended with the terms of reference specified in Clauses (a) & (b) of the said Section. Accordingly, the Central Government in exercise of powers conferred by the Sub-Section 3 of the Section 5 of the said Act vide Notification No. S.O. 1290 (E) dated 15.05.2014 and Corrigendum No. S.O. 1483 (E) dated 9th June, 2014 extended the period of submission of Further Report for a period of 2 years (or until further orders, whichever is earlier) w.e.f. 1st August, 2014 so as to address the Terms of Reference specified in Clauses (a) & (b) of the Section 89 of the Andhra Pradesh Re-organization Act, 2014 (6 of 2014).

The Tribunal has issued a Notice to all parties States including the Central Government that July 24, 2014 has been fixed for appearance of the parties i.e. Andhra Pradesh, Telangana, Maharashtra and Karnataka before the Tribunal through their Counsel or an officer duly authorized on their behalf . After considering the replies and responses and the rejoinders of all

the Parties and hearing the parties, the Tribunal vide its order dated 7th January, 2015 framed preliminary issue for further hearing in the Tribunal. Three more hearings were conducted on the preliminary issues on the date from 25th Feb., 26th Feb. and 27th Feb. 2015 . Further proceeding were due on 30th March, 2015 on wards. But no further proceeding could be conducted in the Tribunal due to severe damage caused to office and court wing due to a fire which broke out. on 26th March, 2015 in the office premises . The repair of the damaged court wing of Tribunal is in the progress and likely to be completed by February, 2016. Thereafter further steps will be taken up to initiate the proceedings on priority basis.

FINANCIAL OUTLAYS

(in thousands)

Name of Scheme Programme	Actual expenditure 2013-14	BE 2014-15 Non-Plan	Actual expenditure 2014-15	BE 2015-16 Non-Plan	RE 2015-16 Non-Plan	BE 2016-17 Non-Plan
	20615	23000	19847	22000	24900	27900

6.5. Vansadhara Water Disputes Tribunal

The Vansadhara Water Disputes Tribunal (VWDT) was constituted by the Government of India on 24th February, 2010 to adjudicate the water disputes regarding Inter State River Vansadhara and the River valley thereof pursuant to the directions given by the Hon'ble Supreme Court in Writ Petition (Civil) No.443/2006.

The Tribunal held its two preliminary sitting on 9th September, 2010 and 23rd November, 2010 in the office of the Central Water Commission, SevaBhawan, Sector-1, R.K. Puram, New Delhi, due to non-availability of the office space. In the meantime, one of the Member Hon'ble Mr. Justice Nirmal Singh resigned from the post and the Central Government appointed Hon'ble Mr. Justice Ghulam Mohammed, former Judge, Andhra Pradesh, and High Court as Member of the Tribunal on 08.05.2012.

Pursuant to the directions given by the Hon'ble Supreme Court in I.A, No.8 of 2013 in W.P. (Civil) No.443 of 2006 dated 123.12.2013 (State of Orissa vs. Govt of India & Anr.), the Ministry of Water Resources vide Notification S.O. 778(E) – dated 14th March, 2014 decided that the effective date of constitution of the said Tribunal shall be 17th September, 2012 and accordingly, under the provisions of sub-section (2) of section 5 of the said act, the period of three years of submission of report and decision by the Vansadhara Water Disputes Tribunal shall commence from the 17th September, 2012.

The Hon'ble Tribunal delivered its order in IA No.1 of 2010 on 17th December 2013, allowing the Government of Andhra Pradesh to construct the side weir along with the ancillary works as proposed and has inter alia directed for constitution of a Member Supervisory Flow Management and Regulation Committee on River Vansadhara. The State of Odisha has filed an SLP against the said order in the Hon'ble Supreme Court and the same is pending for hearing.

The issues of the disputes have already been framed. The Tribunal has also started recording the evidence of the witness of the State of Odisha.

The Tribunal visited the C.W.P.R.S. office at Pune from 03.12.2014 to 05.12.2014 for inspection of physical model of proposed Katargadda side weir and proposed Neradi Barrage and also held discussions with the concerned officials and parties at C.W.P.R.S. Pune.

In terms of the request made on behalf of both the States during hearing and as per the Tribunal vide its order dated 30.07.2015, the Tribunal visited Vijayawad from 10.09.2015 to 12.09.2015 and Cuttack from 06.10.2015 to 07.10.2015 to properly understand the disputes.

Presently, the Tribunal is in process of recording evidence of the witnesses of the State of Odisha and have completed the examination-in-chief and cross examination of two witnesses and the examination-in-chief of the third witness of the State of Odisha has been recorded and he is partly cross-examined. After completing the evidence of the State of Odisha the recording of evidence of the witnesses of the State of Andhra Pradesh will commence. Thereafter, the arguments on the issues before the Tribunal will be taken up.

6.6. Mahadayi Water Disputes Tribunal

1. The Mahadayi Water Disputes Tribunal (MWDT) was constituted by the Government of India on 16.11.2010 under Section 3 of the Inter-State River Water Disputes Act 1956 (as amended) for adjudication of the water disputes relating to the inter- state river Mahadayi and the river valley thereof among the States of Goa, Karnataka and Maharashtra. The constitution of the Tribunal consists of a Chairman and two Members. The Chairman of the Tribunal is a former Judge of the Supreme Court of India and the other two Members are former Judges of the High Courts. Hon'ble Mr. Justice J.M. Panchal, Chairman of the Tribunal took over the charge of the post of Chairman on 1.11.2011 after His Lordship's superannuation as Judge from the Supreme Court of India and Hon'ble Mr. Justice Viney Mittal and Hon'ble Mr. Justice P.S. Narayana former Judges of the Punjab & Haryana High Court and Andhra Pradesh High Court had taken charge as Members on 16.11.2010 and 1.12.2010 respectively.
2. The Directorate of Estates has allotted 4159 sq. ft. Office accommodation to the Tribunal at 5th Floor of the Janpath Bhawan, Janpath, New Delhi vide letter dated 27.12.2011. The possession of the said premises has been taken over by the Tribunal. The refurnishing work of the Office space was completed by the CPWD in July 2013 and all

the members of the Staff are accommodated in the Office accommodation provided to the Tribunal. The Tribunal had its first sitting in its Court Hall at 5th Floor, A Wing, JanpathBhawan, New Delhi on 21.8.2013 and is holding the further sittings in its own Hall at 5th Floor, JanpathBhawan, Janpath, New Delhi.

3. It may be mentioned that vide letter No.19/04/2010-MB/97-100 dated 19.1.2015, Deputy Commissioner (BM), Ministry of Water Resources has forwarded Notification dated 13th November 2014 issued by the Government of India which inter alia reads as under:-

“Now, therefore, the Central Government, having regard to the decision taken by the Hon’ble Supreme Court in similar matters as stated above, has decided that the effective date of constitution of said Tribunal shall be 21st August 2013.....”

4. It is submitted that from 21st August 2013 till today many hearings of the Tribunal have taken place where all the three contesting parties put forward their points of argument through their eminent lawyers before the Tribunal. The Tribunal has disposed of many applications filed by the contesting parties. The parties have also filed their statement of case as well as amended statement of cases which have also been taken on record by the Tribunal. Pursuant to the Tribunal’s order dated 17.7.2015, parties have marked their documents as exhibits which will be placed before the Hon’ble Tribunal on the next hearing on 23.2.2016.
5. It is evident that all the three States have filed lengthy and voluminous pleadings including documents. The number of volumes of documents so far filed by the Counsels for all the three States have reached in numbers to 175. On the basis of original pleadings and the amended pleadings and as suggested by the three states, the Tribunal has framed in all 70 issues for determination. In order to prove its case before the Tribunal, the State of Goa proposes to examine 11 witnesses whereas the State of Karnataka proposes to examine 5 witnesses and the State of Maharashtra proposes to examine one witness to prove its case before the Tribunal.
6. The actual financial expenditure for the financial years 2014-15, the Budget Estimate for 2015-16, actual expenditure upto December 2015, anticipated expenditure from 1.1.2016 to 31.3.2016 total anticipated expenditure from 1.4.2015 to 31.3.2016 and Budget demanded for the Financial Year 2016-17 are as under:-

REVISED CHART

Figures in thousand

Sl. No	Particulars	Actual 2014-15	Budget granted 2015-16	Actual 2015-16 (Upto December 2015)	Anticipated expenditure from 1.1.2016 to 31.3.2016	Total anticipated expenditure from 1.4.2015 to 31.3.2016	Budget demand 2016-17
1.	Salary	18872	18710	15920	4200	20120	25879
2.	Wages	0	0	0	0	0	0

3	Medical treatment	48	150	2	0	2	150
Sl. No	Particulars	Actual 2014-15	Budget granted 2015-16	Actual 2015-16 (Upto December 2015)	Anticipated expenditure from 1.1.2016 to 31.3.2016	Total anticipated expenditure from 1.4.2015 to 31.3.2016	Budget demand 2016-17
4.	Overtime allowance	0	10	0	0	0	10
5.	Domestic travel expenses	0	700	33	0	33	700
6.	Foreign Travel expenses	0	0	0	0	0	0
7.	Office Expenses	3865 + 353*	#5000	1889 + 274@	950 + 108 %	3221	5000
8.	Publications	83	200	84	50	134	200
9.	Other administrative expenses	7	30	18	4	22	30
10	Other Contractual Services	2922	3200	2807	1093	3900	4160
	Grand Total	26150	28000	21027	6405	27432	36129

In pursuance of the Ministry's Letter No.2/23/2014-BM/596-600 dated 8th April 2015 MWDT vide letter F.No.9/MWDT/2015-16/Budget dated 10th April 2015 surrendered Rs.5 Lakhs for renovation of Krishna Water Disputes Tribunal as the said Tribunal was damaged on account of fire broken out in the said Tribunal

*Expenditure booked to CPWD for providing service maintenance

@Out of expenditure booked to CPWD for 382 spent upto December 2015

% Out of expenditure booked to CPWD for 382 the remaining expenditure to be booked

6.7. Godavari and Krishna River Management Boards:-

1. Section 85(1) of the Andhra Pradesh Reorganization Act, 2014 (No. 6 of 2014), notified on 1st March, 2014, mandates that the Central Government shall constitute two separate boards to be called Godavari River Management Board and Krishna River Management Board for the administration, regulation, maintenance and operation of such projects as may be notified by the Central Government from time to time. In pursuance, the Central Government has constituted the Godavari River Management Board and Krishna

River Management Board vide notification No. SO-1403(e) and SO-1391(e) both dated 28th May, 2014 respectively. The headquarters of both the Boards are located at Hyderabad.

2. The functions of each Board shall include: -

- (a) The regulation of supply of water from the projects to the successor States having regard to:
 - (i) Awards granted by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956;
 - (ii) Any agreement entered into or arrangement made covering the Government of existing State of Andhra Pradesh and any other State or Union territory;
- (b) The regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory;
- (c) The construction of such of the remaining on-going or new works connected with the development of the water resources projects relating to the rivers or their tributaries through the successor States as the Central Government may specify by notification in the Official Gazette;
- (d) Making an appraisal of any proposal for construction of new projects on Godavari or Krishna rivers and giving technical clearance, after satisfying that such projects do not negatively impact the availability of water as per the awards of the Tribunals constituted under the Inter-State River Water Disputes Act, 1956 for the projects already completed or taken up before the appointed day; and
- (e) Such other functions as the Central Government may entrust to it on the basis of the principles specified in the Eleventh Schedule.

3. The Government of the successor States shall at all times provide the necessary funds to the Board to meet all expenses (including the salaries and allowances of the staff) required for the discharge of its functions and such amounts shall be apportioned between the States concerned in such proportion as the Central Government may, having regard to the benefits to each of the said States, specify.

4. The Cabinet while approving the proposal for constitution of Godavari and Krishna River Management Boards in its meeting held on 3rd April 2014 had also approved an initial contribution of Rs. 1.00 crore for each of the Board which would be later reimbursed to the Central Government by the Boards after contributions are received from party States. The initial contribution of Rs. 1.00 Cr. to each Board has been released in December, 2014.

AUTONOMOUS BODIES (SOCIETIES)

6.8 National Water Development Agency

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 WR, RD & GR) 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.

It has 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.

The Hon'ble Union Minister of Water Resources, RD&GR 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.

Special Committee for Interlinking of Rivers has been constituted vide Gazette notification dated 23rd September, 2014 as per the direction of Hon'ble Supreme Court of India. Seven meetings of the Special Committee for Interlinking of Rivers have been held on 17.10.2014, 6.01.2015, 19.03.2015, 14.05.2015, 13.07.2015, 15.09.2015 and 18.11.2015 respectively at New Delhi. Special Committee for Interlinking of Rivers has constituted four specific sub-committees; (i) Sub-committee for comprehensive evaluation of various studies/reports (ii) Sub-Committee for system studies for identification of most appropriate alternate plan, (iii) Sub-Committee for consensus building through negotiations and arriving at agreement between concerned States and (iv) Sub – Committee for restructuring of National Water Development Agency. The Sub-Committee for consensus building at serial no. (iii) is already functioning as Consensus Group under Chairman, CWC. Other three Sub-Committees have been constituted vide MoWR, RD&GR O.M. dated 13.02.2015.

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 work (Indian Portion) in respect of another 7 links under Himalayan Component were

completed and draft FR prepared. Pre-Feasibility Reports (PFRs) of 35 intra-State links proposed by States have also been completed up to March, 2015 and PFR of 1 link remained in progress during 2015-16.

An expenditure of Rs. 39.78 Crores has been incurred by NWDA on Interlinking of Rivers programme during 2015 -16 (upto December 2015). Various studies were continued by NWDA during the year. Further, Detailed Project Report (DPR) of Ken-Betwa link phase-I was completed and sent to concerned States in May, 2010. The DPR of Ken-Betwa link Phase-I is under appraisal in CWC. The work of preparation of DPR of Ken-Betwa link Phase-II and Damanganga-Pinjal link were completed during 2013-14. Also, the work of preparation of DPR of two intra-State links of Bihar completed during 2013-14. The work of preparation of DPRs, one of Maharashtra and one of Tamil Nadu also taken up and remained in progress during 2015-16. Two more DPRs of intra-State link of Jharkhand and Odisha were also initiated during 2014-15 and remained in progress during 2015-16.

Preparation of DPR of Par-Tapi-Narmada(PTN) Link is completed by August,2015 and Ponnaiyar-Palar link is scheduled to be completed during the year 2015-16 and the other works remain under progress. Post DPR work of Ken-Betwa link Phase –I is in advance stage.

During the year 2016 -17, an outlay of ` 73.50 Crores has been proposed by NWDA. NWDA would continue to do Survey & Investigation and it is planned to complete Survey & Investigation works of 3 links in Himalayan Component (Indian Portion). The work of necessary clearances from MoEF&CC, Convening meeting with CWC/States Govt./other central agencies etc. for post DPR stage work of Ken-Betwa link project Phase-I, Ken-Betwa link project Phase-II, Damanganga-Pinjal link project and Par-Tapi-Narmada(PTN) Link will be done during 2016-17. Also, Preparation of DPRs of two Intra-State links will be completed during 2016-17.

FINANCIAL OUTLAY

(Rs. in crores)

Name of the Scheme / Activity	XII Plan Outlay	Actual Expenditure 2014- – 15	Actual Expenditure 2015 – 16	Budget Estimate 2016 – 17
Investigation of Water Resources Development Schemes – Investigation of River Link Proposals	280.00	62.01	39.78*	73.50 (Proposed)

*up to December, 2015

6.9 National Institute of Hydrology (NIH):

The National Institute of Hydrology, a Govt. of India Society under Ministry of Water Resources, established in December 1979 at Roorkee, is conducting basic, applied and strategic research in the fields of hydrology and water resources development.

Objectives

The Union Minister of Water Resources is the President of the NIH Society and the Union Minister of State of Water Resources is the Vice-President. The Minister-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.

Studies and Research: The studies and research in the Institute are carried out under five scientific themes at the Headquarters, two Centres for Flood Management Studies and four Regional Centres. 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 and GIS Applications, Hydrological Instrumentation, and Ground Water Modelling.

Technical Publication and Technology Transfer: The research output of the Institute is published in the form of report, scientific papers, guidelines, manuals, etc. For transfer of the development technology and techniques to the target users, the Institute organizes workshops, training courses, seminars, symposia, conferences and brain storming sessions.

