



**GOVERNMENT OF INDIA**

**OUTCOME BUDGET**

**2009 - 2010**

**MINISTRY OF WATER RESOURCES**

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## EXECUTIVE SUMMARY

The Outcome Budget 2009-10 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 years 2007-08 and 2008-09 and the targeted performance during 2009-10. This has the following chapters covering different aspects of the Ministry:

Chapter	Aspect(s) covered
I	It gives brief introductory note on the functions of the Ministry, organizational setup, planning and policy framework and programmes / schemes being implemented by the Ministry. Briefly, the Ministry of Water Resources in the Government of India is responsible for laying down policy guidelines for overall development, conservation and management of water as a national resource, overall national perspective and coordination in this regard including coordination of diverse water uses. Under the Secretary and one Additional Secretary, the Ministry is organized under the administration wing, coordination wing, finance wing and nine technical wings. The Ministry has two attached offices, seven subordinate offices, seven statutory bodies, two autonomous bodies (societies) and two public sector undertakings. For XI plan period, the activities under various programmes / schemes being implemented / monitored by the Ministry have been clubbed into 15 central sector, one centrally sponsored and 4 state sector schemes (the centrally sponsored scheme has been shifted to State Sector from 2008-09) as against the 58 schemes in the Xth Five Year Plan.
II	It contains a tabular format, which may be visualized as “vertical compression and horizontal expansion” of the Statement of Budget Estimate (SBE) 2009-10. The main objective is to establish a one-to-one correspondence between Financial Budget 2009-10 and Outcome Budget 2009-10. 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 2007-08 and 2008-09.
V	It contains financial review covering overall trends in expenditure vis-à-vis Budget Estimates and Revised Estimates in recent years. This chapter also gives position of outstanding utilization certificates and unspent balances with states and implementation agencies.

Chapter	Aspect(s) covered
VI	It contains review of performance of statutory / autonomous bodies and public sectors undertakings under the administrative control of the Ministry.
2.	The Ministry adopted Water Policy in 1987 and the same was subsequently revised. The revised National Water Policy was adopted by the National Water Resources Council under the Chairmanship of the Prime Minister of India in its 5 <sup>th</sup> meeting held on 1 <sup>st</sup> April, 2002.
3.	The Central Water Commission, an attached office of MOWR, carries on specific activities related to hydrological observations at key stations, survey & investigations of identified projects particularly in North Eastern Region, assistance to States in planning, design and appraisal of water resources projects and flood forecasting. The Central Water Commission (CWC) carries out general monitoring of selected on-going major, medium and extension, renovation and modernization (ERM) of irrigation projects through its various Monitoring Directorates and Field formations. The Commission particularly monitors implementation of major, medium and selected minor irrigation projects receiving central assistance under Accelerated Irrigation Benefits Programme (AIBP) and schemes for Command Area Development & Water Management. As a part of monitoring, the projects are visited by officers of CWC on regular basis. The command area development projects are also visited by the officers of Command Area Development Wing of the Ministry to monitor various activities under the programme.
4.	The important activities of Central Ground Water Board, a subordinate office of the Ministry of Water Resources, include ground water management studies, ground water monitoring, geophysical studies, exploratory drilling, artificial recharge and rain water harvesting studies, remote sensing studies, water quality analysis, short term water supply investigations, regulation of ground water development, mass awareness and training programme etc. Major achievements during 2008-2009 under the scheme of Ground Water Management and Regulation include coverage of 1.57 Lakh sq. km under Ground Water Management Studies, drilling of 761 wells under the programme of Scientific Ground Water Exploration supported by Geophysical & Remote Sensing Studies, monitoring of ground water in 15640 ground water observation wells, conducting of 116 Water Supply Investigations for Defence and other departments and preparation of various reports. The Scheme for “Artificial Recharge to Ground Water through Dug Wells” in 7 states namely Andhra Pradesh, Maharashtra, Karnataka, Rajasthan, Tamilnadu, Gujarat and Madhya Pradesh is being implemented at an estimated cost of Rs. 1798.71 Crores in which the subsidy component is Rs. 1499.27 Crores. The main objective of the scheme is to augment the ground water resources in over-exploited/Critical/Semi-critical areas in 7 states.
5.	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.

- 6.** 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.
- 7.** Under Information Education and Communication Scheme, mass awareness activities of the Ministry and its Organizations are implemented with a view to create awareness among various target groups about the importance of optimum development and management of Water Resources in a holistic manner. The Media Plan for undertaking various Mass Awareness Activities on Water related issues, involving its conservation and judicious use, is devised and implemented by a Media Committee headed by Additional Secretary (Water Resources). The Committee reviews the Media Plan from time to time to ensure effective implementation of the activities and to take timely remedial measures and corrective action.
- 8.** Investigation of Water Resources Development Scheme is regularly monitored by the Ministry and its concerned organizations. Financial progress is monitored monthly and physical progress is monitored on quarterly basis. To inform the general public about the progress in this regard, the concerned organizations have been advised to put the details of physical/financial targets vis-à-vis achievement on their respective web-sites and update it regularly.

## **CHAPTER - I**

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

#### **INTRODUCTION**

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

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

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

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

#### **ATTACHED OFFICES**

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

#### **SUBORDINATE OFFICES**

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

#### **STATUTORY BODIES**

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

#### **AUTONOMOUS BODIES (SOCIETIES)**

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

#### **PUBLIC SECTOR UNDERTAKINGS**

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

**1.4** The Ministry, during 2008-09, implemented and monitored 15 central sector, and 5 state sector schemes. The following gives a brief overview of the Central Sector Schemes:

**1.4.1 Development of Water Resources Information System:** The objective of the scheme is to develop a water resources information system and make it fully operational at the earliest. The management of water resources is a highly complex task that involves multidisciplinary domains including data acquisition, numerical modelling, 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 utilisation of the resources.

**1.4.2 Hydrology II Project :** The objective of the project is to extend and promote the sustained and effective use of the Hydrological Information System (HIS) by all implementing agencies concerned with water resources planning and management in the 13 States and 8 Central agencies. The project would extend the HIS to the four new state agencies of H.P., Punjab, Goa and Pondichery in addition to States/UTs which were covered under Hydrology-I Project. The coverage of existing states under the project is to help them move from development of Hydrological Information System (HIS), as in the Hydrology Project Phase-I, towards use of HIS in water resources planning and management. The project will strengthen the capabilities of implementing agencies at state/ central level in using HIS for efficient water resource planning and management. It will build awareness and outreach services about HIS use; establishing and enhancing HIS data utilization by all concerned organizations.

**1.4.3 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 reports (DPRs) of various water resources development schemes including the schemes for Inter Basin transfer of Water and to carry out other studies and activities considered necessary incidental, supplementary or conducive to attainment of above objectives.

**1.4.4 Research and Development Programme 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 and equipments of the premier organizations/institutions at National level to keep pace with the state-of-art technology, and (iii) to support research works to be taken up by the various institutions in water sector.

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

**1.4.6 Information, Education and Communication:** The main objectives of the scheme are (i) to advocate the tenets of National Water Policy for adopting water efficient measures, (ii) to create awareness among the people about the need of using available water resources judiciously and sparingly, (iii) to create awareness on necessity of adopting measures for rainwater harvesting and artificial recharge of ground water to meet present and future needs of water, (iv) to reinforce importance of traditional water bodies in maintaining water balance and meeting water needs of the population, (v) to make conservation of water a mass campaign and to convey the population to voluntarily adopt various water saving measures.

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

**1.4.8 Infrastructure Development:** This scheme pertains to the activities related to lands & buildings and IT development and specifically include the activities related to, (i) land and buildings of CWC, (ii) lands and buildings of CGWB, (iii) IT development of MoWR and (iv) upgradation and modernization of computerization and information system of CWC.

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

**1.4.10 Ground Water Management and Regulation:** The main objectives of the scheme are as follows:

- To carry out ground water management studies to design area specific ground water development and management plan;
- To carry out ground water exploration aided by drilling to delineate ground water worthy areas;
- To periodically assess country's ground water resources and revise / update the methodology;
- To monitor ground water levels and quality through ground water observation wells;
- To carry out demonstrative artificial recharge and rain water harvesting studies to develop / update area specific methodologies;
- To establish / update data storage and information system to store, process and disseminate ground water data;
- To regulate and control ground water development in coordination with State Governments;
- To carry out geophysical studies through surface and sub-surface methods to delineate potential aquifers and pinpoint suitable sites for ground water exploration, artificial recharge etc;
- To coordinate with State governments with a view to establish benchmark methodologies for ground water studies;
- To promote awareness and water quality consciousness;
- To develop linkages with Scientific institutions on aspects of ground water saving and sharing;
- To assess ground water quality for determining their suitability for various types of uses including use for agriculture, industrial and allied purposes;
- To prepare reports, maps, ground water atlases and brochures for use by planners and administrators and
- To strengthen infrastructure by way of procurement of state of the art equipment which will aid in achieving the above objectives.