Performance during 2015-16 and targets for the year 2016-17 are shown below:

S. No.	Description of Item	Physical target for 2015-16	Achievement during 2015-16*	Target for 2016-17
1	Preparation of technical reports/ studies completed	50	15	50
2	Publication of research papers	148	96	150
3	Preparation of guidelines/ manuals	2	0	2

4	Organization of workshops/ seminars/ symposia	25	14	25
5	Training of Personnel	40	30	40

*Upto Dec., 2015

PUBLIC SECTOR UNDERTAKINGS:

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

INTRODUCTION

WAPCOS Limited is a “**MINI RATNA-I**” Public Sector Enterprise under the aegis of the Union Ministry of Water Resources, Ganga Rejuvenation & River Development. 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. Company’s Vision is “To be a Premier Consultancy Organization recognized as a Brand in Water, Power and Infrastructure Development for Total Project Solutions in India and Abroad”.

VISION

To be a Premier Consultancy Organization recognized as a Brand in Water, Power and Infrastructure Development for Total Project Solutions in India and Abroad.

MISSION

Sustained Profitable Growth, Excellence in Performance, Use of State-of-the-art Technical Expertise, Innovativeness and Capacity Building to Meet Society’s Needs Globally.

OBJECTIVES

- To perform the role of a premier agency for offering integrated package of services of scientific, technological and managerial quality for optimal planning and development of Projects.
- To adopt modern technology and systems to build in quality, reliability and accuracy thereby ensuring customer satisfaction.
- To continue the pace of growth of domestic and overseas business and to transfer know-how to Clients.

- To adopt 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 Projects.
- To promote research and development through interaction with other national and international agencies.
- To maintain pre-eminence in the field of consultancy through diversification in allied fields.
- To secure a fair monetary return to the enterprise as a result of its operations through improved productivity.
- To play a dynamic role in use of state-of-the-art consultancy for innovative design alternatives.
- To attract the best available talent and promote a committed and motivated workforce.
- To strive to achieve client satisfaction.
- To promote WAPCOS as a Brand Name.

FIELDS OF SPECIALIZATION

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, Roads & Bridges; Rain Water Harvesting; Ghats Development; Survey & Investigations, System Studies & Information Technology, City Development Plans, Financial Management Systems, Quality Control and Construction Supervision, Roads & Bridges. The Company provides concept to commissioning services for developmental projects in India and Abroad.

RANGE OF CONSULTANCY SERVICES

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 & Regional Development Plans, Field Investigations, Detailed Engineering Including Designs, Detailed Specifications, Tendering Process, Contract Management & Construction Supervision, Commissioning & Testing, Operation & Maintenance, Quality Assurance & Management, Software Development and Human Resource Development.

The USPs of WAPCOS include Survey & Investigation/Pre-Feasibility/DPRs for more than 300 Projects in Irrigation, Water Resources & Agricultural etc. contributing to development of over 12 Million Ha Irrigation Potential; more than 180 Projects in Ports & Inland Navigation; over 250 Projects in Water Supply & Sanitation, Rural & Urban Development, Roads & Highway Engineering; EIAs for over 250 Projects in the fields of Irrigation,

Hydro/Thermal Power, Ports & Harbours in India and Abroad. Similarly, in Hydro-Power Sector; WAPCOS has completed almost 51 Hydro-Power Projects in 19 Countries with an installed capacity of more than 20,500 MW; over 47 Hydro Power Projects in India with an installed capacity of more than 9,000 MW. In Thermal Power; the Company has successfully completed 10 overseas Projects with installed capacity of more than 2,900 MW and 9 Projects in India with an installed capacity of more than 12,000 MW. In Transmission & Distribution WAPCOS has accomplished more than 25 Projects in India and Abroad.

REGISTRATION WITH INTERNATIONAL ORGANISATIONS

WAPCOS is registered with various international funding agencies for participating in the funded projects like World Bank, Asian Development Bank, African Development Bank, Japan Bank for International Cooperation and United Nations Office for Project Services.

OPERATIONS ABROAD

Apart from India, WAPCOS has successfully completed/on-going consultancy assignments abroad and is currently engaged in providing consultancy services in

• Angola	• DR Congo	• Mali	• Sierra Leone
• Afghanistan	• Ethiopia	• Mongolia	• South Sudan
• Bangladesh	• Fiji	• Mozambique	• Sri Lanka
• Benin	• Ghana	• Myanmar	• Swaziland
• Bhutan	• Guinea Conakry	• Nepal	• Tanzania
• Burkina Faso	• Kenya	• Niger	• Trinidad & Tobago
• Burundi	• Lao PDR	• Nigeria	• Togo
• Cambodia	• Lesotho	• Philippines	• Uganda
• Central African Republic	• Liberia	• Rwanda	• Yemen
• Chad	• Malawi	• Senegal	• Zimbabwe
	• Maldives		

DIVIDEND

In view of the excellent performance of the company for the year 2014-15, dividend of Rs. 16.50 Crore, which is highest-ever in the history of the company and is 66% of the paid-up capital of Rs. 25.00 Crore, was paid in September, 2015

6.11. National Projects Construction Corporation Limited:

INTRODUCTION: National Projects Construction Corporation Limited (NPCC) was set up in 1957 as a premier construction Company to create necessary infrastructure for economic development of the country in the core sectors of irrigation and water resources, power and heavy industries. Its administrative control was transferred from M/o Irrigation and Power to M/o Water Resources, RD & GR since 1989. NPCC is having pan india presence with 15 Zonal offices situated at Kolkata, Bhubneshwar, Guwahati, Silchar, Shillong, Itanagar, Raipur, Mumbai, J&K, Bangalore, Patna, Ranchi, Lucknow, NCR

Gurgaon and Dehradun & 105 operational Units. NPCC Ltd complies with Quality management requirements of ISO 9001-2008 for execution of Civil Works. The corporation has also been awarded credit rating as A+ company by ICRA. Presently, the total manpower of the Company is 1045 as on 31.01.2016.

VISION: *“To become world class engineering projects implementing organization”*

MISSION: “To achieve a turnover exceeding Rupees 3500 crores with positive net worth by 2021-22 by focusing value addition at all points of interaction with our clients and continuously enhancing capabilities of organization and employees through innovations.”

OBJECTIVES:

1. To ensure customer satisfaction through:
 - Execution of projects within schedule time & cost,
 - Adhering Specifications & conditions of Contract,
 - Customer feedback & ensuring improvement.
2. Achieving Turnover Target as per MOU
3. Securing Business to maintain Work Order Book position in excess of three times of Turnover.
4. Realizing old dues maximally and quickly for improving financial position of NPCC.
5. Continual improvement of Manpower knowledge & skills.
6. Continual organizational re-structuring and diversification with focus to Business, Profitability and Customer’s satisfaction.
7. Maintaining & improving ISO 9001 – 2008 based Quality Management Systems in all areas of activity.

AREAS OF OPERATION

- Townships & Other Residential Buildings
- Institutional Buildings
- Office Complexes
- Roads, Bridges & Fly-Overs
- Hospitals & Health Sector Projects
- Industrial Structures
- Surface Transport Projects
- Environmental Projects
- Thermal Power Projects

- Hydro-Electric Power Projects
- Dams, Barrages & Canals
- Tunnels & Underground Projects
- Real Estate Works

Financial Status: The authorized capital of the corporation is Rs. 700 Crores and its Paid up Capital is Rs. 94.53 Crores. The Corporation achieved a turnover of Rs. 1108.51 crore during 2014-15 compared to previous year's turnover of Rs 1174 crore. The turnover during the year 2015-16 is anticipated amount to Rs. 1100 crore, whereas the turnover of Rs. 583.12 crore is achieved upto December 2015.

The Company has made net profits for the last 6 years continuously and has a positive net worth during the last three years. Net profit expected during the financial year 2015-16 of Rs 14.15 Crore (estimated).

The Company has set the following targets for the year 2016-17

(Rupee in Crores)

S.No.	Financial indicator	Target for Good Category
1	Gross Margin	34.75
2	Gross Sales	1200
3	Gross Profit	30.40
4	New Business	1200

Performance of 2014-15

Annexure – I
(Chapter-IV)

(Rs. in Crore)

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2014-15	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.03.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
1	Development of Water Resources Information System (DWRIS)		225.40				
	Hydrological Observations and Monitoring System						
	Upgradation of existing HO Stations and Setting of new HO Sites	1) Continuation of Hydrological Observations activities including snow hydrology, water quality and monitoring of glacial lakes, 2) Expansion and modernisation of hydrological observation network with state of art technique and equipments, 3) Collection compilation storage, Dissemination, analysis and publication of Data in form of Water Year Book,		Observation of data at 933 sites to continue and Data collection at G&D sites and snow observation sites for various uses etc. to continue. Upgradation of 100 existing sites, expansion of data observation network through establishment of 236 new stations.	Daily/ periodical observation of hydro-meteorological, snow observation, Water quality parameters as per established procedures and protocol to continue throughout the year.	1). Observation of Hydrological data at 878 sites including snow data and monitoring of glacier lakes continued. 2). Collection, compilation, storage, dissemination, analysis and publication of data in the form of Water Year Books achieved. 3). Up gradation of 100 HO stations to be achieved. 4). 177 new sites opened.	BE for only Hydrological observation component, RMCD, CWC
	Collection of Storage data on the major reservoirs in the country	To collect reservoir water level of 120 reservoirs whose live storage is proposed to be monitored by the CWC by telemetry system		Telemetry system will be installed on 87 reservoirs.	The activities to continue throughout the year as part of program to be completed in 12th Plan period.	Reservoir storage data continued to be collected using conventional methods. Proposal for telemetry based monitoring system has been drafted.	

	Developing Coastal Management Information System (CMIS)	<p>Determination of causes of erosion/ sediment transportation /defining sediment cell/sediment budget etc. including data collection and documentation (6 sites)</p> <p>Collection, Analysis, Processing and Integration of Coastal Data into WRIS</p> <p>Strengthening of CPDAC/it's sub-committees, Field visits, Training/Study Tours, Technology Transfer, Strengthening of Beach Erosion Dte. as a Centre of excellence , Preparation of Manual, guidelines, Workshop / Seminar etc.</p>		<p>Opening of two site and data collection</p> <p>Organizing meeting of CPDAC and its sub-committees.</p> <p>Strengthening of Beach Erosion Directorate</p>	Activities to continue throughout the year	A meeting was held with IIT, Madras and their estimate for 66 crore was discussed. They were advised to revised it and submit the same. NIO Goa has also been requested to submit the proposal similarly.	
Irrigation Census							
	Rationalization of Minor Irrigation Statistics (RMIS)	Conduct of 5th Minor Irrigation Census in the country using traditional methodology.		<p>(i) Conduct of 5th MI Census in States/ UT's by traditional methodology -Trainings, Fieldwork by States and development of software by NIC</p> <p>(ii) Release of funds to States/ Uts</p> <p>(iii) Signing of MOU with NIC & release of Ist installment to NIC Phy. Target: Development of Data entry/processing software for Census by NIC.</p> <p>(iv) Studies for 6th MI census, salary of outsourced staff, Evaluation studies, Technical Consultants</p>		<p>1. Six Regional Training Workshops organized in six regions in which detailed training on schedules/manuals etc. of 5th Minor Irrigation Census was imparted to officials from States/UTs</p> <p>2. Released/ Revalidated Census funds to 25 States/UTs till Dec.2014.</p> <p>3. MoU has been signed with NIC for development of software for data entry/ validation.</p>	

	Pilot Census of Major and Medium Irrigation Projects	Collection of census data (Phase-II) at outlet level of 8 projects covered in the Phase-I through outsourcing		Finalization of schedule to be filled up for census and guidelines thereon.		<p>Eight projects from North, South, East, West, North East and Central region were selected for phase I of Pilot Census of Major and Medium Irrigation (MMI) Projects.</p> <p>For the purpose of collecting data on physical assets i.e. inventory of projects during Phase-I, schedule and guidelines were prepared and sent to concern regional Chief Engineers for collecting the information from state project authorities.</p> <p>The filled in scheduled were received in respect of seven out of eight (except Upper Ganga Canal project) projects from regional CE's. on examining the same, some incompleteness was observed in the filled in schedules. Accordingly these schedules were referred back to the concerned regional CEs for doing the needful.</p>	
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	Water Quality Assessment Authority and Monitoring System	To provide Secretarial assistance to WQAA to carry out its mandated activities.		(1) Uniform Protocol on Water Quality Monitoring (UPWQM), (2) Organising WQAA Meetings, (3) Organising trainings/workshop/seminars on water quality issues, (4) Organising international training programmes/short courses, (5) Taking-up/sponsoring R&D activities of WQAA.		Continuing Activity	
	Strengthening of Monitoring Unit in CWC	General/ AIBP Monitoring of Major/Medium/ERM Projects		3 + 36 visits in Q1/ 14 + 37 Visits in Q2/ 13+ 37 visits in Q3/14+37Visits in Q4. Processing for Approval of advance payment/Award of work/ Procurement & hosting of processed imageries/ digitization and assessment study		General Monitoring visits 4 (2+2)out of 27 and AIBP Monitoring 12 visits out of 73 for I & II quarters made by field monitoring units	
	Data Bank and Information System						
	Web-enabled Water Resources Information System & Setting up of National Water Informatics Centre (NWIC)	Creation of Watershed Atlas and development of web enabled Water Resouces Information system of the country at 1:50000 scale Reassessment of basin wise water availability for planning of national water resources		(i) Completion of India WRIS by NRSC (ii) Taking over of India WRIS project by CWC & setting up of Centre at CWC hq iii). Updation & Refinement of India-WRIS iv). Updation & Refinement of India-WRIS (v) Approval of proposal by		Proposal of NWIC and Reassessment of Water Availability of 19 no. of basins (Rs 6 cr) in the country has been sent to MoWR for approval. The approval is awaited.	

				MoWR (vi) Phase I data collection and capacity building of CWC officers (vii) Phase II - checking of consistency of data and calibrating of data and model parameters (viii) Phase II continues			
	Up-gradation and Modernization of Library Information Bureau in CWC	Enhancement of CWC professional knowledge base by providing them with best of literature on the subject by upgrading the facilities in library and modernisation of library information system		Procurement of books/publication/software purchase etc., R&M of library & library building, Procurement of M&E+AC + Computer, Digitization of CWC publications, R&M of library & library building + payment for Horticulture services		Procurement of books/publications/ periodicals/ Journals etc. Procurement of AC/ Computers and stationary/ library furniture Charges towards Electrical Energy /Water/ Sewage. Training of staff	
	Software Management in CWC	Enhancing e-governance capabilities with web based custom-made softwares in CWC. Up-grade and strengthen the hardware/ software/ network resources for CWC-HQ and field offices		Procurement of laptops/ computers/ printers up-grade and strengthen the hardware / software / network resources for CWC-HQ and filed offices		Up-grade and strengthen the hardware / software / network resources for CWC-HQ and filed offices	
2	Flood Forecasting	1) To continue flood forecasting from existing 147 level forecast and 28	100.00	1) Collection of real time data, compilation and	Works will be continued	1). Total of 4772 forecast were issued out	

		<p>inflow forecast sites covering 20 river basins.</p> <p>2) Automation of the existing network of forecast sites together with telemetry system for communication of real time data and other state of art equipments.</p> <p>3) Automation and telemetry system at 219 existing stations covering flood forecasting network of CWC.</p>		<p>formulation of flood and inflow forecast and its dissemination to user agencies to continue.</p> <p>2) Automation of existing flood forecast sites together with telemetry system for communication of real time data and other state of art equipments.</p>	<p>throughout the year as a part of programme to be completed during 12th Plan</p>	<p>of which 4667 (97.8%) were within permissible limits of accuracy.</p> <p>2). 205 sites were equipped with telemetry system in XI Plan.</p> <p>3). Mathematical modeling study continued. The work could not be completed as approval of EFC was awaited.</p>	
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.	31.38	Implementation of the project components, i.e. institutional strengthening, vertical extension (with DSS-Planning, DSS-Real Time, Hydrological Design Aids, and 10 Purpose Driven Studies) and Horizontal Expansion with support of 4 major consultancies. Aquifer Mapping in 6 pilot study areas.	The planned activities are to be implemented through the Central Agencies, viz. PCS (MoWR), BBMB, CWC, CGWB, CWPRS, CPCB, IMD and NIH till end of May, 2014. The World Bank reimbursement shall be completed by 30 th September, 2014.	<p>(a) Data observation and validation is being carried out on a regular basis.</p> <p>(b) Under Decision Support System-Planning consultancy, DSS developed for identified basins in 9 HP-I states.</p> <p>(c) Installation of RT-DAS for DSS-Real Time of BBMB nearing completion.</p> <p>(d) Development of modules of Hydrological Design Aids (HDA) model nearing completion.</p> <p>(e) 2 No. of</p>	Project has now been closed and all reimbursement completed by November 30 th , 2014.