**1.4.11 Rajiv Gandhi Institute of Training and Research:** This scheme covers the activities to provide a base for organizing and upgrading the knowledge and skills of ground water professional in planning, investigation, development, management, augmentation, conservation and protection of ground water resources.

**1.4.12 Pagaladiya Dam Project:** The main objective of the scheme is the construction of dam and canal system to protect an area of 40,000 ha in Nalbari area of Assam from recurring floods from the river Pagladiya and to provide irrigation to a gross command area of 54,160 ha annually (average). The project is also to generate 3 MW of hydro-electricity from release of water from canal as incidental benefit.

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

**1.4.14 River Management Activities in Border Areas:** In view of the international issues involved in international rivers, under the scheme river management activities are taken up on priority in a systematic manner which include hydrological observation, investigation and necessary flood control measures in cooperation with neighboring countries wherever necessary.

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

CHAPTER-II

STATEMENT OF OUTLAYS AND OUTCOMES/TARGETS: ANNUAL PLAN 2009-10

(Rs. Crore)

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources	5	6	7	
1	2	3	4			5	6	7	8
1	Development of Water Resources Information System	(i) To collect data from network of Hydrological Observation stations for overall assessment of water resources and analysis of their characteristics (ii) Collection of information about minor irrigation through MI Census (iii) To establish infrastructure and launch the water resources information system.	70.82	70.00	0.00	(i) Continued hydrological observation at 878 site, (ii) development of water resources information system, (iii) continued activities for MI Census	(a)Collection of hydrological data is a continuous activity (b) Completion of 4th MI Census (c) Development of WRIS by December 2010.	Activities to continue throughout the year.	
2	Hydrology Project Phase-II	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.	-	38.10	0.00	Implementation of the project components, i.e. institutional strengthening, vertical extension (with DSS- Planning, DSS-Real Time and 31 Purpose driven Studies) and horizontal expansion with support of 3 major consultancies in place in Hydrology Project Phase-II.	(a) Improved data accessibility for exchange among Implementing Agencies (b) Improved tools for water resource planning and management. (c) Improved data system and tools for management of flood and drought.	Project would be implemented through the central agencies, namely MoWR, BBMB, CWC, CGWB and NIH.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
3	Ground Water Management and Regulation	i) Ground Water Management Studies to prepare ground water management plan ii) Ground Water exploration utilizing scientific tools viz. Remote sensing and GIS, Geophysical surveys aided by drilling to locate ground water worthy areas. iii) Monitoring of ground water levels from Ground water monitoring stations iv) Short term water supply investigations for source finding to Central/ State Govt deptt., v) Preparation of Report, Maps for use by planners and administrators. vi) Artificial recharge studies including construction of Artificial recharge structures. (vii) Regulation of Ground water development by CGWA.	95.00	70.00	0.00	i) Ground Water Management Studies - 1.50 Lakh Sq.Km. ii) Ground Water exploration - 800 wells. iii) Monitoring of ground water levels - 15000 observation wells 4 times a year. iv) Short term water supply investigations - need based (300) v) Geophysical survey:- VES 2200, Line Km. 10, well logging-need based vi) Artificial recharge studies (new - 15) (vii) Regulation of Ground water development by CGWA - continuing	Availability of additional data and their analysis would help in realistic assessment of the issues related to Ground Water and in better management	Activities will be undertaken by Central water Ground Water Board and would continue through out the year.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables / Physical Outputs	Outcomes		
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
4	Investigation of Water Resources Development Schemes	To carry out the activities related to survey, field investigation, preparation of prefeasibility / feasibility report & Detailed Project Report of various Water Resources Development schemes including the schemes for Interbasin transfer of Water and to carry out other studies and activities considered incidental, supplementary or conducive to attainment of above objectives	7.60	42.00	0.00	(a) Preparation of DPR of two river interlinking projects by NWDA (i) Par-Tapi-Narmada & (ii) Daman Ganga- Pinjal (b) DPR of Rangit HE Project Stage I, Kalez Khola and Suntaley Projects. Feasibility Report of Manas Teesta Link Canal. (c) Survey & field investigations and preparation of feasibility Reports for Rukni and Sonai Irrigation Schemes and survey & field investigations and preparation of Detailed Project Reports (DPR) for 14 Micro Hydel Projects in Arunachal Pradesh. (d) Preparation of DPR of Kirthai Hydro-electric project Stage-II (J&K) and Seli and Raoli Projects (Himachal Pradesh).	Identification of most appropriate Plan for development of water resources	Activities to be undertaken by National Water Development Agency (NWDA) and Central Water Commission. Activities to continue throughout the year.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
5	Research & Development programme in Water Sector	The scheme comprises of various activities related to R&D and training in the water resources. sector These activities are being implemented by the premier research Institutes in the field of hydrology, hydraulics, soil and material sciences, i.e. NIH, CW&PRS and CSMRS. Specific research/studies by CWC are also supported under the scheme. Assistance is also provided for research studies to WALMIs located in various States and Academic institutions for research & development in the field of Water Resources.	43.40	52.00	0.00	The implementation of the scheme will help in capacity building and creation of additional facilities. The research output are generally in terms of technical report & research papers having recommendations for improved techniques for planning & design. Quantifiable deliverables are: (a) Research Reports = 300 (b) Research Papers = 250 (c) Training workshops = 26	(a) Improvement in efficiency of the water resources system (b) Reduction in risk/hazard in water resources project (c) Economic design of water resources project (d) Development of new/improved technology	The work is to be implemented by various organisations of the Ministry, namely CWC, CWPRS, CSMRS and NIH.	
6	National Water Academy	Training for in service Engineers / Induction Engineers in Water Resources Planning, Development and Management	-	2.60	0.00	42 Training Programmes	Training of officers of Central as well State Government to equip them with latest technique & technology would help in better planning, design and management of water development projects.	Annual training schedule prepared	
7	Rajiv Gandhi National Ground Water Training and Research Institute	Training of officers and staff of CGWB and other Central / State Government organisation on Ground Water aspects	0.00	2.00	0.00	18 Training Programmes	Training of officer of Central as well State Government to equip them with latest technique & technology would help in better planning, design and management of water development projects	Annual training schedule prepared	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
8	Information Education and Communication	To Generate awareness amongst the masses about the importance of water and need for its conservation	-	12.00	0.00	(i) Publicity through electronic media (ii) organizing and participating in workshops/seminars, (iii) publicity through print media, (iv) campaign through traditional media, (v) printing and distribution of printed material (vi) support to NGOs and other organizations for mass awareness activities (vii) organizing events for students (ix) organizing events for empowering peoples organizations (x) advertise ment through mass media transport vehicles, (xi) murals and displays at prominent places, (xii) organizing exhibitions in prominent places, (xiii) production of documentaries, short films, audio/video sports,	Publicity and awarenes about Water Resources Sector with emphasis on water conservation and rainwater harvesting.	Activited will be conducted throughout the year	
9	Pagladiya Dam Project	Flood Control, Irrigation and Ancillary Power Generation	-	0.50	0.00	Project is yet to be taken up due to non completion of Zirat survey. Pre construction activities to continue.		Works on project yet to start. Preconstruction activities to continue	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
10	Farakka Barrage Project	Maintenance of Farakka Barrage Project and its appurtenant structures including feeder canal, Jangipur barrage etc. and Anti-erosion works for protection of embankments along river Ganga and its tributaries to train the river along main barrage	39.45	70.00	0.00	(i) Maintenance of Farakka Barrage Project and its appurtenant structures including feeder canal, Jangipur barrage etc. is a continuing activity. (ii) Erosion control to save land, crops, orchards, public buildings etc along the river Ganga-Padma in its extended jurisdiction of 120 km.	Operation and maintenance of Farakka & Jangipur Barrages / Gates, associated structures is the on-going activity entrusted to Farakka Barrage Project. Anti-erosion measures in extended jurisdiction of Farakka Barrage Project would save the public property along the river banks which get eroded every year due to high floods in the districts of Malda and Murshidabad in West Best Bengal.	Activities to continue throughout the year.	
11	Dam Safety Studies and Planning	(i) Instrumentation Museum in CWC (ii) Preparation and digitisation of PMP atlases of 4 Basins and 6 Regions (iii) Development of Environmental and Social Management Framework through Environmental and Social Assessment Studies of 10 existing projects (iv) Risk Analysis and Other Specialised Studies of some existing Projects (v) Training and Development of special propose packages on Dam Safety Activities.	-	1.00	0.00	1. Setting up of Management Information System (MIS) for Dam Safety 2. Preparation of generalized PMP Atlas and updation of PMP Atlases and digitization of PMP Atlases 3. Models/fixtures for Instrumentation Museum	The output would contribute in availability of design tools and in improving the technical expertise of dam safety aspects	1. Setting up of Management Information System (MIS) for Dam Safety - 3/2010. 2. Preparation of generalized PMP Atlas and updation of PMP Atlases and digitization of PMP Atlases - 3/2010. 3. Models/fixtures for Instrumentation Museum - 3/2010.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Process/ Timelines	Remarks
			4			5	6	7	
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
1	2	3						8	
12	River Basin Organisation / Authority	Creation of the River Basin Organisations in order to have the optimum utilisation of available water resources in an integrated manner by adopting the basin approach. The Organisation will provide a common platform to the co-basin states and will facilitate the projects in their efficient execution and management. It would result in achieving the highest possible efficiency of the created facilities and in utilisation of the facilities for irrigation, hydro-power etc fully.	-	0.50	0.00	Initiation of process for selection of potential basins where RBOs can be created in consultation with co-basin states. 2 river basins have been identified and proposals have been sent to co-basin states for their consideration.	Better management for optimum and efficient utilization of water resources.	Efforts are on to seek the support of basin states for constitution of River Board Organisations in respect of Mahanadi Basin and Godavari Basin.	
13	Flood Forecasting	To maintain the network of hydrological observation sites across the country by Central Water Commission covering 20 river basins to provide timely flood forecasts at 175 stations to the local administration.	54.36	25.00	0.00	Collection of real time data, its analysis and issue of flood forecasts. About 6000 forecasts are issued every year.	Advance warning of the incoming flood to help in planning activities for reducing the damages from floods.	Continued activity.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
14	River Management Activities and Work Related to Border Areas	Hydrological observations and investigations of Water Resources Projects with neighboring countries besides river management works on common/border rivers. Flood Control, Anti-erosion & Drainage development works by Brahmaputra Board. Maintenance of Flood Protectionworks of Kosi and Gandak projects( in Nepal).	-	199.30	0.00	(i) Breach closure of left afflux bund of Kosi barrage in Nepal. (ii) Anti-erosion & Flood protection works of Majuli Island. (iii) Transmission of flood related data from/to neighboring countries. (iv) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and (v) Preparation of Joint Detailed Project Reports (DPR). (vi) Development works on common/border rivers.	Mitigating the recurring flood problems.	Activities to be implemented by Central Water Commission, Ganga Flood Control Commission, Brahmaputra Board and concerned State Governments.	
15	Infrastructure Development	To procure land and building for Ministry of Water Resources and it attached / subordinate offices and implementation of IT Plan in MoWR, CWC and CGWB.	-	15.00	0.00	Construction of office and residential buildings for CWC and CGWB and other activities	Better and more efficient working environment	Activities to be implemented by Central Water Commission and Central Ground Water Board.	
16	Command Area Development and Water Management Programme	To develop adequate delivery system of irrigation water upto farmers fields with an objective to enhance water use efficiency and production and productivity of crop per unit of land and water for improving socio-economic conditions of farmers	-	400.00	0.00	i. OFD works (Field channels & Land levelling, shaping & realignment of field boundaries) =0.35 Mha ii. Field, intermediate and linked drains = 0.14 Mha, iii. Correction of system deficiencies = 0.026 Mha, iv. Reclamation of waterlogged areas = 0.022 Mha	To bridge the gap between created potential and potential utilized through (a) on-farm-development (OFD) works, (b) implementation of Participatory Irrigation Management (PIM) and Warabandi, (c) correction of conveyance deficiency and (d) reclamation of water logged, saline and alkaline land.	Continued activity	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
17	Accelerated Irrigation Benefit Programme	To complete on-going irrigation/multi-purpose project in advanced stage of construction and which are beyond the resources capability of State Government in a time bound manner with a view to (a) create additional irrigation potential and (b) derive envisaged benefits from these projects	-	7000.00	0.00	To create additional irrigation potential of 1.05 Mha with the projects supported under AIBP (Major/medium 0.90 and Minor 0.15 Mha)	Creation of additional irrigation potential through projects supported by AIBP (major/medium and minor).	Continued activity	
18	Repair, Renovation and Restoration of Water Bodies	The objectives of the scheme are (i) to restore and augment the storage capacity of water bodies and (ii) to recover and extend their irrigation potential.	-	399.00	0.00	A.P. Project extended to 21 districts and District project Units. Karnataka project has commenced from 14.1.08 in 8 districts. Tamil Nadu project with World Bank assistance became effective in September, 2007	Creation of additional irrigation potential .	Continued activity	
19	Dam Rehabilitation and Improvement Programme	To prepare disaster management plans in consultation with respective State Governments to provide incentives to the State Governments in taking up measures related to Dam Safety and Rehabilitation and to strengthen and further consolidate the institutional framework of Dam Safety Assurance in Central Water Commission and the participating States.	-	1.00	0.00	A token provision has been kept in order to facilitate the initiation of the activities after the agreement between GOI, State Governments and World Bank.	-	This is a proposed externally aided project. Discussions with World Bank are going on. The scheme is likely to start by March 2010.	

S.No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2009-10			Quantifiable	Projected	Process/ Timelines	Remarks
						Deliverables /	Outcomes		
						Physical Outputs			
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
20	Flood Management Programme	To provide financial assistance to various state governments for river management, flood control, anti-erosion, drainage development, flood proofing works in the critical areas in the country	-	900.00	0.00	(i) River Management works in the critical areas. (ii) Anti-erosion works, drainage improvement works, etc. as suggested by Task-Force-2004 on Flood Management and Erosion Control in respect of Ganga and Brahmaputra Basin states. (iii) Coastal erosion works in maritime states. (iv) De-silting /dredging of river sections in the selected reaches.	The output would help in reducing damages due to flood, river bank erosion and coastal erosion.	Central assistance would be provided to the State Governments on submission of detailed project proposals. The new proposals will be considered by a Committee headed by Secretary (Expenditure) for release of central assistance.	
		<b>Total</b>	<b>310.63</b>	<b>9300.00</b>	<b>0.00</b>				

## CHAPTER – III

### REFORM MEASURES AND POLICY INITIATIVES

**3.1** National Action Plan on Climate Change (NAPCC) envisages eight National Missions which, inter-alia, include National Water Mission. Ministry of Water Resources has been assigned to take up work for the institutionalization of the National Water Mission. A Draft Comprehensive Mission Document for National Water Mission has been prepared by the Ministry and submitted to Prime Minister's Office for consideration of Prime Minister's Council on Climate Change. One of the important strategies is to revisit the Nation Water Policy.

**3.2** The International Commission on Irrigation and Drainage (ICID) and the Ministry of Water Resources has proposed to jointly organize the 5<sup>th</sup> Asian Regional Conference and the 60<sup>th</sup> International Executive Council Meeting of ICID at New Delhi during December 6-11, 2009. The theme of the Asian Regional Conference is "Improvement in Efficiency of Irrigation Projects through Technology Upgradation and Better Operation and Maintenance"

**3.3** The proposal of this Ministry for revival of NPCC by way of conversion of Govt. of India principal amount and cumulative interest due & accrued on it as on the date of conversion to equity capital and further written down to 10% of value by following the procedure as prescribed in the Companies Act, 1956, as recommended by the committee of Secretaries was approved by the Cabinet Committee on Economic Affairs (CCEA).

**3.4** As a result of initiative taken by Ministry of Water Resources the party States of Maharashtra and Gujarat conveyed their concurrence to the MOU for preparation of DPRs of Par-Tapi-Narmada and Daman Ganga-Pinjal links. The work has been started in January, 2009 and is scheduled to be completed of December, 2011.

**3.5** INDIA – CHINA COOPERATION: During the 2<sup>nd</sup> meeting of Expert Level Mechanism (ELM) on Trans Border Rivers held at New Delhi from 10<sup>th</sup> to 12<sup>th</sup> April, 2008 between India and China, a draft Memorandum of Understanding (MoU) was finalized on provision of hydrological information of the Brahmaputra/ Yaluzangbu River in flood season by China to India. The said memorandum was signed with China on 05.06.2008 with a validity of 5 years during the visit of Hon'ble External Affairs Minister of India to Beijing from June 4-7, 2008. In pursuance, the Chinese side has started supplying the data w.e.f. 08.09.2008 in respect of three stations namely Nugesha, Yangcun and Nuxia located on River Yaluzangbu/ Brahmaputra.

**3.6** Two new schemes for the repair, renovation and restoration of water bodies, one with external assistance and the other with domestic support, have been approved by the Cabinet. These schemes envisage comprehensive improvement of selected water bodies including their restoration, improvement of their catchments areas, community participation and self – supporting system for sustainable management of water bodies.

**3.7** Restructuring of Brahmaputra Board- An initiative has been taken to restructure the Brahmaputra Board considering the extended jurisdiction of the Board.

## **CHAPTER - IV**

### **REVIEW OF PAST PERFORMANCE**

- 1.** The relevant information regarding performance during 2007-08 and 2008-09 against the targets already set are given at **Annexure-I** and **Annexure - II**.
- 2.** There is one flagship programme of this Ministry namely, 'Accelerated Irrigation Benefits Programme' details of which are given at **Annexure-III**.