						<p>Purpose Driven Studies are completed and approved. Remaining PDSs are nearing completion. The interpretation of results and finalization of report in progress.</p> <p>(f) Heliborne survey completed in the 6 Pilot Areas. The interpretation of results and finalization of report in progress.</p>	
4	Ground Water Management And Regulation	A) Aquifer Mapping	325.00		1 st April, 2014 – 31 st March, 2015	Rs 137.82 (G) Rs 125.42 (N) 5.89 lakh sq.km.	
		Compilation of Existing data (in lakh sq.km.)		5.89 lakh sq.km			
		Identification of Data gap for Aquifer Mapping (in lakh sq.km.)		5.89 lakh sq.km.	1 st April, 2014-31 st March, 2015	5.89 lakh sq.km.	
		Data Generation <ul style="list-style-type: none"> • Exploratory drilling • Vertical Electrical Sounding (VES) (nos) • Borehole logging (No.) • Hydro-chemical Analysis (Nos) 		700 wells 2000 Need Based 20000 samples		664 wells 2124 nos 143 nos 22017 samples	
		B) Monitoring of wells <ul style="list-style-type: none"> • Monitoring of existing ground Water observation wells (Nos) 		23000 wells	1 st April, 2014-31 st March, 2015	Monitoring of April/May, 2014, August, 2014 and November, 2014 and Jan 2015 completed	
		<ul style="list-style-type: none"> • Establishment of additional new observation wells (Nos) 		7000 wells		2007 wells	
		C) Technical assistance to organisations for water supply source investigations (nos)		Need Based	1 st April, 2014-31 st March, 2015	121 nos investigations	

		D) Ground Water Resources Assessment		Dynamic Ground Water Resources Assessment (As on 2013)	1 st April, 2014-31 st March, 2015	Out of 36 No. States/UTs, 23 states/UTs, have constituted the State Level Committee for Assessment of Dynamic Ground Water Resources of concerned states/ UTs (As on 31 st March, 2013)	
		E) Procurement of Machinery & Equipments for Technology upgradation		Procurement of Rigs	1 st April, 2014-31 st March, 2015	Procurement of 9 Rigs <ul style="list-style-type: none"> • DTH rigs (500m) – Supply order for 3 DTH rigs placed by DGS&D on 9th July, 2014. (3 Nos rigs delivered to DivIX, Hyderabad, Div-XII, Bhopal and Div-XIV, Bangaluru respectively • Dual Rotary rigs (400m)-supply order for 2 Dual Rotary rigs has been placed by DGS&D on 25th September, 2014. • DTH rigs (300m)-supply order for 4 DTH rigs has been finalized by DGS&D on 27th Jan, 2015. • Procurement of 15 Air compressors – E-tender floated on 30.03.2015 at CPP Portal and CGWB web site. Date of 	

						online opening of tender is 25.05.2015.	
				Procurement of Scientific Equipments/ Softwares and Data	1 st April, 2014-31 st March, 2015	<p>Procurement details are as under:</p> <ul style="list-style-type: none"> • Procurement of 4 nos of hydrological equipments – Administrative approval of the Ministry has been received for e-procurement and the tender document uploaded on CPP Portal on 24.02.2015. The date of opening of tender is 23.04.2015. • Procurement of 4 nos of geophysical equipments – The technical specification of tender document has been modified and re-put up for concurrence of FAO for sending the case to the Ministry for obtaining administrative 	

						<p>approval.</p> <ul style="list-style-type: none"> • Procurement of 6 nos of chemical equipments – Administrative approval of the Ministry has been received for e-procurement. Proposal has been sent to Ministry of Water Resources, River Development and Ganga Rejuvenation for approval of the tender document. • Procurement of 4 nos of chemical equipments – The tender document has been uploaded on CPP Portal on 19.02.2015. The date of opening of tender is 21.04.2015. • Procurement of 7 nos scientific softwares – Supply orders for all concerned software have been placed on 30.03.2015. • Procurement of 11 	
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						nos Scientific softwares for development of e-GEMS under HP – II – Supply order have been placed for 10 nos of softwares on 30.03.2015. For Visual Studio, NIQ was floated, only one quotation has been received.	
		F) Preparation of Reports, maps for dissemination of Scientific information			1 st April, 2014-31 st March, 2015		
		a) Stat Report		18		10	
		b) District Brochures		125		125	Target of 12 th Plan (625) achieved
		c) Ground Water Year Books		23		24	Including Telengana state
		G) Central Ground Water Authority (Information, Education & Communication)					
		• Organizing National GW Congress, Workshops, Seminars etc.				CGWB organized 6 Workshops in Arsenic affected areas at Kolkata, Patna, Chandigarh, Raipur, Lucknow and Guwahati.	

		<ul style="list-style-type: none"> Painting Competition 				5 th National Level Painting Competition was organized on 16 th February, 2015 a New Delhi in the National Level Painting Competition, in all 13 students were declared winners. Master/ Abhayam Rathod of class VIII of Bridge Ford School, Ranchi of Jharkhand state won the first prize of Rs. 1,00,000/- (One Lakh).	
5	Research & Development Programme in Water Sector	It includes preparation of technical reports. It also includes publishing research papers/ Manual /Guidelines, organizing training/ workshop etc	50.00	Preparation of technical reports-229 Nos. Publication of research papers- 270 Nos. Organization of workshop /seminar/symposia/Training- 37 Nos.	The work is to be implemented by various organisations of the Ministry.	Upto Dec.14 Preparation of technical reports- 170 Nos. Publication of research papers- 229 Nos. Organization of workshop /seminar/symposia /Training- 35 Nos	
6	Human Resources Development /Capacity Building		50.00				
(a)	IEC component of HRD/CB Scheme	To generate awareness amongst the masses about the importance of water and need for its conservation.	30.00	Publicity through Electronic Media for mass awareness on water conservation Messages of Water Conservation were propagated through	23.08.2014 to 24.09.2014	Successfully executed.	

			<p>Electronic Media by telecasting video spots of 60 seconds duration on DD National, DD News and 18 Regional Kendras from 23.08.2014 to 20.10.2014. These were also telecast on LSTV from 22.08.2014 to 20.10.2014. Similarly, 60 seconds of audio spots were broadcast on National News, Vividh Bharti (37 Stations), FM Radio (20 Rainbow + 4 Gold) and Regional News (31 stations) from 26th August, 2014 to 24th September, 2014.</p> <p>Painting Competition</p> <p>School level Painting Competition on the theme of “Save Water Live Better” for the students of 6th, 7th and 8th standard was organized from September, 2014 to October, 2014 in the schools all over the country.</p> <p>ii. State level painting competition on the theme of “Save a drop save the future” was organized across the country on 26.11.2014</p>	<p>From September, 2014 to January, 2015</p>	<p>Successfully executed.</p>
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			<p>amongst the 50 best students of each state out of the school level entries.</p> <p>iii. National painting competition on the theme “Save Water for the Future” was organized on 28th January, 2015.</p> <p>Publicity through participation in Fairs/Exhibitions</p> <p>The Ministry participated in 18th National Exhibition through CWC and CGWB from 3rd to 7th September, 2014 at Kolkata.</p> <p>ii. Ministry of Water Resources, River Development and Ganga Rejuvenation had erected a pavilion on the theme of “CLEAN RIVER-BRIGHT FUTURE” in Hall No.7-E in the 34th Edition of India International Trade Fair in Pragati maidan from 14th to 27th November, 2014.</p>	<p>3rd to 7th September, 2014</p> <p>14th to 27th November, 2014</p>	<p>Successfully executed.</p> <p>Successfully executed.</p>	
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				<p>Publicity through Print media i.e. newspapers /magazines</p> <p>A colored advertisement on Painting Competition was issued in all leading newspapers across the country on 18th October, 2014.</p> <p>ii. Half page colored advertisement in leading newspapers of Hindi, English and regional languages was issued on the occasion of ‘Jal Manthan’ on 20th November, 2014</p> <p>Organisation of Workshops /Seminars/ Conferences</p> <p>India Water Week was organized from 13th to 17th January, 2015 at Vigyan Bhawan and Pragati Maidan. The main theme of IWW-2015 was “Water Management for Sustainable development”. Main theme had been divided into 8 sub themes, under each sub-theme a number of technical</p>	<p>18th October, 2014.</p> <p>20th November, 2014</p> <p>13th to 17th January, 2015</p>	<p>Successfully executed.</p> <p>Successfully executed.</p> <p>Successfully executed.</p>	
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				<p>sessions were organized.</p> <p>ii. 'Hamara Jal- Hamara Jeevan' was organized in the districts of the country along with the organization of India Water Week in New Delhi.</p> <p>Exhibitions in prominent Places</p> <p>Ministry participated in the '7th Vibrant Gujarat Global Trade Show' from 8th to 13th January at Gandhi Nagar, Gujarat.</p> <p>Activities under Tribal Sub-plan</p> <p>Various events/activities were organized under Tribal Sub plan by the subordinate organizations of the Ministry, viz. CWC, CGWB and Brahmaputra Board</p>	<p>8th to 13th January</p> <p>From January to March, 2015</p>	<p>Successfully executed.</p> <p>Successfully executed.</p>	
(b)	National Water Academy : Continued upgradation of National Water Academy (NWA)	Training in all aspects of WRD&M for all Stakeholders of water Sector including Induction Training Programme. Running and Maintenance	6.00	<p>a) 32 Nos. of Training Programmes</p> <p>b) Running and Maintenance</p>	<p>a) Training Programme will be spread over the whole year and will be conducted in</p>		

				of NWA campus and its infrastructure. c) Prurchase of New Vehicle and Furnishing the remaining portion in the newly constructed Guest House & annexe building.	accordance with the approved Training Calendar b) Throughout the year c) completed by March,2015		
(c)	RGN Ground Water Training Institute	Training and Capacity building in Ground water sector	7.00	Number of Training conducted/ Tire I-32 Tire II-50 Tire III-350	Annual	Tier I- 33 Tier II-50 Tier III-35	Targets against Tier-I & Tier-II will be achieved by March 2015. Using available funds 35 Tier-III training will be completed.
(d)	Capacity Building Programme (NERIWALM)	Capacity Building/ training	5.00	60 Nos.	As per Training Calendar, 2015-16		
(e)	Training of MoWR Officers	To train officers/officials of the Ministry in institutions located in India and Abroad in different fields as per the mandate given to MoWR, RD & GR.	2.00	-	-	-	Training Policy was not approved during the year.
7	Infrastructure Development - CGWB - Land & Building	To set up own office buildings	80.00	Construction of Office building for 1. Regional and Divisional office at Guwahati. 2. Divisional Store and Workshop buildings at	1-2 years	1. Construction of building at Guwahati is almost completed except few minor works. 2. Construction of building at Bangalore	

	<p>Infrastructure Development (L&B) – CWC</p>	<p>To procure land and construction of office/ residential building for CWC for providing decent, honourable, better and healthy working condition to its staff.</p>		<p>Bangalore.</p> <p>3. Staff Quarters for the employees of CGWB at Bhubaneshwar.</p> <p>4. Divisional Store & Workshop for Division XII at Bhopal.</p> <p>5. Regional and Divisional office at Ahmedabad.</p> <p>6. Divisional office, workshop & store at Ambala.</p> <p>7. Building for Regional & Divisional at Jammu.</p> <p>8. Boundary wall and Building for RGNGWTRI (RGI) at Naya Raipur.</p> <p>9. Divisional workshop & store at Chennai.</p> <p>10. Boundary wall/building for Divisional workshop & store at Jodhpur.</p> <p>Construction of CWC Building at Kolkata, Guwahati, Patna, Hutments to be continued. Construction works of boundary wall at Itanagar. Proposal for construction of office cum</p>	<p>Majority of works are being implemented by CPWD/ CWC.</p>	<p>and Bhopal is completed.</p> <p>3. Work on rest of the seven projects as per EFC for the 12th Plan shall be executed on receipts of Ministry's approval/sanction.</p> <p>Construction of CWC Building at Kolkata, Guwahati, Patna, Balasore (Swarnarekha Sub-Division) , Hutments continued.</p>	
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	<p>Infrastructure Development-CGWB(IT)</p> <p>Infrastructure Development Scheme- e-Governance component</p>	<p>1.Procurement of 2000 No. of PCs, printers & MS office</p> <p>2.Design & Development of webbased applications for e-Governance activities</p> <p>To strengthen the working environment with a view to providing prompt, responsive and transparent governance. Dissemination of citizen centric information on the water related issues.</p>		<p>residential buildings at Rongpur, Silchar. Modernization of CWC(HQrs) at New Delhi to be continued.</p> <p>1.Procurement of 200 No. of Pcs, printers and MS Office</p> <p>Design & Development of Work flow applications for e-Governance activities</p> <ul style="list-style-type: none"> •Development/ Redesigning the Website of the Ministry in compliance with Guidelines for Indian Government Websites (GIGW). •Implementation of identified IT/e-Governance 	<p>One year</p> <p>Three Years</p> <p>31.12.2014</p> <p>(As per NIC / concerned agency proposal)</p>	<p>Construction works of boundary wall at Itanagar contd. Proposal for construction of office cum residential buildings at Rongpur, Silchar under progress. Modernization at New Delhi continued, fresh proposal for modernization works through NPCC pursued</p> <p>200 nos of Pcs and printers procured and installed in all the offices of CGWB.</p> <p>(Financial Progress 0.5 Crore)</p> <p>The activity was not undertaken as Proposal from NIC was not received.</p> <ul style="list-style-type: none"> • A comprehensive Website detailing all information about the work being done by the Ministry and the Water resources available in the 	<p>Due to less allocation of funds in RE stage, payment for the PCS and procurement of MS office was not undertaken</p>
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				<p>applications under the Roadmap project or mandated to be implemented by Government of India.</p>		<p>country has been designed and operationalized for use of the people/experts in the field of water resources. The new Website of this Ministry has been launched by NIC on 11.06.2014.</p> <ul style="list-style-type: none"> • Facebook page of the Ministry hosted on 12.11.2014. • Prepared/uploaded an eBook containing major activities and achievements of the Ministry on 26.12.2014. This was converted into proper eBook format. • Hardware for enhancing e-Governance capacity of the Ministry containing computers, printers, UPS etc. procured from e-Governance Budget Head. 	
		To Procurement of Computers, printers,					

	GA-IT	Scanners, laptop, UPS, Multifunction Machine, Digital copiers etc., Consumable Items		Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database to facilitate e-Gov	Change of XP windows is a time consuming process, some of targeted have spilled over to next year.	Procurement of Desktop Computers and peripherals, Purchase of Photocopier Machines, Scanner AMC of IT equipment. AMC of photocopiers, AMC of UPS.	
	GA- Land & Building				Renovation of rooms over to next year	Providing infrastructure support for implementation of IPV6 in Ministry. Providing infrastructure support for implementation of e-Gov/e-Office.	
8	River Basin Management		250.00				
a	River Basin Organisation	Scheme under approval stage	1.00				
b	Investigation of Water Resources Development Schemes	To carry out activities related to survey, field Investigations in respect of preparation of Detailed Project Reports (DPRs), Feasibility Reports (FRs) of river link proposals & preparation of Prefeasibility Reports (PFRs) / FRs / DPRs of intra-State link proposals and activities consider incidental, supplementary or conducive to the attainment of above objectives.	105.00	(a) Survey & Investigations for preparation of Feasibility Report of Himalayan Component 1. Manas – Sankosh – Tista – Ganga (M – S – T – G) link 2. Jogighopa – Tista –	The works of investigation / preparation of project report are covered in more than one year and are carried over to following years	1. & 2. NWDA has carried out alternative studies of Manas-Sankosh-Tista-Ganga link to avoid Jogighopa – Tista – Farakka (Alternative to M–S–T–G). In the alternative proposal of M-S-T-G link, Manas Tiger	

				<p>Farakka link (Alternative to M – S – T – G)</p> <p>3. Sone dam-STG link</p> <p>4. Kosi – Ghaghara link</p>		<p>Reserve and Buxa Tiger Reserve and other Forests will be avoided. Therefore, NWDA has done alternative alignment of MSTG link which merges both MSTG and JTF alignments. Topographical Surveys of alternative alignment is under progress.</p> <p>3. Survey and Investigation works remained under progress.</p> <p>4. Survey and Investigation works of link in Indian portion is completed.</p>	
				<p>(b) Consensus building process amongst the concerned States for preparation of Detailed Project Report of Parbati – Kalisindh – Chambal link and Mahanadi – Godavari – Krishna – Pennar – Cauvery – Vaigai – Gundar links system.</p>	<p>March, 2015</p>	<p>Efforts have been made by MOWR / NWDA to obtain the concurrence of concerned States, Madhya Pradesh & Rajasthan for signing of tripartite MOU for preparation of DPR of Parbati – Kalisindh – Chambal link.</p>	<p>Based on the suggestions of WRD, Govt. of Odisha, NWDA has prepared a revised Preliminary proposal of Mahanadi-Godavari Link Project with reduced submergence, a presentation on the revised proposal of</p>

				<p>(c) Preparation of Prefeasibility Reports of intra – State link proposals, as proposed by State Govts.</p> <p>(d) Post – DPR stage work of Ken – Betwa link Project Phase-I</p> <p>(e) Preparation of DPR of Ken-Betwa links (Phase-II).</p> <p>(f) Preparations of DPR of</p>	<p>March, 2015</p> <p>Preparation of DPR takes 3-4 years.</p> <p>Activities to continue throughout the year as a part of programme to be completed during</p>	<p>Work of consensus building on the links under 8 link system remained under progress. NWDA has carried out various alternative studies in Tel sub-basin of Mahanadi basin of diversion of water of Mahanadi river from the site other than Manibhadra dam site.</p> <p>2 PFRs completed during 2014– 15.</p> <p>Technical appraisal has been completed by CWC. The environmental, wild life and forest clearances are under process at advance stage.</p> <p>Process for the environmental, wild life and forest clearances has been started.</p> <p>The work of DPR of Par-Tapi-Narmada (PTN) link remained in</p>	<p>Mahanadi-Godavari Link Project has been made to the Hon'ble Chief Minister, Govt. of Odisha on 29.05.2015 by the seniors of MoWR, RD&GR. The response of Govt. of Odisha in this regard is awaited. Govt. of Odisha is not agreeing with the water balance studies of the link project carried out by NWDA. Based on response from Govt. of Odisha, NWDA will take up preparation of Feasibility Report to establish techno-economic feasibility of</p>
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	<p>IWRD - CWC</p>	<p>Carrying out investigation in respect of identified projects for water resources development.</p>		<p>Par- Tapi-Narmada (PTN) link</p> <p>(g) Preparation of DPR of intra-State links</p> <p>(i) Barakar-Damodar-Subaranrekha link</p> <p>(ii) Wain Ganga - Nalganga (Purna Tapi) link</p> <p>(iii) Ponnaiyar-Palar link</p> <p>1). Preparation of DPR for of Twang chu, Ujh, Kirthai-II, Suntaley, Kalez Khola HEPs.</p> <p>2). Continuation of S&I of Sonai and Rukni Irrigation Project, Manas- Sankosh-Teesta Link Canal, Gyspa Project</p> <p>3). Continuation of Hydrological and seismological observations. at 4 stations of Sankosh basin in Bhutan</p> <p>4). Preparation of feasibility reports of Adhwara groups of rivers in Sitamarhi Districts through WAPCOS.</p>	<p>12th Plan.</p>	<p>progress.</p> <p>The work of preparation of DPRs remained in progress.</p> <p>1) DPR submitted for Ujh & Kirthai-II HEP. 2) Continuation of the works of S&I and HO of Twang ch, HEP, Sonai and Rukni Irrigation Project, and Hydrological & seismological observations in Sankosh basin. 3) Work for Suntaley & Kalez khola HEP is held due to non availability of permission from forest department & shifting of dam axis respectively. 4) Works of Gyspa project could not progress due to local hindrances in the project area.</p>	<p>the revised proposal followed by Detailed Project Report.</p>
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						5). Satellite imageries received by WAPCOS from NRSE for Adhwara groups of rivers 6) Work for new projects (Kali Khola & Tarum Chu HEP, Sikkim, Tlwang in Mizoram) started.	
c	Re-Structuring of CWC	Scheme under approval stage (not recommended by EFC).	1.00				
d	Brahamaputra Board	<ul style="list-style-type: none"> ✓ 'Survey & Investigation' and Preparation of- <ul style="list-style-type: none"> ○ Master Plan ○ DPRs for Drainage Development Schemes ○ DPRs for Multipurpose project ✓ Execution of Anti-erosion schemes & Flood Management Schemes ✓ Execution of Drainage Development Schemes ✓ Operation & maintenance and up-gradation of NEHARI ✓ Construction of H.Q. Complex and R&M of assets created by the Board 	143.00	<ul style="list-style-type: none"> ✓ Survey & Investigation' and Preparation of- <ul style="list-style-type: none"> ○ 3 Master Plans ○ DPRs of DDS ○ DPR of Kulsi MP Project ✓ Execution of Anti-erosion schemes & Flood Management Schemes <ul style="list-style-type: none"> ● Protection of Majuli Island- Phase-II & III - 23.52% ● Avulsion of Brahmaputra at Dhola Hatighuli-Phase- IV - 0.2% ● Balat Village, Meghalaya- 35% ● Mankachar, Kalairalga, Assam- 50% 	Activities implemented by Brahmaputra Board.	<ul style="list-style-type: none"> ✓ 'Survey & Investigation' and Preparation of- <ul style="list-style-type: none"> ○ 2 Draft Master Plans completed ○ Preparation of 2 draft DPRs of DDS Haria-Nanoi & Dipota in progress ○ DPR of Kulsi MPP completed ✓ Execution of Anti-erosion schemes & Flood Management Schemes <ul style="list-style-type: none"> ● 12.03 % of phase-II & III works of protection of Majuli Island completed ● Remaining works in progress 	River Basin Management

		<p>✓ Construction of raised platforms</p> <p>Feasibility studies of channalisation of river Brahmaputra</p>	<p>50%</p> <p>✓ Execution of Drainage Development Schemes</p> <ul style="list-style-type: none"> ○ 25% works of Barbhag DDS ○ 30% works of Amjur DDS ○ 50% of Jengrai ○ 35% of Jakaichuk <p>✓ R & M of NEHARI</p> <p>✓ R&M of assets created by the Board</p> <p>✓ completion of construction of raised platform</p> <p>Feasibility studies of channalisation of river Brahmaputra</p>		<ul style="list-style-type: none"> ● Work order issued ● Tendering process for execution have been initiated for these two schemes <p>✓ Execution of Drainage Development Schemes</p> <ul style="list-style-type: none"> ○ Due to dewatering problem in Barbhag DDS progress is nil ○ Due to revision of DPR the progress of Amjur DDS is held up ○ Due to poor response of tenderer retendered twice for execution of construction of sluice of Jengrai DDS ○ 26% of Jakaichuk DDS completed <p>✓ Continued</p>	
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						<ul style="list-style-type: none"> ✓ Continuing Activity ✓ construction of raised platforms Barbalarchar completed ✓ Work in progress 	
9	River Management Activities And Works Related To Border Rivers & UTs	Hydrological observations and investigations of Water Resources Projects with neighboring countries besides river management works on common/border rivers. Flood control, Anti-erosion and anti sea erosion works, Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal).	175.00	<ul style="list-style-type: none"> (i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and (ii) Transmission of flood related data from/ to neighbouring countries (iii) Preparation of Joint Detailed Project Reports (DPR). (iv) Development works on common/border rivers. (v) Anti-erosion and anti sea erosion works of UTs. (vi) Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal). 	The works will be implemented by Central Water Commission, Ganga Flood Control Commission, and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal, other border States and UTs.	<ul style="list-style-type: none"> (i) Continued Joint Hydrological observations on river Ganga with Bangladesh, and (ii) Transmission of flood related data from/ to neighbouring countries continued (iii) The work of Preparation of Joint Detailed Project Reports (DPR) of Sapta Kosi Sun Kosi projects continued. The works could not progress due to local law and order problems. (iv) The work of investigations for Pancheswar project at Rupaligad site continued 	

						but could not progress due to lack of response from Nepalese side as the works are located in Nepalese territory.	
10	Farakka Barrage Project <ul style="list-style-type: none"> • Operation and maintenance of Barrage and allied structure including protective measures for safety of the barrage • Maintenance and protective measures of Feeder Canal and allied structures including navigational lock etc 	<p>To upkeep the Farakka Barrage and its allied structure and replacement of its gates in a phased manner</p> <p>To upkeep of the Feeder Canal and filling of scour pocket</p>	150.00	<ul style="list-style-type: none"> • Spl. Repairs/ Replacement of Main Barrage Gates • Operation maintenance of Feeder Canal and navigation lock 	<p>The works are identified according to vulnerability and/ proneness of areas and executed after the approval of TAC, FBP.</p>	<p>1212.00</p> <p>619.00</p>	<p>Less expenditure is slow progress of works of replacement of 33 gates due to working limitations</p> <p>Less expenditure is due to foreclosure of work of scour pocket filling of Bagmari Syphon due to non-availability of coal rejected boulders from NTPC. In addition delay in submission of report of renovation/ modernisation</p>

	<ul style="list-style-type: none"> • Operation and maintenance of Jangipur Barrage - Gates & allied structures, protection measures for afflux bund of River Ganga/Padma • Maintenance of townships at Farakka, Jangipur & Khejuriaghat, Barrage Hospital, FBP HS School, Roads, Buildings, Drains, Water Supply System, Electrical Works, Vehicles, Equipments etc • Anti erosion & Flood management works along river Ganga/Padma in the u/s & d/s of Farakka Barrage and 	<p>To upkeep the Jangipur Barrage and repairs of the Barrage gates</p> <p>To maintain the residential township of Approx 2700 dwelling units</p> <p>Regular & Emergent Anti erosion works executed along Ganga/Padma, upstream & downstream of FB</p>		<ul style="list-style-type: none"> • 70% • Maintenance of project colony, of building, hospitals, shools, guest house etc. 90 % • Anti erosion works at different location along Ganga/ 		<p>7.00</p> <p>1448.61</p> <p>2916.00</p>	<p>of existing navigation lock at Farakka, thereby affecting finalisation of further remedial measures.</p> <p>Operation & maintenance of Jangipur Barrage.</p> <p>-</p> <p>As recommended by TAC, anti erosion works have been</p>
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	tributaries of river Ganga in North Bengal including Bhutni Diara.			Padma/ Bhagarathi.			undertaken and completed.
11	Implementation Of National Water Mission(NWM)-New Scheme	Establishment of the National Water Mission (NWM) on the recommendations of the National Action Plan on Climate Change (NAPCC). The main objective of the 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”. There are five goals of the Mission and various strategies identified.	40.00	1.Setting up of National Water Mission (NWM) Directorate.	31.03.2015	Expenditure incurred is 1.29 cr in 2014-15. 1. Strengthening of National Water Mission Directorate. 2. Preparation of State Specific Action Plans. Guidelines were prepared and various states have been requested to prepare their SSAP's in the 1 st Phase. 3. Human Resource Development and Capacity Building are being undertaken in coordination with national level institutes like NIRD & PR, LBSNAA, RGNGWTRI, CWRDM, TISS, NWA, etc. NWM-TISS water project is being implemented. National Convention of Water Users Association of Participatory Irrigation Management was conducted. 4.Setting up of	Implementation of NWM – XII Plan is new Central Sector Scheme. The Scheme was approved by DoE, MoF on 25.10.2013 and sanction order issued on 27.11.2013. NWM activities have been initiated.

						<p>National Bureau of Water Use Efficiency (NBWUE). A proposal for setting up of NBWUE is under process in the Ministry.</p> <p>5. Proposal of Baseline Studies for water use efficiency of 25 Major-Medium projects in the States of Maharashtra, Andhra Pradesh, Telangana and North-Eastern States are being processed. The work is to be carried out through WALMI, Aurangabad, WALAMTARI, Hyderabad, NERIWALAM, Tejpur in two phases.</p> <p>3.</p> <p>6.Preparation of Demonstrative/ benchmarking projects. NWM has initiated actions for undertaking demonstration projects in irrigation sector in consultation with State Governments.</p>	
12	Irrigation Management Programme	Incentivizing States for improvement in Irrigation Management	1.00	-	-	-	The Scheme was not approved during the year.
13	Dam Rehabilitation and Improvement Project (DRIP)	Coordination and Supervision of DRIP activities in participating states and Dam Safety Institutional Strengthening	30.00	Hiring of Engineering and Management Consulting Firm	Implementation period for DRIP is six years. The	1. Design Flood Review of 50 DRIP dams.	Total fund utilization in DRIP upto

		of CWC			activities shall be carried out as per phasing of rehabilitation works of DRIP dams.	<ol style="list-style-type: none"> 2. Inspection of 22 dams by Dam Safety Review Panel (DSRP); inspection of 40 dams by Dam Safety Experts of Central Project Management Unit; and inspection of 10 dams by Quality and Construction Expert of CPMU. 3. Approval of Project Screening Template (on line of Detailed Project Report) for 40 dams. 4. Approval of tender documents for 9 dams; award of work for 6 dams. 5. Organizing total of 11 trainings on different aspects of dam safety, emergency action plan, procurement procedures, and allied areas benefitting about 300 officials. 6. Preparation of four draft guidelines, namely on "Emergency Action Plan", "Dam Break Analysis of Dam", "Guidelines for Earthquake 	December 2014 is amounting to Rs. 7.107 Crore against the RE of Rs. 14.30 crore.
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						<p>Resistant Rehabilitation Design of Solid and Earth fill Dams” and “Hazard categorization of Large dams”.</p> <p>7. Website on DRIP (http://damsafety.in/) for dissemination of information to general public; promoting cross learning of implementing agencies with sharing of all DRIP implementation related documents; capturing status of work flows; and uploading of final key documents along with capturing of meta data for analysis.</p> <p>8. Implementation of Quality Management System for Central Dam Safety Organisation linked with ISO certification targeted by April 2015.</p> <p>9. Karnataka included in DRIP as new State for rehabilitation of</p>	
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						their 27 dams.	
14	Bodwad Parisar Sinchen Yojana of Maharashtra	Grant is released to State Government.	200.00	-	-	-	One time grant was released to Maharashtra Government.
15	Impact Assessment Studies of projects Accelerated Irrigation Benefit & Flood Management Programme (AIBFMP)	To carry out impact assessment studies of Projects under AIBFMP	50.00	-	-	-	The Scheme was not approved during the year.
16	Polavaram Project Authority	Implementation of Polavaram Project as mandated by Andhra Pradesh Reorganisation Act, 2014. Supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to krishna river basin also envisaged.	250.00	Polavaram Project (also known as Indira Sagar (Polavaram) Project in the existing State of Andhra Pradesh, is a multi-purpose project with an assessed Culturable Command Area of 2.91 lakh hectares and power generation potential of 960 Mega Watt (MW). It also has a provision for supply of 23.44 Thousand Million Cubic Feet (TMC) water as delinking water supply to Vishakhapatnam city and other areas, as also industrial water, supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to Krishna river basin is also envisaged.	No process / timelines has been set.	Data yet to be received from State Govt.	