## CHAPTER - V

### OVERALL FINANCIAL REVIEW

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

#### **TREND OF EXPENDITURE IN FY 2008- 09:**

**5.2** Budget Estimate for the annual plan of this Ministry for the year 08-09 is Rs. 600.00 crores which was reduced to Rs. 550.00 crores by the Ministry of Finance at RE stage. As per the expenditure details received from the Office of Controller of Accounts, an expenditure of Rs. 441.18 crores has been incurred upto March, 09 which works out to 73.53% and 80.21% with reference to B.E and R.E 08-09 respectively.

**5.3** The grant of Ministry of Water Resources for FY 08-09 is classified into four Sectors. The Sector-wise distribution of approved plan outlay (both BE/RE) and expenditure up to March, 09 under different Sectors are summarized below:

<b>(Rs in crore)</b>			
<b>Sector</b>	<b>B.E. 2008-09</b>	<b>R.E. 2008-09</b>	<b>Exp. Upto March, 09</b>
Major & Medium Irrigation	209.90	186.78	141.58
Minor Irrigation	104.10	89.70	55.14
Flood Control	211.00	197.84	190.43
Transport Sector	75.00	75.68	54.03
<b>Total</b>	<b>600</b>	<b>550</b>	<b>441.18</b>

#### **Budget at a Glance**

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

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

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

**Central Sector**

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

**State Sector Schemes**

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

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

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

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

(Rupees in crore)

Sl No.	Sector/ Organisation /Scheme	Actuals 2007-08		BE 2008-09		RE 2008-09		BE 2009-10		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<b>I</b>	<b>Secretariat-Economic Services</b>									
1.	Ministry of Water Resources (prop.)	0.00	14.41	0.00	19.13	0.00	19.58	0.00	21.00	21.00
2.	Ravi-Beas Waters Tribunal	0.00	0.63	0.00	0.75	0.00	0.75	0.00	0.80	0.80
3.	Cauvery Water Disputes Tribunal	0.00	1.19	0.00	1.37	0.00	1.45	0.00	1.60	1.60
4.	Krishna Water Disputes Tribunal	0.00	1.09	0.00	1.28	0.00	1.17	0.00	1.40	1.40
	<b>Total : Secretariat-Economic Services</b>	<b>0.00</b>	<b>17.32</b>	<b>0.00</b>	<b>22.53</b>	<b>0.00</b>	<b>22.95</b>	<b>0.00</b>	<b>24.80</b>	<b>24.80</b>
<b>II</b>	<b>Major &amp; Medium Irrigation</b>									
	<b>Central Water Commission</b>									
1.	Direction & Administration	0.00	13.81	0.00	14.25	0.00	15.97	0.00	23.00	23.00
2.	Data Collection	0.00	46.35	0.00	44.65	0.00	47.35	0.00	69.22	69.22
3.	Training	0.00	0.42	0.00	0.57	0.00	0.60	0.00	0.65	0.65
4.	Research	0.00	0.87	0.00	1.11	0.00	1.50	0.00	1.60	1.60
5.	Survey & Investigation	0.00	5.16	0.00	3.25	0.00	4.50	0.00	4.50	4.50
6.	Consultancy	0.00	13.88	0.00	13.56	0.00	18.00	0.00	20.00	20.00
7.	Contribution to international bodies	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01
8.	Exhibition and Trade Fair	0.00	0.13	0.00	0.30	0.00	0.30	0.00	0.30	0.30
9.	Modernization of equipment CWC Offset Press	0.00	0.19	0.00	0.25	0.00	0.25	0.00	0.35	0.35
10.	Seminars and conferences on water resources on water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	Cell for monitoring externally aided projects	0.00	0.44	0.00	0.45	0.00	0.50	0.00	0.60	0.60
12.	Water Planning Wing	0.00	0.92	0.00	0.93	0.00	1.25	0.00	1.40	1.40
13.	Hydrological observations in Chenab basin	0.00	1.20	0.00	1.35	0.00	1.50	0.00	1.60	1.60
14.	National Water Academy	1.86	0.00	2.30	0.00	2.64	0.00	2.60	0.00	2.60
	<b>Total : CWC</b>	<b>1.86</b>	<b>83.37</b>	<b>2.30</b>	<b>80.68</b>	<b>2.64</b>	<b>91.73</b>	<b>2.60</b>	<b>123.23</b>	<b>125.83</b>
15.	Central Soil and Materials Research Station	0.00	4.31	0.00	4.85	0.00	4.82	0.00	5.00	5.00
16.	Central Water & Power Research Station	0.00	18.24	0.00	17.00	0.00	22.10	0.00	25.00	25.00

Sl No.	Sector/ Organisation /Scheme	Actuals 2007-08		BE 2008-09		RE 2008-09		BE 2009-10		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
17.	National Institute of Hydrology	0.00	5.18	0.00	5.20	0.00	5.20	0.00	5.30	5.30
18.	Sardar Sarovar Construction Advisory Committee	0.00	0.43	0.00	0.51	0.00	0.58	0.00	0.90	0.90
19.	Bansagar Control Board	0.00	0.11	0.00	0.16	0.00	0.16	0.00	0.23	0.23
20.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	25.00	0.00	15.00	0.00	22.00	22.00
21.	Upper Yamuna River Board	0.00	0.37	0.00	1.58	0.00	1.08	0.00	1.84	1.84
22.	Research and Development Programme	33.28	0.00	60.00	0.00	60.00	0.00	52.00	0.00	52.00
23.	Development of Water Resources Information System	18.65	0.00	46.00	0.00	45.10	0.00	70.00	0.00	70.00
24.	Hydrology Project	6.98	0.00	44.00	0.00	25.51	0.00	38.10	0.00	38.10
25.	Investigation of Water Resources Development Schemes	25.09	0.00	37.00	0.00	37.59	0.00	42.00	0.00	42.00
26.	Information, Education and Communication	1.32	0.00	13.00	0.00	13.00	0.00	12.00	0.00	12.00
27.	River Basin Organization/ Authority	0.00	0.00	1.00	0.00	0.01	0.00	0.50	0.00	0.50
28.	Dam Safety Studies and Planning	0.48	0.00	1.60	0.00	0.58	0.00	1.00	0.00	1.00
29.	Infrastructure Development	1.33	0.00	5.00	0.00	2.35	0.00	1.00	0.00	1.00
30.	National Projects Construction Corporation Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	<b>Total: Major &amp; Medium Irrigation</b>	<b>88.99</b>	<b>112.01</b>	<b>209.90</b>	<b>134.98</b>	<b>186.78</b>	<b>140.67</b>	<b>219.20</b>	<b>183.51</b>	<b>402.71</b>
<b>III</b>	<b>Minor Irrigation</b>									
1.	Central Ground Water Board	0.00	59.51	0.00	57.70	0.00	82.80	0.00	94.99	94.99
2.	Rajiv Gandhi NGWTRI	0.60	0.00	2.10	0.00	0.81	0.00	2.00	0.00	2.00
3.	Ground Water Management and Regulation	48.11	0.00	95.00	0.00	84.29	0.00	70.00	0.00	70.00
6.	Infrastructure Development	1.27	0.00	7.00	0.00	4.60	0.00	4.00	0.00	4.00
	<b>Total : Minor Irrigation</b>	<b>49.98</b>	<b>59.51</b>	<b>104.10</b>	<b>57.70</b>	<b>89.70</b>	<b>82.80</b>	<b>76.00</b>	<b>94.99</b>	<b>170.99</b>
<b>IV.</b>	<b>Command Area Development</b>									
1.	Command Area Development Programme #	277.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Total: Command Area Development</b>	<b>277.84</b>	<b>0.00</b>	<b>0.000</b>						

Sl No.	Sector/ Organisation /Scheme	Actuals 2007-08		BE 2008-09		RE 2008-09		BE 2009-10		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<b>V.</b>	<b>Flood Control</b>									
1.	<b>Central Water Commission</b> Flood Data Collection	0.00	36.48	0.00	35.00	0.00	50.00	0.00	55.00	55.00
2.	Payment to Government of Bhutan for maintenance of flood forecasting and warning centres	0.00	0.71	0.00	0.80	0.00	1.00	0.00	1.20	1.20
3.	Strengthening and moderni- zation of flood forecasting and hydrological network in Brahmaputra and Barak Basin	0.00	1.58	0.00	1.60	0.00	2.00	0.00	2.25	2.25
	<b>Total : CWC</b>	<b>0.00</b>	<b>38.77</b>	<b>0.00</b>	<b>37.40</b>	<b>0.00</b>	<b>53.00</b>	<b>0.00</b>	<b>58.45</b>	<b>58.45</b>
4.	Emergent Flood Protection Measures in Eastern and Western Sectors	0.00	1.32	0.00	3.00	0.00	3.00	0.00	3.00	3.00
5.	Schemes for the benefit of North Eastern States & Sikkim  -Pagladia Dam Project	1.35	0.00	2.00	0.00	1.00	0.00	0.50	0.00	0.50
6.	Flood Forecasting	13.91	0.00	23.00	0.00	22.22	0.00	25.00	0.00	25.00
7.	River Management Activities and Works related to Border Areas	51.44	0.00	160.00	0.00	160.50	0.00	199.30	0.00	199.30
8.	Infrastructure Development	1.54	0.00	26.00	0.00	14.12	0.00	10.00	0.00	10.00
	<b>Total : Flood Control</b>	<b>68.24</b>	<b>40.09</b>	<b>211.00</b>	<b>40.40</b>	<b>197.84</b>	<b>56.00</b>	<b>234.80</b>	<b>61.45</b>	<b>296.25</b>
<b>VI.</b>	<b>Other Transport Services</b>									
1.	Farakka Barrage Project	30.99	18.31	75.00	19.24	75.68	28.25	70.00	32.00	102.00
2.	Jangipur Barrage	0.00	1.52	0.00	1.75	0.00	2.00	0.00	2.25	2.25
3.	Feeder Canal	0.00	3.09	0.00	3.40	0.00	3.54	0.00	4.00	4.00
	<b>Total : Transport Services</b>	<b>30.99</b>	<b>22.92</b>	<b>75.00</b>	<b>24.39</b>	<b>75.68</b>	<b>33.79</b>	<b>70.00</b>	<b>38.25</b>	<b>108.25</b>
	<b>TOTAL (I to VI) *</b>	<b>516.04</b>	<b>251.85</b>	<b>600.00</b>	<b>280.00</b>	<b>550.00</b>	<b>336.22</b>	<b>600.00</b>	<b>403.00</b>	<b>1003.00</b>
<b>VII.</b>	<b>AIBP and other Water Resources Programme **</b>	<b>5445.71</b>	<b>0.00</b>	<b>5550.00</b>	<b>0.00</b>	<b>7850.00</b>	<b>0.00</b>	<b>8700.00</b>	<b>0.00</b>	<b>8700.00</b>
	<b>GRAND TOTAL</b>	<b>5961.75</b>	<b>251.85</b>	<b>6150.00</b>	<b>280.00</b>	<b>8400.00</b>	<b>336.22</b>	<b>9300.00</b>	<b>403.00</b>	<b>9703.00</b>

Source of financing : \*Demand No.103 – Ministry of Water Resources for 2009-2010 (excluding AIBP)

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

# Scheme has been transferred to State Sector w.e.f. 2008-09

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

(Rupees in crore)

Sl. No	Sector/Organisation/Scheme	Actuals 2007-08		B.E. 2008-09		R.E. 2008-09		B.E. 2009-10		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<b>A.</b>	<b>DIRECT EXPENDITURE</b>									
1.	Secretariat-Economic Services	0.00	17.32	0.00	22.53	0.00	22.62	0.00	24.80	24.80
2.	Central Water Commission -Major & Medium Irrigation -Flood Control	1.86 0.00	83.37 38.77	2.30 0.00	80.68 37.40	2.64 0.00	91.84 53.00	2.60 0.00	123.23 58.45	125.83 58.45
3.	Central Soil & Materials Research Station	0.00	4.31	0.00	4.85	0.00	4.85	0.00	5.00	5.00
4.	Central Water & Power Research Station	0.00	18.24	0.00	17.00	0.00	22.10	0.00	25.00	25.00
5.	Central Ground Water Board	0.00	59.51	0.00	57.70	0.00	83.00	0.00	94.99	94.99
6.	Rajiv Gandhi & NGWTRI	0.60	0.00	2.10	0.00	0.81	0.00	2.00	0.00	2.00
7.	Farakka Barrage Project	30.99	22.92	75.00	24.39	75.68	33.79	70.00	38.25	108.25
8.	Boards and Committees	0.00	0.91	0.00	2.25	0.00	1.82	0.00	2.97	2.97
9.	National Projects Construction Corporation Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	<b>Total : Direct Expenditure</b>	<b>33.45</b>	<b>245.35</b>	<b>79.40</b>	<b>246.80</b>	<b>79.13</b>	<b>313.02</b>	<b>74.60</b>	<b>372.70</b>	<b>447.30</b>
<b>B.</b>	<b>RELEASES</b>									
<b>(a)</b>	<b>Grants to Autonomous Bodies</b>									
1.	National Institute of Hydrology	0.00	5.18	0.00	5.20	0.00	5.20	0.00	5.30	5.30
2.	Research & Development Programme -Major and Medium Irrigation	33.28	0.00	60.00	0.00	60.00	0.00	52.00	0.00	52.00
3.	Pagladia Dam Project	1.35	0.00	2.00	0.00	1.00	0.00	0.50	0.00	0.50
	<b>Sub-Total (a) Grants to Autonomous Bodies</b>	<b>34.63</b>	<b>5.18</b>	<b>62.00</b>	<b>5.20</b>	<b>61.00</b>	<b>5.20</b>	<b>52.50</b>	<b>5.30</b>	<b>57.80</b>
<b>(b)</b>	<b>Central/Centrally Sponsored/ State Plan Schemes</b>									
1.	Command Area Development Programme	277.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Sub-Total (b):Central/Centrally sponsored Schemes</b>	<b>277.84</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>(c)</b>	<b>Assistance to States for Flood Control/anti-erosion works</b>									
1.	Emergent Flood Protection measures in Eastern and Western Sectors	0.00	1.32	0.00	3.00	0.00	3.00	0.00	3.00	3.00
	<b>Sub-Total(c) : Assistance to States for flood control/anti-erosion works</b>	<b>0.00</b>	<b>1.32</b>	<b>0.00</b>	<b>3.00</b>	<b>0.00</b>	<b>3.00</b>	<b>0.00</b>	<b>3.00</b>	<b>3.00</b>
<b>(d)</b>	<b>State Irrigation Schemes</b>									
1.	Sutlej Yamuna Link Canal Project	0.00	0.00	0.00	25.00	0.00	15.00	0.00	22.00	22.00
	TOTAL: RELEASES (a) to (d)	312.47	6.50	62.00	33.20	51.00	23.20	52.50	30.30	82.80
	<b>Total (A+B)*</b>	<b>345.92</b>	<b>251.85</b>	<b>141.40</b>	<b>280.00</b>	<b>130.13</b>	<b>336.22</b>	<b>127.10</b>	<b>403.00</b>	<b>530.10</b>

Sl. No	Sector/Organisation/Scheme	Actuals 2007-08		B.E. 2008-09		R.E. 2008-09		B.E. 2009-10		Total
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<b>C</b>	<b>OTHER PLAN SCHEMES</b>									
	<b>Major &amp; Medium Irrigations</b>									
1.	Development of Water Resources Information System	18.65	0.00	46.00	0.00	45.10	0.00	70.00	0.00	70.00
2.	Hydrology Project	6.98	0.00	44.00	0.00	25.51	0.00	38.10	0.00	38.10
3.	Investigation of Water Resources Development Schemes	25.09	0.00	37.00	0.00	37.59	0.00	42.00	0.00	42.00
4.	Information, Education and Communication	1.32	0.00	13.00	0.00	13.00	0.00	12.00	0.00	12.00
5.	River Basin Organization/ Authority	0.00	0.00	1.00	0.00	0.01	0.00	0.50	0.00	0.50
6.	Dam Safety Studies and Planning	0.48	0.00	1.60	0.00	0.58	0.00	1.00	0.00	1.00
7.	Infrastructure Development	1.33	0.00	5.00	0.00	2.35	0.00	1.00	0.00	1.00
	<b>Total - MMI</b>	<b>53.85</b>	<b>0.00</b>	<b>147.60</b>	<b>0.00</b>	<b>124.14</b>	<b>0.00</b>	<b>164.60</b>	<b>0.00</b>	<b>164.60</b>
	<b>Minor Irrigation</b>									
1.	Ground Water Management and Regulation	48.11	0.00	95.00	0.00	84.29	0.00	70.00	0.00	70.00
2.	Infrastructure Development	1.27	0.00	7.00	0.00	4.60	0.00	4.00	0.00	4.00
	<b>Total - MI</b>	<b>49.38</b>	<b>0.00</b>	<b>102.00</b>	<b>0.00</b>	<b>88.89</b>	<b>0.00</b>	<b>74.00</b>	<b>0.00</b>	<b>74.00</b>
	<b>Flood Control</b>									
1.	Flood Forecasting	13.91	0.00	23.00	0.00	22.22	0.00	25.00	0.00	25.00
2.	River Management Activities and Works related to Border Areas	51.44	0.00	160.00	0.00	160.50	0.00	199.30	0.00	199.30
3.	Infrastructure Development	1.54	0.00	26.00	0.00	14.12	0.00	10.00	0.00	10.00
	<b>Total - FC</b>	<b>66.89</b>	<b>0.00</b>	<b>209.00</b>	<b>0.00</b>	<b>196.84</b>	<b>0.00</b>	<b>234.30</b>	<b>0.00</b>	<b>234.30</b>
	<b>Total - (A+B)+C</b>	<b>516.04</b>	<b>251.85</b>	<b>600.00</b>	<b>280.00</b>	<b>550.00</b>	<b>336.22</b>	<b>600.00</b>	<b>403.00</b>	<b>1003.00</b>
<b>D</b>	<b>AIBP and other Water Resources Programme **</b>	<b>5553.52</b>	<b>0.00</b>	<b>5550.00</b>	<b>0.00</b>	<b>7850.00</b>	<b>0.00</b>	<b>8700.00</b>	<b>0.00</b>	<b>8700.00</b>
	<b>GRANT TOTAL (A+B+C+D)</b>	<b>6069.56</b>	<b>251.85</b>	<b>6150.00</b>	<b>280.00</b>	<b>8400.00</b>	<b>336.22</b>	<b>9300.00</b>	<b>403.00</b>	<b>9703.00</b>

Source of financing: \*Demand No.103 – Ministry of Water Resources for 2009-2010 (excluding AIBP).