17	National River Conservation Plan	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for National River Conservation Plan, for greater efficiency in programme delivery, the programme has been shifted to the Ministry of Water Resources from Ministry of Environment and forest.	537.00	The WB assisted and JICA assisted project at Varanasi are included here. Uder JICA assisted Yamuna Action plan at Delhi 10 projects will be sanctioned targeting rehabilitation of 950 mld STP capacity NON EAP Projects under NGRBA have been included here. The ongoing non EAP projects on Ganga & its tributaries are recently transferred from MoEF&CC to MoWR, RD & GR and under implementation.	Projects identified under NGRBA program are scheduled to be completed by 2020. Projects under JICA assisted Yamuna Action Plan III are scheduled to be completed by 2018. These projects will be completed by 2020.	The projects and activities under this plan include pollution abatement measures for different sources of pollution, river front development, Afforestation and conservation of aquatic life, Communication and public outreach, water quality monitoring etc. and enforcement of standards and other policy initiatives for ensuring Aviral and Nirmal Ganga.	
18	National Ganga Plan (Met from balance under NCEF)	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for cleaning of Ganga. The amount is to be met from National Clean Energy Fund (NCEF).	1500.00	74 schemes in 49 towns in five Ganga States, 5 institutional development projects and 1 one implementation support project including Automatic Water Quality Monitoring and Ganga Knowledge Center have been sanctioned. Treatment capacity of 702.23 mld (including 64 mld for rehabilitation of old STPs) shall be created on implementation of these projects, of which a treatment capacity of 123 mld has been created so far. During 2015-16, sewage treatment capacity of 126.5 mld has been targeted under NGRBA.	Timeline for completion of projects under NGRBA including the projects proposed under 'Namami Gange' has been indicated for the year 2020 to abate pollution of river Ganga, particularly through the interventions to be made under short and medium term action plans. However, the interventions under long term	The projects and activities under this plan include pollution abatement measures for different sources of pollution, river front development, Afforestation and conservation of aquatic life, Communication and public outreach, water quality monitoring etc. and enforcement of standards and other policy initiatives for ensuring Aviral and Nirmal Ganga.	

					action plan shall be based on the Ganga River Basin Management Plan of the IIT Consortium, 1st draft of which has been received on 31st January, 2015 and presently under examination in the ministry.		
19	DPR for interlinking of Rivers	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for preparation of Detailed Project Report for Inter-linking of Rivers.	100.00	-	-	-	The Scheme was not approved during the year.
20	Ghat works for beautification of river fronts	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for River front development and beautification of their Ghats.	100.00	7 towns have been identified for the proposed ghat development / riverfront projects, DPR for which are under preparation.	These projects will be completed by 2020.	The projects and activities under this plan include pollution abatement measures for different sources of pollution, river front development, Afforestation and conservation of aquatic life, Communication and public outreach, water quality monitoring etc. and enforcement of standards and other policy initiatives for ensuring Aviral and Nirmal Ganga.	
21	Water projects for NCT	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial	500.00			Rs. 270 crore has been transferred to NCT of Delhi for the water	One time grant of Rs. 320 Cr

		Year 2014-15. The Budget provision is for improving supply of water in the NCT of Delhi. The amount includes provisions for Renuka Dam.				projects.	released to Government of NCT Delhi against Rs. 500 Cr for reforms on water sector in Delhi.
22	Accelerated Irrigation Benefit & Flood Management Programme						
i	AIBP and National Projects	Grant is released to State Governments under AIBP to complete ongoing Major, Medium & Minor irrigation/multipurpose projects in advanced stage of construction and which are beyond the resource capability of State Government in a time bound manner with a view to (A) Create additional irrigation potential and (B) Derive envisage benefits from these projects. Grants released to the respect states for SMI projects creating below 2000 hect Irrigation Potential.	6265.22	The Funds are projected for 149 on going projects and also for national projects. Funds released under SMI scheme to respective State Government on the demand submission by the state government	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis. 1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Data yet to be received from State Govt. Data yet to be received from State Govt.	The projects included in the AIBP are to be executed by respective State Govts. The time for completion of Major/Medium Irrigation Scheme is 5 years including the year of inclusion under AIBP.
ii	Command Area Development and Water Management (CADWM) Programme	Grant is released to State Governments under CADWM Programme. At least 10% of the total Culturable Command Area (CCA) of each new project is to be covered under micro irrigation during XII Plan.	1077.00	Grants released to State Governments as per their demands. Quantifiable outputs are: (i) Irrigation Potential of 3.5 million hectares is targeted for	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Data yet to be received from State Govt.	Progress depends on receipt of proposals in complete respect from the States.

				creation. (ii) Central assistance released.			
iii	Repair, Renovation and Restoration (RRR) of Water Bodies	Grant is Released to State Governments for Repair, Renovation and Restoration of Water Bodies.	750.00	Grants released to State Governments as per their Demands. Quantifiable Outputs are:- (i) Irrigation Potential of 0.40 million hectares is targeted for creation (ii) Central assistance released.	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Data yet to be received from State Govt.	Progress depends on receipt of proposals in complete respect from the States.
iv	Flood Management Programme	To provide financial assistance to various State Governments for works related to river management, flood control, anti-erosion, drainage development, flood proofing, restoration of damaged flood management works and anti-sea erosion in critical areas in the country, catchment area treatment and related DPRs.	900.00	(i) River management works in critical areas (ii) Anti-erosion works, drainage development works (iii) Anti-sea erosion works in critical areas in the country (iv) Catchment area treatment works and related DPRs. (v) A total of 97 No. Of new projects have been approved for funding under FMP during XII Plan.	The project completion schedule would be generally 2 to 4 years.	The Central Assistance would be provided for projects as per guidelines. The activity will help the states in reducing damages due to flood, River Bank erosion, coastal erosion and reduction of Sediment erosion in selected River Catchments. The central assistance of Rs. 572.85 crore was released under the Programme in the years 2012-13 and 2013-14 of XII Plan towards ongoing and new works.	
		Total: AIBFMP	8992.22				
23	Pradhan Mantri Krishi Sinchai Yojana	-	1000.00	-	-	-	The Scheme was not approved during the year and is coordinated by Ministry of

							Agriculture & Farmers Welfare.
		GRAND TOTAL	14737.00				

Performance of 2015-16

Annexure – II
(Chapter-IV)

(Rs. in Crore)

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
1	Development of Water Resources Information System (DWRIS)		81.00				
	Upgradation of existing HO Stations and Setting of new HO Sites	1) Continuation of Hydrological Observations activities including snow hydrology, water quality and monitoring of Glacial lakes, 2) Expansion and modernisation of hydrological observation network with state of art technique and equipments, 3) Collection compilation storage, Dissemination, analysis and publication of Data in form of Water Year Book		Observation of data at 878 sites and Data collection at G&D sites and Snow Observation sites for various uses etc. to continue. Upgradation of existing sites, expansion of data observation network through establishment of new stations.	Data/ periodical observation of hydro-meteorological, snow observation, Water quality parameters as per established procedures and protocol to continue throughout the year.		
	Collection of Storage data on the major reservoirs in the country	Collect reservoir storage status on real time basis of 120 reservoirs whose live storage is proposed to be monitored by CWC		Installation of water level automated sensors and telemetry system on 87 reservoirs	The activities to continue throughout the year as part of program to be completed in 12th Plan period.		
	Developing Coastal Management Information System (CMIS)	Operational Coastal Management Information System to help in determining causes of erosion/ sediment transportation /defining sediment cell/sediment budgeting etc along maritime coastline to enable planning of coastal protection schemes		Opening of two site and data collection Organizing meeting of CPDAC and its sub-committees. Strengthening of Beach	Activities to continue throughout the year		

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1	2	3	4	5	6	7	8
		Data collection and documentation (6 sites) Collection, Analysis, Processing and Integration of Coastal Data into WRIS Strengthening of CPDAC/it's sub-committees, Field visits, Training/Study Tours, Technology Transfer, Strengthening of Beach Erosion Dte. as a Centre of excellence , Preparation of Manual, guidelines, Workshop / Seminar etc.		Erosion Directorate			
	Irrigation Census						
	Rationalization of Minor Irrigation Statistics (RMIS)	Conduct of 5th Minor Irrigation Census in the country using traditional methodology.		1.Release of 40% (Second Instalment)of Census funds to States after completion of field work by States/UTs and receipt of Utilisation Certificates for first instalment from States/UTs. 2.Training to States/UTs for data entry/validation using software developed by NIC. 3.Data entry /validation by States/UTs. 4.Receipt of Census data &Scrutiny of Census data at Central level	Various phases of 5th Minor Irrigation Census (i.e.Field work, data entry, validation) will continue in different stages in States/UTs during the year.	1.Seven States have completed field work and out of these , second instalment has been released to five States based on their requirement.7 more States have completed more than 85% of field work. 2.Released partial /full amount of first instalment to 5 States/UT. 3.Software developed by NIC . 4. Regional Data Processing Workshops organised in four regions in which	

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1	2	3	4	5	6	7	8
						detailed training on software of 5th Minor Irrigation Census was imparted to officials from States/UTs .	
	Census of Major and Medium Irrigation Projects	Collection of census data (Phase-II) at outlet level of 8 projects covered in the Phase-I through outsourcing		Data at the outlet level to be collected through outsourcing during Phase-II in respect of 8 projects covered in Phase-I	Will be decided at the time of award of work		Phase-II will be taken up only after successful completion of Phase-I of Pilot Census.
	Water Quality Assessment Authority and Monitoring System	To provide Secretarial assistance to WQAA to carry out its mandated activities.		(1) Uniform Protocol on Water Quality Monitoring (UPWQM), (2) Organising WQAA Meetings, (3) Organising trainings/workshop/seminars on water quality issues, (4) Organising international training programmes/short courses.	Continuing Activity		
	Strengthening of Monitoring Unit in CWC	Monitoring of major and medium irrigation and multipurpose projects so that they are completed as per scheduled timelines To develop information system of the water resources projects and related subject at the national level Evaluation of IP creation using remote sensing techniques		Monitoring of major and medium projects The CARTOSAT satellite data for the 13 selected projects would be provided by NRSC with detail of balance potential in AIBP component Phase-II. Pilot study using the BHUVAN portal as per NRSC user manual to	The activities are continuing during the Plan period.		

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1	2	3	4	5	6	7	8
	Data Bank and Information System			develop in-house capability in CWC for using raw satellite imagery and potential assessment study in future similar to NRSC.			
	Web-enabled Water Resources Information System & Setting up of National Water Informatics Centre (NWIC)	Creation of Watershed Atlas and development of web enabled Water Resources Information system of the country at 1:50000 scale Reassessment of basin wise water availability for planning of national water resources		(i) Upgradation and refinement of INDIA WRIS portal (ii) The work of Reassessment of Water Availability of 19 Nos. of basins in the country	The activities are continuing during the Plan period.		The studies for basin wise reassessment of "Water availability" can be taken up after approvals of government.
	Up-gradation and Modernization of Library Information Bureau in CWC	Enhancement of CWC professional knowledge base by providing them with best of literature on the subject by upgrading the facilities in library and modernisation of library information system		Up-gradation & Modernization CWC Library & Information Bureau	The activities are continuing during the Plan period.		
	Software Management in CWC	Enhancing e-governance capabilities with web based custom-made softwares in CWC. Up-grade and strengthen the hardware/ software/ network resources for CWC-HQ and field offices		Up-grade and strengthen the hardware / software / network resources for CWC-HQ and field offices	Continuing process		
2	Flood Forecasting	To maintain the network of hydrological observation sites across the country by CWC covering 10 river basins including 72 river sub-basins to provide timely flood forecast at 176	50.00	To collect 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 4055 nos. flood forecasts were issued. Out of 4055 flood forecasts, 3978 number forecasts were	New activity of extension of Flood Forecasting Network

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1	2	3	4	5	6	7	8
		stations to the local administration and extension of Flood Forecasting Network.				issued with an accuracy of 98.10%.	could not commence due to late approval of schemes.
3	Hydrology Project III	To extend and promote the sustained and effective use of the Hydrological Information System by all potential users concerned with water resources planning and management in 13 states and 8 Central Agencies.	10.00	Automation of existing flood forecast sites together with telemetry system for communication of real time data and other state of art equipments.	The planned activities are to be implemented through the Central Agencies, viz. PCS (MoWR), BBMB, CWC, CGWB, CWPRS, CPCB, IMD and NIH till end of May, 2014.		
4	Ground Water Management And Regulation	<p>(A) Aquifer Mapping Data Generation</p> <ul style="list-style-type: none"> • Exploratory drilling • Vertical Electrical Sounding (VES) (nos) • Borehole logging(No.) • Hydro-chemical Analysis (Nos) <p>(B) Monitoring of wells</p> <ul style="list-style-type: none"> • Monitoring of existing ground Water observation wells (Nos) • Establishment of additional new observation wells (Nos) 	163.00	<p>700 wells 2000</p> <p>Need Based 20000 samples</p> <p>23000 wells</p> <p>2000 wells</p>	<p>1st April, 2015 - 31st March,2016</p> <p>1st April, 2015 - 31st March,2016</p> <p>1st April, 2015 - 31st March,2016</p>	<p>Rs85.77 (G) Rs76.54 (N)</p> <p>475 wells 2013 nos</p> <p>89 nos 21496 samples</p> <p>Monitoring of April/May,2015, August,2015 and November,2015 completed</p> <p>509 wells</p>	

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1	2	3	4	5	6	7	8
		<p>(C) Technical assistance to organisations for water supply source investigations (nos)</p> <p>(D) Ground Water Resources Assessment</p> <p>(E) Procurement of Machinery & Equipments for Technology up-gradation</p>		<p>Need Based</p> <p>Dynamic Ground Water Resources Assessment(As on 2013)</p> <p>Procurement of Rigs</p>	<p>1st April, 2015 - 31st March,2016</p> <p>1st April, 2015 - 31st March,2016</p> <p>1st April, 2015 - 31st March,2016</p>	<p>170 nos</p> <p>Ground Water Resource Assessment (as on 31 March 2013) has been completed in 13 states J & K, Punjab, Madhya Pradesh, Chhattisgarh, Maharashtra, Dadra & Nagar Haveli, Assam, Meghalaya, Nagaland , Tripura, Arunachal Pradesh, Kerala Lakshadweep.</p> <p>Procurement of 9 Rigs</p> <p>–</p> <ul style="list-style-type: none"> • DTH rigs (500m) –3 DTH rigs are received and delivered to Div IX, Hyderabad, Div-XII, Bhopal and Div-XIV, Bangaluru 	

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1	2	3	4	5	6	7	8
						<p>respectively in March, 2015 and 90% payment i.e. Rs. 18,47,03,111/- released by DGS&D in March, 2015.</p> <ul style="list-style-type: none"> • Commissioning of two rigs at Div XII Bhopal and Div XIV, Bangalore completed and Div IX, Hyderabad is on progress. • Dual Rotary rigs (400 m)- supply order for 2 Dual Rotary rigs has been placed by DGS&D on 25th September, 2014. Supply of Rigs expected by March, 2016. • DTH rigs (300m)- Supply order for 4 DTH rigs has been placed by DGS&D on 27th Jan, 2015. Supply expected by January, 2016. <p>Procurement of 15 Air Compressors</p> <ul style="list-style-type: none"> • Technical Evaluation of Tenders 	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
		<p>(F) Preparation of Reports, Maps for dissemination of Scientific information</p> <ul style="list-style-type: none"> State Report (Nos) Ground Water Year Books(Nos) <p>(G) Central Ground Water Authority (Information, Education & Communication</p> <ul style="list-style-type: none"> Organizing National GW 		<p>Procurement of Scientific Equipments/ Software's</p> <p>6 24</p> <p>11</p>	<p>1st April, 2015 - 31st March,2016</p> <p>1st April, 2015 -</p>	<p>completed and Financial Bid opened on 7.01.2016.</p> <ul style="list-style-type: none"> Tender for hydrogeological equipments opened on 15.12.2015. Tender for geophysical equipments opened on 17.12.2015. Tender for chemical equipments opened on 16.12.2015. Tender for chemical equipments to be opened on 13.01.2016. Full payments (Rs 2,32,64,138/-) have been released to the Suppliers for softwares. Map Info floated to be opened on 12.01.2016. <p>Under Progress 15</p> <p>16</p>	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
		Congress, Workshops, Seminars etc. • Painting Competition		35	31 st March,2016	Under progress	
5	Research & Development Programme in Water Sector	Objective of the scheme is to find practical solutions to the Country's water resources related problems and to improve available technology, engineering methods, procedures, and to create/upgrade research facilities and equipments of the premier organisations at national level. Also to promote educational, training & human resources development programmes in water sector	30.00	Completion of physical/mathematical/ model/ /desk studies=165 Preparation of technical reports= 229 Publication of research papers=270 Preparation of guidelines/manuals=6 Organization of workshop/ seminar/symposia/Training = 37 Training of personnel= 250			
6	Human Resources Development /Capacity Building		29.00				
(a)	IEC component of HRD/CB Scheme	To generate awareness amongst the masses about the importance of water and need for its conservation.	10.00	<u>Participation in Fairs/Exhibitions</u> Ministry of Water Resources, River Development and Ganga Rejuvenation had erected a pavilion in Hall No.7-E in the 35th Edition of India International Trade Fair organized by ITPO in Pragati maidan from 14th to 27th November, 2015. The pavilion was carrying different exhibitory materials viz. Physical models of various projects/activities, banners, posters etc.	14th to 27th November, 2015	Successfully executed.	

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1	2	3	4	5	6	7	8
				<p>depicting various activities, programmes and Projects undertaken by the ten organizations under MoWR, RD and GR. A quiz and pantomime show was organized in the pavilion to make the masses aware regarding water conservation and various aspects of water. The theme of the pavilion for the year was: "JAL KRANTI ABHIYAN" with focus on Water Conservation, Water Use Efficiency, Stop River Pollution and Ganga Cleaning.</p> <p><u>JAL KRANTI ABHIYAN</u> i) Organisation of Workshops /Seminars/ Conferences 'JAL KRANTI ABHIYAN' was launched on 05.06.2015 simultaneously at Jaipur, Shimla and Jhansi. Jal Kranti Abhiyan is being observed during 2015-16 to spread awareness on water conservation and management in the country through a holistic and integrated approach involving all stakeholders and making it a mass movement. Various activities include Jal Gram Yojana,</p>	Whole FY 2015-16	Successfully executed.	

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1	2	3	4	5	6	7	8
				<p>Development of Model Command Area, Pollution Abatement and Mass Awareness Programme. A number of workshops are to be conducted by CWC, CGWB at State/UT level.</p> <p>ii) BHUJAL MANTHAN As a part of Jal Kranti Abhiyan the Ministry through CGWB organized one day “Bhujal Manthan” at Kurukshetra University, Kurukshetra, Haryana on 21.08.2015. Public Representatives, Ground Water Experts, Representatives of Central & State Governments, Farmers, Students, and NGO etc. from across the country participated in this program for discussion and deliberation during various technical sessions. A book containing selected articles was also released during this program.</p> <p>Painting Competition School level, State Level, National Level, Painting Competitions on the themes “River Pollution”,</p>	<p>21st August, 2015</p> <p>From November, 2015 to March, 2016</p>	Successfully executed.	

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1	2	3	4	5	6	7	8
				“Clean River” and “Climate Change” are being organized by the Ministry in the financial year 2015-16.			
(b)	National Water Academy : Continued upgradation of National Water Academy (NWA)	Training in all aspects of WRD&M for all Stakeholders of water Sector including induction Training Programme	6.00	32 Nos. of Training Programmes a) Purchase of 25 nos of Computers and Server Networking facilities	a) 27 Training Programmes completed by 31-12-2015 b) 100% work completed by Sept-2015 c) Initiative for Construction activities like upgradation of the amenities in guest house etc. Hydraulic elevator in the main building. Construction of the staff quarters, Construction of the 4 suits in Krishna and 8 in Godavari and Multipurpose hall are have not been taken up due	4.16	

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1	2	3	4	5	6	7	8
					to curtailment of the Budget.		
(c)	RGN Ground Water Training Institute	Training and Capacity Building in Ground Water sector	7.00	Number of Training conducted/ Tire I-32 Tire II-50 Tire III-350	Annual	Tire I-32 Tire II-25 Tire III-50	Targeted reduced as per the allocation of budget to Tire I-32 Tire II-25 Tire III-50
(d)	Training of Officers of MoWR	To train officers/ officials of the Ministry in institutions located in India and abroad in different fields as per the mandate given to MoWR.	1.00	(i) Organizing orientation training for officers/ officials who are newly posted. (ii) Deputing officers/ officials on induction training on selection/ recruitment in the Ministry. (iii) Deputing officers/ officials on mid-career training at various levels/stages in their career. (iv) Conducting in-house/ on the job training at workplace. (v) Deputing officials/ officers for thematic training like leadership development, stress management, ethics and values, finance administration, etc.	The training of the officers/ officials will be conducted round the year as per the Training Policy of the Ministry	(i) 200 officers/ officials were sent for Mandatory and Non-Mandatory training. (ii) 20 In-house training on various topics were organized.	
(e)	Capacity Building Programme (NERIWALMs)	Capacity building/ Training	5.00	60 Nos.	As per Training Calendar, 2015-16		
7	Infrastructure Development: CGWB - Land & Building	To set up own office buildings	17.00	Construction of Office building for 1. Regional and Divisional	1-2 years	1. Construction of building at Guwahati completed and development works like	

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1	2	3	4	5	6	7	8
				<p>office at Guwahati.</p> <p>2. Divisional Store and Workshop buildings at Bangalore.</p> <p>3. Staff Quarters for the employees of CGWB at Bhubaneshwar.</p> <p>4. Divisional Store & Workshop for Division XII at Bhopal.</p> <p>5. Regional and Divisional office at Ahmedabad.</p> <p>6. Divisional office, workshop & store at Ambala.</p> <p>7. Building for Regional & Divisional at Jammu.</p> <p>8. Boundary wall and Building for RGNGWTRI (RGI) at Naya Raipur.</p> <p>9. Divisional workshop & store at Chennai.</p> <p>10. Boundary wall/building for Divisional workshop & store at Jodhpur.</p>		<p>roads, filtration plant & horticulture work etc is in progress.</p> <p>2. Construction of building at Bangalore and Bhopal is completed</p> <p>3. Revised Proposal for construction work at Jammu, Ambala has been submitted to Ministry for approval. Revised estimate and MoA from NPCC for Chennai, Jodhpur yet not received.</p> <p>4 Proposal for RGI building at Raipur/Pune shall be taken up after Ministry's approval/decision.</p> <p>5. Modified DPR for Bhubaneshwar Staff quarters is under consideration with CGWB.</p> <p>6. Minor changes in MoA for Ahmedabad is under consideration of</p>	

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1	2	3	4	5	6	7	8
	Infrastructure Development (L&B) – CWC	To procure land and construction of office/ residential building for CWC for providing decent, honourable, better and healthy working condition to its staff.		<p>1) Acquisition of land and construction of non-residential and residential building for CWC at various locations all over India.</p> <p>2) Modernisation of CWC HQ at New Delhi will continue.</p> <p>3) Construction of hutments for CWC site locations.</p> <p>4) Construction of buildings/ boundary walls and land aquisition (as required) at Kolkata, Nizamabad, Patna, Bhubaneshwar, Balasore, Guwahati, Silcher, Itanagar.</p>	Majority of works are being implemented by CPWD/ NPCC/ CWC.	CGWB and MoWR. Construction of building at Burla completed. Construction of hutment at some H O sites have been completed. Construction of CWC Building at Kolkata, Guwahati, Patna, Hutments continued. Construction works of boundary wall at Itanagar to be contd. Proposal for construction of office cum residential buildings at Rongpur, Silchar to be taken up. Modernization of CWC (HQ) at New Delhi being executed by CPWD. Works has been withdrawn from CPWD and MOA has been constituted between CWC and NPCC have entered for works of modernization of CWC (HQ) at New Delhi.	

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1	2	3	4	5	6	7	8
	GA-IT	To Procurement of Computers, printers, Scanners, laptop, UPS, Multifunction Machine, Digital copiers etc., Consumable Items		Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database to facilitate e-Gov	Change of XP windows is a time consuming process, some of targeted have spilled over to next year. Renovation of Rooms over to next year	<ul style="list-style-type: none"> e-Leave Management System has been operationalized w.e.f. 01.01.2016. Hardware for enhancing e-Governance capacity of the Ministry i.e. Computers, Printers, UPS etc. procured from e-Governance Budget Head (so far Rs. 25.00 Lakhs have been utilized). Procurement of Desktop Computers and peripherals, Purchase of Photocopier Machines, Scanner, Video Conferencing System, Bio-metric attendance AMC of IT equipment. AMC of photocopiers, AMC of UPS. Providing infrastructure support for implementation of IPV6 in Ministry. Providing infrastructure support for	

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1	2	3	4	5	6	7	8
	GA- Land & Building				Renovation of Offices over to next year	implementation of e-Gov/e-Office.	
8	River Basin Management		119.00				Schme under approval stage
i)	River Basin Organisation		0.10				
ii) (a)	IWRD – NWDA	To carry out activities related to survey, field Investigations in respect of preparation of Detailed Project Reports (DPRs), Feasibility Reports (FRs) of river link proposals & preparation of Prefeasibility Reports (PFRs) / FRs/ DPRs of intra - State link proposals and activities considered incidental, supplementary or conducive to attainment of above objectives.	25.00	<p>(a) Survey & Investigations for preparation of Feasibility Report under Inter Basin Water Transfer Proposals</p> <p>(i) Himalayan Component</p> <p>1. Manas – Sankosh – Tista – Ganga (M – S – T – G)</p> <p>2. Sone dam-STG link</p> <p>3. Kosi – Ghaghra link</p> <p>(ii) Peninsular Component</p> <p>Mahanadi (Baramul)- Godavari link (Revised FR)</p>	<p>June, 2016</p> <p>March, 2017</p> <p>March, 2018</p>		<p>Permission is required from neighbouring countries of Nepal & Bhutan for carrying out Survey & Investigations in their territories for Manas – Sankosh – Tista – Ganga and Kosi – Ghaghra links. NWDA through MOWR, RD&GR is pursuing the matter with MEA for</p>

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1	2	3	4	5	6	7	8
							<p>expediting the dialogue with neighbouring countries. In view of this, the target date of completion for all the Himalayan links may not be fixed.</p> <p>NWDA has carried out alternative studies of Manas-Sankosh-Tista-Ganga link to avoid Jogighopa – Tista – Farakka (Alternative to M-S-T-G). In the alternative proposal of M-S-T-G link Manas Tiger Reserve and Buxa Tiger Reserve and other Forests</p>

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1	2	3	4	5	6	7	8
				<p>(b) Preparations of DPR of Par-Tapi-Narmada (PTN) link.</p> <p>(c) Preparation of Prefeasibility Reports of intra – State link proposals, as proposed by State Govts.</p> <p>(d) Post – DPR stage work of:</p> <p>(i) Ken – Betwa link Phase-I.</p> <p>(ii) Ken – Betwa link Phase-II.</p> <p>(iii) Damanganga-Pinjal (DP) link.</p>	<p>August, 2015</p> <p>March, 2016</p> <p>Ongoing work</p>		<p>will be avoided. Therefore, NWDA is concentrating on the alternative alignment of MSTG link which merges both MSTG and JTF alignments.</p> <p>DPR completed.</p> <p>Post DPR work remained in progress</p>

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1	2	3	4	5	6	7	8
ii) (b)	IWRD – CWC	Preparation of DPR of identified water resources projects for making investment decisions towards project implementation with a view of development of country's water resources.	20.00	<p>(iv) Par – Tapi - Narmada(PTN) link</p> <p>(e) Preparation of DPR of intra-State link</p> <p>(f) Work of studies as suggested by the Special Committee for Interlinking of Rivers</p> <p>Preparation of DPR of Kirthai-II Multipurpose Project and Suntaley HEP. Continuation of survey & investigation of Kalez Khola, Sonai & Rukni Irrigation Schemes, Tawanchu HE projects. New projects in NER (Tlawang in Mizoram), Sikkim (Tarum Chu HEP, Kali Khola), J&K, HP and funding of national project Gypsa to continue.</p>	<p>March, 2017</p> <p>Ongoing work.</p> <p>Activities to continue throughout the year as a part of programme to be completed during 12th Plan.</p>	<p>Timely clearances from Forest Deptt. for carrying out field works, cooperation from GSI in geological investigations and permission to procure field inspection vehicles for increasing mobility of CWC field officers and staff working at remote locations.</p>	<p>A DPR normally takes 3-4 years for completion.</p> <p>Timely clearances from Forest Deptt. for carrying out field works, cooperation from GSI in geological investigations and permission to procure field inspection vehicles for increasing mobility of</p>

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1	2	3	4	5	6	7	8
iii)	Re-Structuring of CWC		0.10				CWC field officers and staff working at remote locations.
iv)	Brahamaputra Board	<ul style="list-style-type: none"> ✓ ‘Survey & Investigation’ and Preparation of- <ul style="list-style-type: none"> ○ Master Plan ○ DPRs for Drainage Development Schemes ○ DPRs for Multipurpose project ✓ Execution of Anti-erosion schemes & Flood Management Schemes ✓ Execution of Drainage Development Schemes 	73.80	<ul style="list-style-type: none"> ✓ ‘Survey & Investigation’ and Preparation of- <ul style="list-style-type: none"> ○ 3 Master Plans ○ DPRs of DDS ✓ Execution of Anti-erosion schemes & Flood Management Schemes <ul style="list-style-type: none"> ● Protection of Majuli Island- Phase-II & III – 11.5% ● Avulsion of Brahamaputra at Dhola Hatighuli- Phase- IV -0.2% ● Balat Village, Meghalaya- 100% ● Mankachar, 	Activities implemented by Brahamaputra Board.	<ul style="list-style-type: none"> ✓ ‘Survey & Investigation’ and Preparation of- <ul style="list-style-type: none"> ○ Preparation of 3 Master Plans are in progress ○ Preparation of 2 DPRs of DDS are in progress ✓ Execution of Anti-erosion schemes & Flood Management Schemes <ul style="list-style-type: none"> ● 2.1% of phase-II & III works of protection of Majuli Island completed ● Additional works under Phase –IV works are in progress 	Schme under approval stage

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
		<p>✓ Construction of H.Q. Complex and R&M of assets created by the Board</p> <p>✓ Construction of raised platforms</p> <p>Feasibility studies of channalisation of river Brahmaputra</p>		<p>Kalairalga, Assam-50%</p> <p>Masalabari area, Assam-50%</p> <p>✓ Execution of Drainage Development Schemes</p> <ul style="list-style-type: none"> ○ 25% works of Barbhag DDS ○ 30% works of Amjur DDS ○ 50% of Jengrai ○ 9% of Jakaichuk <p>✓ R & M of NEHARI</p> <p>✓ R&M of assets created by the Board</p> <p>✓ completion of construction of 1 raised platforms</p>		<ul style="list-style-type: none"> ● 54.12% of Phase –I works of Balat Village completed ● 34.77% of works of Protection of Mankachar, Kalair-alga omnternational Boarder area completed. <p>Tendering process for Masalabari scheme is in process</p> <p>✓ Execution of Drainage Development Schemes</p> <ul style="list-style-type: none"> ○ Due to dewatering problem in Barbhag DDS progress is nil ○ Due to revision of DPR the progress of Amjur DDS is held up ○ Due to poor response of tendered retender for execution of construction of 	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				Feasibility studies of channalisation of river Brahmaputra		<ul style="list-style-type: none"> sluice of Jengrai DDS <ul style="list-style-type: none"> o 2% of JakaichukDDS completed ✓ Continued ✓ Continuing Activity ✓ construction of 1 raised platforms completed ✓ Continued 	
9	River Management Activities And Works Related To Border Rivers & UTs	Hydrological observations and investigations of Water Resources Projects with neighboring countries for development of water resources and providing data for flood forecast formulation on transboundary rivers for minimising loss of life and property by making timely flood forecasts on these rivers.	102.00	<p>(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and</p> <p>(ii) Transmission of flood related data from/ to neighbouring countries</p> <p>(iii) Preparation of Joint Detailed Project Reports (DPR).</p>	The works will be implemented by Central Water Commission	<p>(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and</p> <p>(ii) Transmission of flood related data from/ to neighbouring countries.</p>	Timely clearances from Forest Deptt. for carrying out field works, cooperation from GSI in geological investigations and favourable civil condition in Nepal for carrying out field works.

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
10	Farakka Barrage Project <ul style="list-style-type: none"> • Operation and maintenance of Barrage and allied structure including protective measures for safety of the Barrage • Maintenance and protective measures of Feeder Canal and allied structure including navigation lock etc. • Operation and maintenance of Jangipur Barrage – gates and allied structures, protection measures for afflux bund of river Ganga/ Padma • Maintenance of township at Farakka, Jangipur and Khejurighat, Barrage Hospital, FBP HS School, roads, buildings, Drains, water supply system, 	<p>To upkeep the Farakka Barrage and its allied structure and replacement of its gates in a phased manner</p> <p>To upkeep of the Feeder Canal and filling of scour pocket</p> <p>To upkeep the Jangipur Barrage and repairs of the Barrage gates</p> <p>To maintain the residential township of Approx 2700 dwelling units</p>	100.00	<p>51%</p> <p>53%</p> <p>The work of Painting of Jangipur Barrage and its associated structures is in progress</p> <p>Ongoing maintenance and approx 85% work is completed by December 2015</p>	Continuing nature of work	<p>988.00 lakh</p> <p>849.00 lakh</p> <p>52.00 lakh</p> <p>1230.26 lakh</p>	<p>Budget Estimates has been revised on realistic basis in RE 2015-16</p> <p>Budget Estimated has been revised on realistic basis in RE 2015-16</p> <p>-</p> <p>-</p>