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

**TABLE - C****UTILISATION CERTIFICATES OUTSTANDING IN RESPECT OF GRANTS /LOANS  
RELEASED UPTO 1.4.09****Position as on 1.4.09**

<b>No. of UCs Outstanding in r/o grants released upto march,06</b>	<b>Amount involved (Rs in Crores)</b>	<b>No. of UCs received</b>	<b>Amount involved in respect of UCs received</b>	<b>No. of UCs outstanding as on 1.4.09</b>	<b>Amount involved on outstanding UCs(Rs in crores)</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
<b>65</b> (Institutions & Autonomous bodies)	2.92	22	0.70	43	2.22
<b>25</b> (State Govts.)	51.57	9	13.19	21	38.38

<b>Name of the SMD</b>	<b>No. of UCs Outstanding in r/o grants released upto March, 06</b>	<b>Amount involved (Rs in Crores)</b>	<b>No. of UCs received</b>	<b>Amount involved in respect of UCs received</b>	<b>No. of UCs outstanding as on 31.12.07</b>	<b>Amount involved on outstanding UCs(Rs in crores)</b>
	1	2	3	4	5	6
Minor Irrigation	2	0.04	0	0	2	0.04
Ganga Wing(#)	13	9.85	6	4.17	12	5.68
Command Area Development	10	41.68	3	9.02	7	32.66
<b>Total</b>	<b>25</b>	<b>51.57</b>	<b>9</b>	<b>13.19</b>	<b>21</b>	<b>38.38</b>

(#) Due to partial receipt of UCs

## CHAPTER - VI

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

#### STATUTORY BODIES:

##### 6.1 Brahmaputra Board:

**6.1.1** The Brahmaputra Board was set up by the Government of India under Act of Parliament, i.e. Brahmaputra Board, Act, 1980 (46) of 1980 under the Ministry of Irrigation (Now renamed as Ministry of Water Resources). The jurisdiction of the Board includes both the Brahmaputra and Barak Valleys and covers all states of North Eastern Region including the State of Sikkim and Northern part of West Bengal falling in the Brahmaputra basin. The Board started functioning with headquarters at Guwahati with effect from January 1982.

**6.1.2** The main functions assigned to the Board are to carry out survey and investigation and to prepare Master Plan for the control of floods, bank erosion and improvement of drainage congestion giving importance to development and utilization of water resources of the Brahmaputra and Barak Valleys for hydropower, navigation and other beneficial purposes. Its assignment also includes preparation of Detailed Project Report of the Dams and other projects identified in Master Plan as approved by Central Government and to take up construction and maintenance of the projects approved by the Central Govt. and works connected there with as proposed in the Master Plan and also to maintain and operate such dams and works.

**6.1.3** During the year 2008-09, approval from the Govt. of India for 5 sub-basin Master Plans viz. Shogdoi, Godadher, Belsiri, Depota & Kushi-Deosila have been received and another completed 3 Sub-basin Master Plans have been approved by the Board and are under process for acceptance of the Govt. of India. Preparation of 7 sub-basins Master Plan are on and survey and investigation for remaining 6 Master Plan are under progress. During 2009-10, 4 sub-basin Master Plans would be completed.

**6.1.4** For protection of Majuli Island in Assam an expenditure of Rs. 45.83 crore was incurred upto March 2009 including emergent works and 92.5% of works under Phase-I were completed. DPR for Phase-II and Phase-III have been technically cleared for Rs.115.03 crore. Phase-II & III works would start during the year 2009-10 and an amount of Rs. 11.31 crore has been kept for the year 2009-10. For the works for avulsion of river Brahmaputra at Dholla Hathiguli under phase -IV, an amount of Rs. 5.18 crore has been kept during the year 2009-10.

**6.1.5** The North Eastern Hydraulic and Allied Research Institute (NEHARI) under Brahmaputra Board has taken up the works of testing of quite a good numbers of soil, rock and concrete samples for Brahmaputra Board, NEEPCO, CWC, NHPC etc.

**6.1.6** Works under Borbhag and Amjur Drainage Development scheme are under progress and an amount of Rs. 1.24 crore and Rs. 3.30 crore respectively has been kept for the year 2009-10.

## **6.2 Ravi and Beas Waters Tribunal:**

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

## **6.3 Cauvery Water Disputes Tribunal:**

**6.3.1** The Cauvery Water Disputes Tribunal (CWDT) was constituted by the Government of India on 2nd June, 1990 to adjudicate the water dispute regarding Inter State River Cauvery and the river valley thereof. The tribunal has submitted its report and decision on 05.02.2007 under section 5(2) of Interstate River Water Disputes Act, 1956. The concerned states and the Central Govt. have sought clarification and guidance under section 5(3) of the Act.

**6.3.2** 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 that party States have filed Special Leave Petition against the Tribunal's decision dated 05th February 2007 before the Hon'ble Supreme Court, the Hon'ble Supreme Court has granted Special Leave and the same is pending before the Hon'ble Supreme Court ordered that further action by the Tribunal will be taken only after decision of the Supreme Court on the special leave petitions becomes available. Preliminary hearing of SLPs was held before the Hon'ble Supreme Court on 28th July 2008 and the Hon'ble Court passed the order that these appeals may be put up before a three member Judge Bench in the month of November, 2008. However the matter did not come for hearing again and SLPs are yet to be disposed by the Hon'ble Supreme Court. The terms of the tribunal has been extended by the Govt. upto 2.11.2009.

## **6.4 Krishna Water Disputes Tribunal:**

**6.4.1** The Krishna Water Disputes Tribunal (KWDT) was constituted on 2nd April, 2004 for adjudication of the dispute relating to sharing of waters of Inter-State River Krishna and river valleys thereof. The term of KWDT has been extended upto 31.1.2010.

**6.4.2** All the 90 IAs filed by the party states so far have been disposed of by passing necessary orders and placing the documents/reports/data on record.

**6.4.3** Final arguments on the issues framed earlier have begun and States of Karnataka and Maharashtra have concluded their arguments. The arguments on behalf of State of Andhra Pradesh are continuing.

## **AUTONOMOUS BODIES (SOCIETIES):**

### **6.5 National Water Development Agency (NWDA):**

**6.5.1** The Ministry of Water Resources (MOWR) and Central Water Commission (CWC) formulated a National Perspective Plan (NPP) for Water Resources Development in 1980 envisaging inter-basin transfer of water from surplus basins to deficit basins / areas which comprises of two components, namely Himalayan Rivers Development Component and Peninsular Rivers Development Component. National Water Development Agency (NWDA) was set up under the MOWR in July 1982 as a Registered Society under the Societies Registration Act, 1860 for carrying out various technical studies to establish the feasibility of the proposals of NPP and to give concrete shape to it.

**6.5.2** The objectives of National Water Development Agency, as amended from time to time are:

- a) To carry out detailed surveys and investigations of the possible reservoir sites and interconnecting links in order to establish feasibility of the proposal of Peninsular Rivers Development and Himalayan Rivers Development Components forming part of National Perspective Plan 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 quantum of water in various Peninsular River Systems and Himalayan River Systems and which can be transferred to other basins / States after meeting reasonable needs of basin States in the foreseeable future.
- c) To prepare feasibility reports of various components of the schemes 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 reports of the intra-state links as may be proposed by the States.
- f) To do all such other things the Society may consider necessary, incidental, supplementary or conducive to the attainment of above objectives.

**6.5.3** The Hon'ble Union Minister of Water Resources is the President of the National Water Development Agency Society, which is the apex body of NWDA. The Annual General Meeting of the Society is held once a year to review the programme and progress of the Agency. The Governing Body of the NWDA headed by Secretary (Water Resources) reviews the programme and progress of works in every six months. The Technical Advisory Committee (TAC) of the Agency under the Chairmanship of the Chairman, Central Water

Commission examines various technical proposals framed by the Agency. All the concerned states are represented in these committees.

**6.5.4** Based on various studies conducted, NWDA has identified 30 links (16 under Peninsular component and 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.

**6.5.5** An expenditure of Rs. 30.04 crore was incurred on ILR programme during 2008-09. DPR of Ken-Betwa link has been completed and two more links namely Par-Tapi-Narmada and Damanganga-Pinjal were initiated during 2008-09.