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
	<p>electrical works, vehicles, equipments etc</p> <ul style="list-style-type: none"> • Anti erosion and flood management works along river Ganga/ Padma in the u/s & d/s of Farakka Barrage and tributaries of river Ganga in North Bengal. 	To upkeep the banks of the original and extended jurisdiction in the upstream and downstream of Ganga.		85%	Completed	2260.00 lakh	The excess has been provided in the Revised Estimates.
11	Implementation Of National Water Mission(NWM)-New Scheme	The Ministry of Water Resources established the National Water Mission (NWM) on the recommendations of the National Action Plan on Climate Change (NAPCC). The main objective of the 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”. There are five goals of the Mission and various strategies formulated for carrying out the work during 12 th Plan.	20.00	1.National Water Mission Directorate	31.12.2015	Expenditure, Rs. 2.48 crore up to 31 st December, 2015. 1.National Water Mission secretariat has been established and is headed by a Mission Director in the rank of Additional Secretary to the Government of India and is supported by two Advisors (Adviser, Coordination & Monitoring and Adviser, Technical) with supporting staff. Five Consultants and Young Professionals and One Executive Assistant have joined in NWM for carrying out the	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				2. Preparation of State Specific Action Plans		<p>assigned technical works. The work of NWM web portal has been assigned to NIC/NICSI and the work is being carried out by the experts from NIC/NICSI in association with NWM.</p> <p>2. Twelve States namely, Andhra Pradesh, Telangana, West Bengal, Uttarakhand, Gujarat, Assam, Chhattisgarh, Karnataka, Madhya Pradesh, Maharashtra, Odisha and Tamil Nadu have been requested to prepare their State Specific Action Plans, in the 1st phase. These State Governments have been requested to identify an agency/organization for preparation of SSAP in a meeting held on 18.09.2015 under the chairmanship of AS & MD, NWM. It is proposed that North-Eastern Research Institute of Water and Land Management (NERIWALM), Tezpur,</p>	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015- 16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				3. Human Resource Development and Capacity Building and Setting up of National Bureau of Water Use Efficiency (NBWUE)		<p>Assam under the Ministry of Water Resources, River Development & Ganga Rejuvenation has been proposed as the nodal agency for coordination, monitoring and release of funds to the selected State agencies for preparation of SSAP.</p> <p>There is a provision of Rs.20.00 crore for SSAP in the NWM scheme. NWM shall offer technical guidance to all the states/UTs through the regional offices of CWC and CGWB at the State level. It is proposed to provide financial assistance for preparation of SSAP for water sector @Rs. 50 lakh for major/big State and Rs. 30 lakh for small State/UTs).</p> <p>3.NWM formulated. MoUs with the NIRD & PR, LBSNAA, CWRDM, NWA, RGNGWTRI, TISS for training capacity building of multi-</p>	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				<p>4. Baseline studies</p> <p>5. Preparation of Demonstrative/benchmarking</p>		<p>stakeholders. 23 Training/capacity building/mass awareness programmes have been organised to address various strategies under Goal-2 of NWM. A proposal for setting up of NBWUE is under process in the Ministry. Various Ministries/Departments supported the proposal but Ministry of Environment, Forests and Climate Change and PMO has made some observations on creation of NBWUE.</p> <p>4.Approval for conducting 25 baseline studies in irrigation sector through WALMI, Aurangabad, WALAMTARI, Hyderabad, NERIWALAM, Tejpur and DWM, Bhubaneswar have been obtained from the Ministry.</p> <p>5.Demonstration/ benchmarking projects</p>	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				projects		shall be undertaken in water sector. NWM has initiated actions for undertaking demonstration projects in irrigation sector in consultation with State Governments.	
12	Irrigation Management Programme	Incentivizing States for improvement in Irrigation Management	1.00	-	-	-	The Scheme was not approved during the year.
13	Dam Rehabilitation and Improvement Project-Central Component	<p>To supervise and coordinate the implementation of Dam Rehabilitation and Improvement Project with the following Activities:</p> <p>(a) Rehabilitation and improvement of about 223 large dams in four states (Madhya Pradesh, Orissa, Kerala and Tamil Nadu) with World Bank funding.</p> <p>(b) Dam safety Institution strengthening of party States and Central Water Commission</p> <p>(c) Project Management</p> <p>DRIP is a six year project. It has become effective from 18th April 2012.</p>	29.00	<p>Implementation of Engineering and Management Consultantancy for Central Project Management Unit (CPMU) of DRIP</p> <p>Funding to Academic Institutes for their capacity building requirement in dam safety areas</p> <p>Approval of Bid Documents beyond thresholds of State Project Management Units</p> <p>Approval of Project Screening Templates</p> <p>Preparation of Technical, Managerial, and Project Implementation Reports</p>	Uniformly Spread		

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				<p>Technical Committee Meetings for guiding Project Implementation</p> <p>Inspection/Visits of DRIP Dams</p> <p>Organization of dam safety related trainings</p> <p>International training programs/Seminars/Workshop in dam safety areas</p> <p>Preparation of guidelines on varied areas of dam safety</p> <p>ISO Certification for Central Dam Safety Organization</p> <p>Expenditure on hired vehicles for CPMU office</p> <p>Development of Dam Assessment Management tool</p> <p>Infrastructure Development of CPMU Office & DSO Unit of CWC. Purchase of Hydrologic/Design/Dam Break Modeling Softwares Like Mike 11, MIKE 21, ARC GIS, FEM Software</p> <p>Expenditure on hired vehicles for CPMU office</p>			

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
14	Bodwad Parisar Sinchen Yojana	Grant is released to State Government.	1.00	-	-	-	Fund was not allocated during the year.
15	Impact Assessment Studies of projects Accelerated Irrigation Benefit & Flood Management Programme (AIBFMP)	To carry out impact assessment studies of Projects under AIBFMP	5.00	-	-	-	The Scheme was not approved during the year.
16	Polavaram Project Authority	Implementation of Polavaram Project as mandated by Andhra Pradesh Reorganisation Act, 2014. Supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to krishna river basin also envisaged.	100.00	Polavaram Project (also known as Indira Sagar (Polavaram) Project in the existing State of Andhra Pradesh, is a multi-purpose project with an assessed Culturable Command Area of 2.91 lakh hectares and power generation potential of 960 Mega Watt (MW). It also has a provision for supply of 23.44 Thousand Million Cubic Feet (TMC) water as delinking water supply to Vishakhapatnam city and other areas, as also industrial water, supply to Vishakhapatnam Steel Plant. An inter basin transfer of 80 TMC water annually to Krishna river basin is also envisaged.	No process / timelines has been set.	Data yet to be received from State Govt.	
17	National River Conservation Plan	Pollution Abatement of River Ganga & its tributaries including Yamuna	550.00	The WB assisted and JICA assisted project at Varanasi are included here. Uder JICA assisted Yamuna Action plan	Projects identified under NGRBA program are scheduled to	The ESC recommended two projects for 386 mld STP capacity have been kept on hold as the	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				<p>at Delhi 10 projects will be sanctioned targeting rehabilitation of 950 mld STP capacity</p> <p>NON EAP Projects under NGRBA have been included here. The ongoing non EAP projects on Ganga & its tributaries are recently transferred from MoEF&CC to MoWR, RD & GR and under implementation.</p>	<p>be completed by 2020. Projects under JICA assisted Yamuna Action Plan III are scheduled to be completed by 2018.</p> <p>These projects will be completed by 2020.</p>	<p>projects are proposed to be taken up on Hybrid Annuity Based PPP Model.</p>	
18	“Namami Gange”/ National Ganga Programme (Met from balance under NCEF)	The new initiatives under “Namami Gange” approaches Ganga Rejuvenation by consolidating the existing ongoing efforts and planning for integrated and comprehensive action plan. Incorporating the existing projects under the NGRBA, the Ganga rejuvenation plan provides for ‘Short-term’ (3 years), ‘Medium-term’ (5 years) and ‘Long-term’ (10 years and more) action plan.	2100 (this amount is to be met from NCEF and not to be included in the Ministry's Budget)	74 schemes in 49 towns in five Ganga States, 5 institutional development projects and 1 one implementation support project including Automatic Water Quality Monitoring and Ganga Knowledge Center have been sanctioned. Treatment capacity of 702.23 mld (including 64 mld for rehabilitation of old STPs) shall be created on implementation of these projects, of which a treatment capacity of 123 mld has been created so far. During 2015-16, sewage treatment capacity of 126.5 mld has	Timeline for completion of projects under NGRBA including the projects proposed under ‘Namami Gange’ has been indicated for the year 2020 to abate pollution of river Ganga, particularly through the interventions to be made under short and medium term action plans.	80 schemes in 50 towns in five Ganga States, which includes newly sanctioned schemes of Jagjeetpur STP work of 40 MLD capacity and Development of Chandi Ghat at Haridwar, 7 institutional development projects which includes newly sanctioned; National Dolphin Survey of Bihar, Treatment Capacity of 738.23 mld (including 64 mld for rehabilitation of old STPs) shall be created on implementation of	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				been targeted under NGRBA.	However, the interventions under long term action plan shall be based on the Ganga River Basin Management Plan of the IIT Consortium, 1st draft of which has been received on 31st January, 2015 and presently under examination in the ministry.	these projects. As against targeted 126.5 mld STP capacity creation 62.90 mld STP creation is in advance stages of completion.	
19	DPR for interlinking of Rivers	This is a new scheme which has been included in the budget of Ministry of Water Resources during the Financial Year 2014-15. The Budget provision is for preparation of Detailed Project Report for Inter-linking of Rivers.	100.00	-	-	-	The Scheme is not approved during the year.
20	Ghat works for beautification of river fronts	Improvement of built environment along river stretches, improvement of small ghats & cremetoria and the conservation & preservation of ecologically sensitive sites	100.00	7 towns have been identified for the proposed ghat development / riverfront projects, DPR for which are under preparation.	These projects will be completed by 2020.	Development of Chandi Ghat at Haridwar has been sanctioned for an amount Rs. 50.36 cr; Patna RFD project is under execution and 4 ghats have been developed; DPR for Allahabad has been received and is under examination.	
21	Flood Management Programme	To provide financial assistance to various State Governments for works	201.00	(i) River management works in critical areas	The activity will help the States in	(i) Spillover works of XI Plan and 97 new works	

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
		related to river management, flood control, anti-erosion, drainage development, flood proofing, restoration of damaged flood management works and anti-sea erosion in critical areas in the country, catchment area treatment and related DPRs.		(ii) Anti-erosion works, drainage development works (iii) Anti-sea erosion works in critical areas in the country (iv) Catchment area treatment works and related DPRs.	reducing damages due to flood, river bank erosion, coastal erosion and reduction of sediment erosion in selected river catchments.	were continued. (ii) The central assistance of Rs. 98.31 crore was released in FY:2015-16 till 31.12.2015 for Flood Management Projects to States of UP, Bihar, Arunachal Pradesh ,HP,Sikkim,Nagaland etc. The works are in progress.	NIL
22	Pradhan Mantri Krishi Sinchai Yojana Accelerated Irrigation Benefit Program Har Khet Ko Pani (PMKSY)	Grant is released to State Governments under AIBP to complete ongoing Major, Medium & Minor irrigation/multipurpose projects in advanced stage of construction and which are beyond the resource capability of State Government in a time bound manner with a view to (A) Create additional irrigation potential and (B) Derive envisage benefits from these projects.	1799.00	The Funds are projected for 149 on going projects and also for national projects.	1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.	Data yet to be received from State Govt.	The projects included in the AIBP are to be executed by respective State Govts. The time for completion of Major/Medium Irrigation Scheme is 5 years including the year of inclusion under AIBP. Scheme transferred to Min of

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015-16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
		<p>Grants released to the respect states for SMI projects creating below 2000 hact Irrigation Potential.</p> <p>Grant is Released to State Governments for Repair. Renovation and Restoration of Water Bodies.</p> <p>Grant is released to State Governments under CADWM Programme. At least 10% of the total Culturable Command Area (CCA) of each new project is to be covered under micro irrigation during XII Plan.</p>		<p>Funds released under SMI scheme to respective State Government on the demand submission by the state government</p> <p>Grants released to State Governments as per thier Demands. Quantifiable Outputs are:- (i) Irrigation Potential of 0.40 million hectares is tergeted for creation (ii) Central assistance released.</p> <p>Grants released to State Governments as per their demands. Quantifiable outputs are: (i) Irrigation Potential of 3.5 million hectares is targeted for creation. (ii) Central assistance</p>	<p>1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.</p> <p>1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.</p> <p>1st April, 2016 to 31st March, 2017. Progress monitored on quarterly basis.</p>	<p>Data yet to be received from State Govt.</p> <p>Data yet to be received from State Govt.</p> <p>Data yet to be received from State Govt.</p>	<p>Agriculture. Some components are implemented by MoWR,RD &GR.</p> <p>Progress depends on reciept of proposals in complete respect from the States.</p> <p>Progress depends on reciept of proposals in complete respect from the States.</p>

Sl.No.	Name of Scheme/ Programme	Objective/ Outcome	B.E. 2015- 16	Quantifiable Deliverables/ physical outputs	Process/ Timelines	Achievements w.r.t Col (5) as on 31.12.2015	Remarks/ Risk Factor
1	2	3	4	5	6	7	8
				released. SMD for ground water MI scheme in Ground Water Wing of MOWR RD &GR			
		GRAND TOTAL	3607.00				

PRADHAN KRISHI SINCHAYEE YOJANA (PMKSY)

The new scheme to provide the irrigation and related facilities by integrated efforts of MoWR, RD & GR, Department of Land Resources and Department of Agriculture & Cooperation. The scheme was formulated for the year 2015-16 to 2019-20 with a combined outlay of central share as Rs.50000 crore. Out of which Rs.21010 crore was allocated to MoWR, RD & GR. AIBP is now a part of PMKSY Umbrella Scheme under MoWR, RD & GR.

Accelerated Irrigation Benefit Programme

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, Uttarakhand, Jammu and Kashmir, Himachal Pradesh and Koraput, Bolangir and Kalahandi districts of Odisha have also been provided Central Loan Assistance (CLA) under this programme since 1999-2000. Grant component has been introduced in the Programme from April, 2004 like other Central Sector Schemes.

The State Governments have been provided an amount of Rs. **68136.23** crore as CLA/Grant under AIBP since its inception till **January, 2016** for **297** major/medium irrigation projects and 16769 surface minor irrigation schemes. After commencement of this Programme, **143** major/medium and 12600 surface minor irrigation schemes have so far been completed. The irrigation potential of **95.55** lakh hectare has been created up to **March 2014**.

The scheme emphasises on completion of all ongoing projects at the earliest under AIBP. Further, 46 projects are again prioritised to complete in 3 or 4 years for which adequate budget provisions are to be made in addition to the budget already allocated.

Under PMKSY, there are four other major components.

1. CADWM
2. RRR
3. SMI
4. Ground Water Minor Irrigation

The main objectives of PMKSY are as follows:

- a) Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans).
- b) Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet Ko Pani).

- c) Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent.
- d) Enhance the adoption of precision-irrigation and other water saving technologies (more crop per drop).
- e) Enhance recharge of aquifers and introduce sustainable water conservation practices.
- f) Ensure the integrated development of rain fed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.
- g) Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
- h) Explore the feasibility of reusing treated municipal water for peri-urban agriculture, and
- i) Attract greater private investments in precision irrigation.

Continuation of AIBP in 12th plan

The AIBP has been approved for implementation in 12th plan by Cabinet Committee on Economic Affairs in its meeting held on 12.09.2013. During the 12th plan, a total outlay of Rs.55200 crore has been proposed for continuation of CAD&WM programme and its pari-passu implementation with AIBP with a total outlay of Rs. 15000 crore has been proposed. Considering the allocation of funds by the Planning Commission, the following targets have been adopted and indicated in Table-3.

Table-3 Targets for AIBP programmes during XII Plan

Sl. No.	Activities	Proposed Target (lakh hectare)
1	Creation of new irrigation potential (IP) through completion of ongoing MMI projects and new MMI projects and restoration of lost irrigation potential through ERM of old MMI projects	24
2	Creation of new irrigation potential (IP) through completion of new and ongoing surface minor irrigation projects	10
3	Closing the gap of irrigation potential created and irrigation potential utilized	36

AIBP in 12th Plan- Policy Changes Some of the main policy changes include:

1. Pari-Passu implementation of AIBP & CAD&WM works.

2. Ongoing and new projects of General Areas continue to get Central Assistance of 25% of the cost. It may be enhanced up to 50% subject to the condition that States actually carryout water sector reforms and satisfy the “Reform Friendliness” benchmarks.
3. For new projects in Special Areas of non-Special Category States, the Central Assistance under AIBP will be 60% of the project (work component) for eligible irrigation projects.
4. For new projects in North Eastern & Hilly States, the Central Assistance under AIBP will be 90% of the cost of the project (work component) for eligible irrigation projects.
5. Advance stage of construction of the projects specified.

II. National Mission for Clean Ganga

National Mission for Clean Ganga (NMCG) is the implementation wing of National Ganga River Basin Authority (NGRBA). It is a registered society under the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR). The Secretary to the Government of India, MoWR, RD & GR is the current chairman of the Governing Council of NMCG. As per the approval of the Cabinet Committee on Economic Affairs (CCEA), the mandate of NGRBA is being implemented by the National Mission for Clean Ganga (NMCG). At national level NMCG is the coordinating body and is being supported by States-Level Program Management Groups (SPMGs) of UP, Uttarakhand, Bihar and West Bengal which, are also registered as societies under Societies Registration Act, 1860 and a dedicated Nodal Cell in Jharkhand.

The area of operation of NMCG is the Ganga River Basin, including the states through which Ganga flows, as well as the National Capital Territory of Delhi.

The Mission Director of NMCG is a Joint Secretary (JS) in Government of India. For effective implementation of the projects under the overall supervision of NMCG, the State Level Program Management Groups (SPMGs) are, also headed by senior officers of the concerned States.

Sanctioned Projects

National Ganga River Basin Authority (NGRBA) has so far sanctioned a total 93 projects in 55 towns in Ganga States costing Rs. 7350.38 crore under NGRBA Program including Externally Aided Projects (EAP) component with the assistance of Japan International Agency (JICA) and the World Bank. These include projects of Rs 2406.96 crore in Uttar Pradesh, of Rs 2155.62 crore in Bihar, of Rs 99.36 crore in Jharkhand, of Rs 1352.51 crore in West Bengal and of Rs 378.29 crore in Uttarakhand for laying of sewage networks, treatment plants, development of river fronts, etc. These sanctioned projects also include three CPCB projects worth Rs 198.48 crore on Pollution Inventorization, Assessment and Surveillance (PIAS) on river Ganga Strengthening of Environmental Regulator (SER)-CPCB and a project of setting up the Ganga Knowledge Centre (GKC) in NMCG (Rs.48.54 crore).

Further, for projects related to biodiversity conservation, afforestation, assessment of special properties of Ganga and communication & awareness for Dolphin conservation Rs 11.24 Crores have been sanctioned. An amount of Rs.1414.54 crore (as on 31st March 2015) has been released by both Centre and the States for implementation of the sanctioned projects.

External Funding and Funding Mechanism

External funding

The Central Government has approved the projects for 'World Bank' assistance to National Ganga River Basin Authority(NGRBA) for abatement of pollution of river Ganga' at an estimated cost of Rs.7000 crore. The Bank will support the Government of India by providing technical assistance and financing of US \$ 1 billion (approx. 4600 crore).The World Bank Board has approved this project on 31st May 2011.The Loan agreement with World Bank has been signed on 14th June 2011.Japan International Cooperation Agency (JICA) is supporting one project on Ganga in Varanasi worth Rs. 496.9 Crore on 85:15 basis.

Funding Mechanism

The investments required to create the necessary treatment and sewerage infrastructure would be shared between Centre and State Governments on 70:30 basis. The State Governments would be required to motivate ULBs for resource recovery and revenue generation. Also, the cost of Operations and Maintenance (O&M) for the initial five years in NGRBA projects would be shared between Centre and States in the ratio of 70:30 with a periodical review.

Hybrid Annuity based Public Private Partnership (PPP) model

An institutional mechanism and financial model for execution of infrastructure projects under Namami Gange Programme on Hybrid Annuity based Public Private Partnership (PPP) model and setting up a Centrally owned Special Purpose Vehicle (SPV) to plan, structure, procure concessionaires, monitor implementation of such projects and develop market for treated water has been approved in February 2016. The purpose is to implement infrastructure projects under '**Namami Gange**' in a financially sustainable, outcome oriented and accountable mode.

Namami Gange Programme

Union Budget 2014-15 has taken cognizance of the substantial amount of money already spent on the conservation and improvement of the Ganga, which has a very special

place in a collective consciousness of this country. However, the efforts are not yielded desired results because of the lack of concerted efforts by all the stakeholders.

Accordingly, an Integrated Ganga Conservation Mission called “Namami Gange” has been proposed to be set up during budget 2014-15. Namami Gange approaches Ganga Rejuvenation by consolidating the existing ongoing efforts and planning for a concrete action plan for future. The interventions at Ghats and River fronts will facilitate better citizen connect and set the tone for river centric urban planning process.

Recognizing the multi-sectoral, multi-dimensional and multi-stakeholder nature of the Ganga Rejuvenation challenge, the key Ministries comprising of (a) WR, RD&GR, (b) Environment, Forests & Climate Change, (c) Shipping, (d) Tourism, (e) Urban Development, (f) Drinking Water and Sanitation and Rural Development have been working together since June, 2014 to arrive at an action plan. The concerned Ministers have nominated a Group of Secretaries to develop a draft action plan and have held periodical meetings to review the progress and provide guidance. The Group of Secretaries submitted its initial report on 21st July, 2014 and after taking into account the feedback received from the Hon’ble Ministers, the final report has been submitted on 28th August, 2014.

Cabinet approved the Namami Gange program on 13th May, 2015 as a comprehensive approach to rejuvenate the river Ganga and all tributaries under one umbrella. Namami Gange focuses on cleaning of river Ganga in short term as well as also has a comprehensive vision with 7 main thrust areas – that includes maintenance of flow, River Front Development, Capacity Building, Research & Monitoring, Biodiversity Conservation and communication & public outreach. A total of Rs. 20,000 crore has been allocated for this project to be spent over the next five years (2019). This includes funds allocated for ongoing projects to clean river Ganga and new initiatives. Primary focus of the program is on pollution abatement. The major activities under Namami Gange includes rehabilitation of existing STPs, creation of new STP, complete sanitation coverage for gram panchayats, development of model cremation/dhobhi ghats, development of a decision support system in GIS platform for efficient planning and monitoring, creation of an IT-based monitoring center with capabilities of real-time alerts and prediction. The program envisages 100% central government funding for the entire life cycle cost of the treatment assets created which includes 10 year Operation and Maintenance (O & M) cost. The importance of maintenance of flow in the River and afforestation with medicinal and native plant species along river sides is also identified under ‘Namami Gange’ along with conservation of aquatic species.

An amount of Rs. 2750 crore has been allotted for FY 2015-2016 which includes Rs. 100 crore for Ghat Works.

ANNEXURE - IV												
STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET VIS-À-VIS XI PLAN OUTLAY												
(Chapter-V)												
(Rs. in Crore/Net)												
Sector/Orgn/ Scheme	XI Plan	Heads of	B.E.	Actual	B.E.	Actual	B.E.	Actual	B.E.	Actual	B.E.	Actual
	Outlay	Accounts	2007-08	2007-08	2008-09	2008-09	2009-10	2009-10	2010-11	2010-11	2011-12	2011-12
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	3.62
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	34.20
3. Hydrology Project	180.00	2701	33.00	6.98	44.00	9.92	38.10	21.54	53.00	27.22	80.00	27.65
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	53.58
5. Infrastructure Development	**	2701	4.00	1.33	5.00	2.06	1.00	1.28	3.00	2.82	3.00	2.13
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	52.97
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	14.32
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	1.38
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
Total: Major and Medium Irrigation			132.50	88.99	209.90	145.79	219.20	169.50	251.00	172.46	277.19	189.85
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	130.75
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	3.65
12. Infrastructure Development	**	4702	4.55	1.27	7.00	2.07	4.50	2.15	10.50	6.86	11.40	6.97
Total: Minor Irrigation			68.05	49.98	104.10	57.08	76.50	72.75	116.50	90.97	134.40	141.37
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
Total: CAD & WM			300.00	277.84	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	33.13
15. Infrastructure Development	**	4711	3.45	1.54	26.00	6.56	9.50	4.25	15.00	9.48	14.00	5.73
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	135.98
17. Paqladia 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
Total: Flood Control Sector			66.45	68.24	211.00	196.33	234.30	181.09	250.50	213.02	238.01	174.84
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	69.46
** 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	575.52

STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET VIS-À-VIS XII PLAN OUTLAY

ANNEXURE - V
(Chapter-V)

(Rs. in Crore/Net)

Sector / Orgn / Scheme	XII Plan	Heads of	B.E.	R.E.	Actual	B.E.	R.E.	Actual	B.E.	R.E.	Actual	B.E.	R.E.	Actual
	Outlay	Accounts	2012-13	2012-13	2012-13	2013-14	2013-14	2013-14	2014-15	2014-15	2014-15	2015-16	2015-16	31.12.2015
Central Sector Schemes														
I. Medium Irrigation														
1. Research & Development Programme	360.00	2701	100.00	35.00	31.37	50.00	35.00	31.36	50.00	34.55	31.95	30.00	54.60	28.16
2. Development of Water Resources Information System	##	2701	84.99	40.00	38.30	149.98	43.00	42.65	225.38	79.99	81.53	80.99	75.33	48.61
3. Infrastructure Development	\$\$	2701	3.20	1.50	1.41	2.55	1.30	1.07	2.90	1.92	1.89	2.00	1.30	0.83
4. Hydrology Project	120.00	2701	70.00	43.72	37.9	70.00	50.00	40.73	31.38	24.55	24.85	10.00	2.00	0.02
5. Human Resource Development/Capacity Building	**	2701	85.00	29.90	11.09	85.00	24.50	20.48	43.00	23.10	21.44	22.00	12.30	6.18
6. River Basin Management	&&	2701	110.00	57.40	58.67	100.00	65.00	64.87	107.00	78.00	75.54	45.20	87.00	55.37
7. Implementation of National Water Mission	1390.00	2701	200.00	0.25	0.00	110.00	2.00	0.71	40.00	1.45	1.29	20.00	9.00	2.40
8. Irrigation Management Programme	6000.00	2701	100.00	0.75	0.24	40.00	0.10	0.00	1.00	0.00	0.00	1.00	0.00	0.00
9. Dam Rehabilitation and Improvement Programme (DRIP)	120.00	2701	24.00	2.30	0.43	36.00	9.00	4.60	30.00	14.30	13.71	29.00	16.00	9.10
10. Bodwad Parisar Sinhan Yojana		2701	0.00	0.00	0.00	0.00	12.40	0.00	200.00	66.67	66.66	1.00	0.00	0.00
11. Impact Study Assessment of Project (AIBFMP)		2701	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.05	0.03	5.00	0.13	0.03
12. Polavaram Project Authority (new scheme from 2014-15)		2701	0.00	0.00	0.00	0.00	0.00	0.00	250.00	250.00	250.00	100.00	400.00	100.00
13. DPR for interlinking of Rivers		2701	0.00	0.00	0.00	0.00	0.00	0.00	100.00	10.00	0.00	100.00	0.00	0.00
Total: Medium Irrigation			777.19	210.82	179.41	643.53	242.30	206.47	1130.66	584.58	568.89	446.19	657.66	250.70
II. Minor Irrigation														
Surface Water Schemes														
14. Ground Water Management and Regulation	3539.00	2702	318.00	180.00	118.28	275.00	140.00	80.40	325.00	143.00	125.29	163.00	163.00	77.27
15. Human Resource Development/Capacity Building	**	2702	15.00	9.00	6.09	9.00	7.00	5.11	7.00	6.00	5.46	7.00	6.65	4.34
16. Infrastructure Development	\$\$	4702	39.80	6.93	3.45	28.00	7.70	3.43	48.60	5.49	3.55	9.00	3.00	0.57
17. Development of Water Resources Information System	##	2702	0.01	0.00	0.00	0.02	0.00	0.00	0.02	0.01	0.00	0.01	0.01	0.00
Total: Minor Irrigation			372.81	195.93	127.82	312.02	154.70	88.94	380.62	154.50	134.30	179.01	172.66	82.18
III. Flood Control Sector														
18. Flood Forecasting	794.00	2711	48.00	30.00	25.21	150.00	25.00	24.67	100.00	30.00	28.65	50.00	35.00	23.65
19. Infrastructure Development	\$\$	4711	12.00	6.57	4.99	19.45	11.00	5.80	28.50	17.10	12.20	6.00	3.70	1.67
20. River Management Activities and works related to Border	763.00	2711	125.00	30.00	25.99	125.00	67.00	30.03	175.00	115.26	93.66	102.00	240.56	71.72
21. River Basin Management	&&	2711	90.00	76.68	76.00	100.00	85.00	85.00	143.00	80.00	80.00	73.80	78.15	44.51
Total: Flood Control Sector			275.00	143.25	132.19	394.45	188.00	145.50	446.50	242.36	214.51	231.80	357.41	141.55
IV. Transport Sector														
22. Farakka Barrage Project	558.00	5075	75.00	100.00	73.56	150.00	115.00	89.82	150.00	85.00	79.39	100.00	84.00	60.08
V. Ecology and Environment (New Schemes 2014-15)														
24. National River Conservation Plan		3435	0.00	0.00	0.00	0.00	0.00	0.00	537.00	453.00	337.46	550.00	550.00	367.00
25. National Ganga Plan (met from balance under NCEF)		3435	0.00	0.00	0.00	0.00	0.00	0.00	1500.00	1500.00	0.00	2100.00	1000.00	1000.00

(Rs. in Crore/Net)

Sector / Orgn / Scheme	XII Plan	Heads of	B.E.	R.E.	Actual	B.E.	R.E.	Actual	B.E.	R.E.	Actual	B.E.	R.E.	Actual
	Outlay	Accounts	2012-13	2012-13	2012-13	2013-14	2013-14	2013-14	2014-15	2014-15	2014-15	2015-16	2015-16	31.12.2015
		3435	0.00	0.00	0.00	0.00	0.00	0.00	-1500.00	-1500.00	0.00	-2100.00	-1000.00	-1000.00
26. Ghat works for beautification of River fronts		3435	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	100.00	100.00	67.00
27. Water Projects for NCT		3435	0.00	0.00	0.00	0.00	0.00	0.00	500.00	500.00	320.00	0.00	0.00	0.00
Total: Ecological and Environment			0.00	0.00	0.00	0.00	0.00	0.00	1137.00	1053.00	657.46	650.00	650.00	434.00
VI. Centrally Sponsored Schemes														
20. Accelerated Irrigation & Flood Management Programme		3601 & 2552	0.00	0.00	0.00	0.00	0.00	0.00	8992.22	3276.56	3261.04	1000.00	3009.76	793.89
21. Pradhan Mantri Krishi Sinchai Yojana		2552	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	100.00	100.00	0.00
		3601	0.00	0.00	0.00	0.00	0.00	0.00	950.00	4.00	0.00	900.00	1400.00	351.35
Total: Centrally Sponsored Schemes			0.00	0.00	0.00	0.00	0.00	0.00	9992.22	3280.56	3261.04	2000.00	4509.76	1145.24
Grant Total	18118.00		1500.00	650.00	512.98	1500.00	700.00	530.73	13237.00	5400.00	4915.59	3607.00	6431.49	2113.75
## Development of Water Resources Information System	2247.00													
\$\$ Infrastructure Development	337.00													
** Human Resource Development/Capacity Building	610.00													
&& River Basin Management	1280.00													

Annexure-VI
(Chapter-V)

STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET VIS-À-VIS XII PLAN OUTLAY

Group/ Scheme Component	Head of Accounts	BE 2016-17
I. Major Irrigation Projects		
1. Polavaram Multipurpose Project	2700	100.00
2. Farakka Barrage Project		80.00
	3075	18.00
	5075	62.00
3. Dam Rehabilitation and Improvement Programme (DRIP)		23.98
(a) EAP Component	2701	18.80
	4701	0.40
(b) Programme Component	2701	4.68
	4701	0.10
4. Water Project of NCT		0.02
	3435	0.01
	5425	0.01
Total: Major Irrigation Projects		204.00
II. Namami Gange		
1. National Ganga Plan	3435	2150.00
2. Ghat Works for Beautification of River Front	3435	100.00
Total: Namami Gange		2250.00
III. River Basin Management		
1. National Water Mission		25.00
	2701	21.00
	4701	4.00
2. River Basin Management		173.60
	2552	79.98
	2701	92.60
	2711	0.01
	4701	1.00
	4711	0.01
3. Flood Forecasting		60.00
	2552	6.04
	2711	38.63
	4552	0.33
	4711	15.00
4. Interlinking of rivers	2701	1.00
Total: River Basin Management		259.60
IV. Water Resource Management		
1. Development of Water Resources Information System		84.87
	2552	2.00
	2701	64.48
	2702	0.02
	4701	18.37
2. Ground Water Management and Regulation		303.39
	2552	0.01
	2702	103.38
	4702	200.00
3. National Hydrology Project		165.00
(a) EAP Component	2701	52.75
	4701	24.75
(b) Programme Component	2552	8.00
	2701	54.75

Group/ Scheme Component	Head of Accounts	BE 2016-17
	4701	24.75
4. Research and Development Water Resources		55.00
	2701	45.00
	4701	10.00
5. Irrigation Management Programme	2701	0.01
6. HRD/Capacity Building Programme		32.00
	2552	5.00
	2701	17.60
	2702	7.60
	4701	1.40
	4702	0.40
7. infrastructure Development		20.00
	2701	3.40
	4701	0.60
	4702	7.00
	4711	9.00
Total: Water Resource Management		660.27
V. Pradhan Mantri Krishi Sinchai Yojana: AIBP and PMKSY (HKKP) (State/UT Plan)		
1. Accelerated Irrigation Benefit Programme (AIBP)		1000.00
	2552	100.00
	3601	900.00
2. PMKSY (Har Khet Ko Pani)		500.00
	2552	40.00
	2701	5.00
	3601	450.00
	3602	5.00
3. Impact Assessment Studies of AIBP Projects	2701	1.00
4. Flood Management Programme		150.00
	2552	20.00
	3601	129.99
	3602	0.01
5. River Management Activities and works related to Border Areas		200.00
	2711	74.18
	3601	120.28
	3602	4.00
	4711	1.54
6. Irrigation Census		25.13
	3601	25.00
	3602	0.13
Total: Pradhan Mantri Krishi Sinchai Yojana: AIBP and PMKSY (HKKP) (State/UT Plan)		1876.13
VI. National River Conservation Plan		250.00
(a) EAP Component	3435	128.00
	3601	1.00
	3602	1.00
(b) Programme Component	3435	119.00
	3601	1.00
Grand total: (I-VI)		5500.00