**6.5.6** During the year 2009-10, an outlay of Rs. 32.44 crore has been provided to NWDA. It would continue to do Survey & Investigation required for ILR programme and preparation of DPR of Par-Tapi-Narmada and Damanganga-Pinjal links. The plan is to complete Survey & Investigation works of three links in Himalayan component (Indian Portion)

## **6.6 National Institute of Hydrology (NIH):**

**6.6.1** The National Institute of Hydrology (NIH) is an apex S&T organization conducting basic, applied and strategic research in the fields of hydrology and water resources in the country. It was established in December 1978 with Headquarters at Roorkee as an autonomous society under the Ministry of Water Resources. The Union Minister for Water Resources is the President and the Union Minister of State for Water Resources is the Vice-President of the Society. The Institute is managed, administered, directed and controlled by the Governing Body with Secretary (Water Resources) as its Chairman. Technical Advisory Committee, with the Chairman, Central Water Commission as its Chairman, is responsible for technical scrutiny of the research programmes of the institute. Director of the institute is the principal executive officer of the Society.

**6.6.2** Main objectives of the Institute are:

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

**6.6.3** Structure: The studies and research in the Institute are carried out under five scientific divisions at the Headquarters, two Centres for flood management studies at Guwahati and Patna and four regional Centres at Belgaum, Jammu, Kakinada and Sagar. The scientific divisions at headquarters are: (i) Surface Water Hydrology (ii) Ground Water Hydrology

(iii) Environmental Hydrology (iv) Water Resources Systems and (v) Hydrological Investigations.

**6.6.4 Regional Centres:** Hydrological studies of different regions are being carried out at the various regional centres of the Institute i.e. (a) Deccan Hard Rock Regional Centre, (b) Western Himalayan Regional Centre, (c) Deltaic Regional Centre and (d) Ganga Plain South Regional Centre.

**6.6.5** Ganga Plains North Regional Centre, Patna and North Eastern Regional Centre, Guwahati of NIH have been renamed as as Centre for Flood Management Studies for Ganga Basin, Patna and Centre for Flood Management Studies for Brahmaputra Basin, Guwahati, respectively and these centres focus mainly on the hydrological studies for flood management in the respective basins.

**6.6.6** Physical performance during 2008-09 and targets for the year 2009-10 are shown below:

<b>Sl.No.</b>	<b>Expected output</b>	<b>Physical targets for the year 2008-09</b>	<b>Physical achievements for the year 2008-09</b>	<b>Physical target for the year 2009-10</b>
<b>1.</b>	Completion of physical/mathematical model/desk studies/lab.studies	40	40	50
<b>2.</b>	Preparation of technical reports/studies completed	30	28	30
<b>3.</b>	Publication of research papers	100	155	160
<b>4.</b>	Preparation of guidelines/manuals	1	1	2
<b>5.</b>	Organisation of workshops/seminars/symposia	19	19	12
<b>6.</b>	Training of Personnel	12	20	25

## **PUBLIC SECTOR UNDERTAKINGS:**

### **6.7 Water and Power Consultancy Services(India) Limited (WAPCOS):**

**6.7.1** WAPCOS Limited is a “MINI RATNA” Public Sector Enterprise under the aegis of the Union Ministry of Water Resources. Incorporated on June 26th, 1969 under the Companies Act, 1956, WAPCOS has been providing consultancy services in all facets of Water Resources, Power and Infrastructure Sectors in India and Abroad. The authorized and paid up capital of the Company is Rs.2.00 crore. WAPCOS is recognized amongst the top

ranking consultancy organizations of the world. The Company has a well knit team of dedicated professionals and with total backup from State and National level organizations operating in relevant fields, provides a wide range of comprehensive technical services. The quality management systems of WAPCOS comply with the Quality Assurance requirements of ISO 9001:2000 for Consultancy Services in Water Resources, Power and Infrastructure Development Projects, as certified by Indian Register Quality Systems.

**6.7.2** 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, Rain Water Harvesting; Survey & Investigations, Human Resource Management, System Studies and Information Technology. WAPCOS has also been venturing into newer fields such as Software Development, City Development Plans, Financial Management System, Technical Education, Quality Control and Construction Supervision, Roads & Bridges. The Company has also amended its Articles of Association to provide concept to commissioning services for developmental projects in India and Abroad. The Company is likely to further consolidate its competence in these service domains during the year 2009-10.

**6.7.3** Spectrum of 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 and regional development plans, field investigations, detailed engineering including designs, detailed specifications, tendering process, contract and construction management, commissioning and testing, operation & maintenance, quality assurance & management, software development and human resource development.

**6.7.4** Business Development: The Company's projected scenario is to be a leader in Business area with High Productivity, Trained and Empowered Employees, High profitability and growth coupled with investment in Information Technology and Human Resources.

**6.7.5** WAPCOS is geared up for tapping emerging opportunities from high growth in domestic markets in all areas of its operation; increasing prospects in international markets—especially in Asian and African regions; communication technology improvement leading to increased networking.

**6.7.6** WAPCOS has identified new thrust areas for focused attention under various market segments in different countries, Fields of Services, Market Penetration and Institutions. Some of the new fields of services identified are Rural Electrification; Water Harvesting; Low Cost Sanitation; Lakes & Wetlands; Roads; Information, Education and Communication; Capacity Building / Institutional Strengthening; Water Quality Monitoring; City Development Plans, Tribal Areas Development, Storm Water Drainage and Rural Development. Liberalized and Competitive Business Environment demands constant

Liaisoning and Interaction with Organizations having market interests allied to Company's nature of services. For gaining foothold in new areas, company entered into Joint Ventures with National & International Consultancy Organizations. In order to provide state-of-the-art Technology for Consultancy Services in India, WAPCOS associated with DHI (Danish Hydraulics Institute, Denmark) and Hydro Tasmania, Australia for submission of proposals under International Competitive Bidding. Similarly, for projects abroad WAPCOS entered into Strategic Alliances with Consultants already having base in other countries. WAPCOS has either already secured or is in the process of securing some prestigious projects in Cambodia, Bhutan, Ethiopia, Sudan, Laos, Myanmar, Mozambique, Lesotho, Ghana, Afghanistan, Royal Kingdom of Saudi Arabia. Company's main strength lies in its technical expertise, knowledge and presence in business areas, image as a "technical consultancy" organization, experience of working in India and Asian/African Region, top management orientation to improve business performance and productivity. The Company is likely to strengthen its operation in all these market segments during the year 2009-10.

**6.7.7 Human Resources:** WAPCOS as a techno-commercial organization utilizes the talent and expertise developed in the various organizations of Govt. of India and State Governments. WAPCOS is responsible for providing quality time bound services to the clients. WAPCOS derives its strength from its human resources, which form the backbone of the organization. The consultancy services are carried out in 3 main Centers i.e. Water Resources, Power and Infrastructure. WAPCOS has the in-built capability to provide a multidisciplinary project team comprising its own core of professionals and also working specialists from various Govt. of India organizations viz. Central Water Commission (CWC), Central Electricity Authority (CEA), Central Ground Water Board (CGWB), Central Public Health and Environmental Engineering Organization (CPHEEO), Central Water and Power Research Station (CWPRS), Central Soils and Material Research Station (CSMRS) etc. and other State and Public Works Departments.

**6.7.8 Recognition with International Organizations and Operations Abroad:** WAPCOS has successfully completed/on-going consultancy assignments abroad in 40 countries and is registered with various international funding agencies for participating in the funded projects like World Bank/International Bank for Reconstruction and Development, African Development Bank, Asian Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, United Nations Development Program, World Health Organization, West African Development Bank, Indian Technical and Economic Cooperation (ITEC) Programme, Overseas Economic Cooperation Fund, Japan Bank for International Cooperation (JBIC) etc. Apart from India, WAPCOS is currently engaged in providing consultancy services in Afghanistan, Bhutan, Cambodia, Ethiopia, Eritrea, Laos, Lesotho, Mozambique, Rwanda, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

**6.7.9 Performance:** Since its inception, the performance of the company has been steadily growing and promising. The details of income and expenditure of the Company during last three years has been as given hereunder:-

(Rs. in crore)

No. Sl.	Particulars	Actuals 2006-07	Actuals 2007-08	MOU Target 2008-09	Provisional/ Unaudited achievement for 2008-09
1.	Income				
	- Projects	128.10	160.05	155.00	205.00
	- Other Income	6.31	4.01	-	6.57
	Total (A)	134.41	164.06	155.00	211.57
2.	Expenditure				
	-Project	104.13	126.23	-	161.26
	-HQ Back-up Expenses	11.92	14.32	-	17.61
	- Depreciation	0.58	0.70	-	0.80
	Total (B)	116.63	141.25	-	179.67
3.	Profit Before Tax (After prior period adjustment)	18.63	23.69	-	31.90
4.	Gross Margin	19.20	24.39	21.34	32.70
5.	Dividend	2.40	3.10	-	3.10

## 6.8 National Projects Construction Corporation Limited:

**6.8.1** National Projects Construction Corporation Limited (NPCC Ltd.) was incorporated in 1957 under the Companies Act, 1956 for taking up the construction of River Valley Projects and other activities. The authorized capital of the Company is Rs.30.00 crore and its paid up capital is 29.84 crore. Out of this,14 state governments and Union Territory of Chandigarh have contributed an amount of Rs.1.05 crore and the central government has contributed rest of the amount. The Corporate office of the company is at Faridabad and the headquarter is at New Delhi. Presently, it has 16 Zonal offices at Kolkata, Bhubneshwar, Agartala, Guwahati, Silchar, Shillong, Sipat, J&K, Parlay, Banglore, Patna, Ranchi, Chhapra, Lucknow, NCR Delhi and Dehradun. At present, it has 106 Units out of which 18 are non-working units. The total manpower of the company is 2001. Voluntary retirement Scheme is in vogue since 1992 to reduce the surplus manpower, 3129 employees have taken retirement under the scheme.

**6.8.2** The Corporation performed well during the first ten years of its operation and declared dividend on paid up capital continuously till 1966-67 (barring the year 1962-63). The Company incurred heavy losses during the next five years. From 1972-73 to 1984-85, NPCC made marginal profits. Since 1985-86, the financial position of the company has been deteriorating. The Company's accumulated losses up to March 2008 were 798.07 crore. The

main reasons of its sickness are negative net worth since 1990-91, surplus manpower, high interest cost on loans, and poor realization of dues from clients.

**6.8.3** The Cabinet Committee on Economic Affairs (CCEA) has approved the proposal of the Ministry of Water Resources for revival of NPCC Ltd. by conversion of the Govt. of India Principal amount of loan of Rs.219.43 crore and the cumulative interest due & accrued on it as on the date of conversion to equity capital and further written down to 10% of value, in its meeting held on 26.12.2008. NPCC has filed the request of enhancement of authorised capital to Rs. 700 crore with Registrar of Companies. A token provision in the Demands for Grants of Ministry of Water Resources has been made and New Head of account in this regard has also been opened.

**6.8.4** Return on the capital deployed by the Government in the Company by way of the equity has been Nil during the last year due to accumulated losses of more than Rs.700 crore. As per the estimate for the year 2009-10, the dividend income to the Government is likely to be Nil. However the financial position of the company is improving.

**6.8.5** The Company works in the Less Developed Areas of the country. The projects taken up by the Company during 2008-09 included (i) B B Fencing, Road works in Tripura, Mizoram, Assam & Meghalaya (ii) Assam Rifle works in different states of North East Region, (iii) INDO Tibetan Boarder Road in Laddakh (J&K state) and (iv) PMGSY works in different district of Bihar etc. The service pattern is likely to be maintained during the year 2009-10.

**ANNEXURE-I****Ministry of Water Resources****Performance of 2007-08****(Rs. Crore)**

<b>Sl. No.</b>	<b>Name of Scheme/ Programme</b>	<b>Objective/ Outcome</b>	<b>Outlay 2007-08</b>	<b>Quantifiable Deliverables</b>	<b>Process/ Timelines</b>	<b>Achievements w.r.t Col (5) as on 31.3.2008</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1	Command Area Water & Development Management Programme	To take up Command Area Development and Water Management in the commands of irrigation projects	300.00	a) Construction of Field Channels (b) Construction of Field Drainage. (c) Correction of System deficiencies of distribution upto 150 cusecs discharge (d) Renovation of tanks		(i) Construction of field channels- 0.394 M.ha (ii) Construction of field drain- 0.069 M.ha (iii) Correction of conveyance system deficiencies - schemes covering an area of 0.093 Mha are sanctioned	Inadequate matching outlay by State Government and delay in release of fund by them to the implementing agencies.
2	Development of Water Resources Information System	(i) To collect data from network of Hydrological Observation stations for overall resource assessment and analyzing the same for its characteristic (ii) To initiate process for development of water resources information system	30.00	Data collection and analysis is a continuous activity.		Hydrological observation at 878 sites including 371 water quality observation sites continued. Activities also initiated for development of Water Resources Information System	

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
3	Hydrology Project	(i) To modernize system of collection, processing and storage of data, (ii) To develop standard procedure for hydrologic planning and design using such data in the implementing agencies	33.00	The project being in initial stage, action to be initiated towards procurement of main consultants and initiating the process of improvement of data processing and utilization systems	To be implemented by 13 States and 8 central implementing agencies. Procurement of three main consultancies to be completed during the year.	(a) Technical evaluation of two consultancies completed and third under progress (ii) Necessary logistic support has been made available (ii) 5 Workshops and 19 training programmes have been organised for participatory agencies	
4	Ground Water Management and Regulation	(i) Integrated Ground Water Management Studies to prepare ground water management plan (ii) Ground water exploration utilizing scientific tools, viz., remote sensing and GIS, geo-physical surveys aided by drilling to locate ground water worthy areas (iii) Periodic assessment of ground water resources (iv) Monitoring of ground water levels from Ground Water monitoring stations (v) Short term water supply investigations for sources finding to Central/State Govt. departments	62.00	(a) Ground Water Management Studies - 1.5 Lakh sq. km. (b) Ground water exploration - 800 wells. (c) Ground water monitoring - 15500 stations. (d) preparation of district reports -40	Implemented by CGWB within the prescribed time frame of one year	(a) Ground Water Management Studies - 1.64 Lakh sq. km. (b) Ground water exploration - 811 wells. (c) Ground water monitoring - completed for April/May, August, Nov. (d) preparation of district reports - 44	
		(vi) Preparation of Reports, maps for use by planners and administrators					

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
5	Investigation of Water Resources Development Schemes	Carrying of investigation in respect of identified projects for water resources development	30.00	Investigation and preparation of project report for identified project to continue.	The works of investigation /preparation of project report are covered in more than one year and are carried over to following years	(a) The work of preparation of 10 feasibility reports and one DPR is in advance stages of completion. (b) The work on investigation of ILR projects continued (c ) FRs of 56 minor irrigation schemes completed	Consensus of co-basin states required
6	Research, Training and Mass-Awareness	To support the research and training activities by premier research institutes, i.e., CWPRS, CSMRS, NWA and RGNGWTRI. In addition, support is to be provided to various other academic and research institutes in the country	35.50	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 and research papers having recommendations for improved techniques for planning and design.	This work is to be implemented by various organizations of the Ministry.	(i) Preparation of reports - 302 (ii) Research Papers - 250 (iii) Training and Seminars -28	

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
				Quantifying deliverables are: (a) research report -275 (b) research papers -225 and (c) Seminar and training works - 75.			
7	Pagladiya Dam Project	To take up works in respect of Pagladiya Dam Project	1.00	To protect areas from flood damages and also provide benefits in terms of creation of irrigation potential. However taking up of the work for this project is subject to fulfilling certain requirements like Zirat Survey etc. Therefore, only token provision has been kept for this year.		Works on project yet to start. Pre construction activities continued	
8	Farakka Barrage Project	Operation and maintenance of barrage, feeder canal, township, vehicle, equipment, etc.	33.00	This is a continuing activity for operation and maintenance of barrage.		Maintenance of the Barrage and other structures and anti-erosion works along the river in the upstream and downstream were taken up as per requirement	

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
9	River Basin Organization/ Authority	The Scheme is to encourage formation of River Basin Organization with the primary objective of providing a forum to all the co-basin states for taking up necessary studies and evaluation etc. with a view to identify the most appropriate alternative for optimum utilization of resources and meeting the aspirations of all stakeholders.	0.50	The creation of RBO has to be preceded by consultations with State Governments. Process of consultations will be initiated during this year. A token provision has been kept in this regard.		New Scheme, yet to be approved	
10	Dam Safety Studies and Planning	(i) To carry out studies and recommend procedures to be adopted for taking up measures related to dam safety (ii) To provide assistance to State Government in respect of dam safety measures (This aspect to be taken up after the proposed DRIP with World Bank assistance is agreed. Thus, a token provision of Rs.1.00 crore has been made under State sector)	2.00	(a) Preparation of standards/guidelines regarding various aspects of dam safety (b) Completion of evaluation studies of safety aspects of identified dams (c) capacity building through software development and training programme etc.		(i) PMP Atlases for Indus and Krishna have been prepared (ii) ESA Studies in respect of 10 dams continued (iii) Mathematical modelling of Reservoir Sedimentation in respect of Baglihar HE project, in J&K has been completed.	

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
11	Flood Management	The Specific activities relate to flood forecasting and flood management on border rivers to be undertaken under Central Sector Scheme. Simultaneously, Government of India will provide support to State Government under the State Sector Scheme.	461.00	Flood control and anti-erosion works.	State Governments submit proposal to Central Agencies/MoWR for examination /approval and release of funds	8056 forecasts were issued with over 95% accuracy and various flood control and anri-erosion schemes submitted by State Govrenments were examined by CWC and GFCC	The work for central sector scheme(Rs 62 Cr) to be implemented by various organizations of the Ministry and that of the state sector (Rs 399Cr) through various state Govts/ agencies
12	Infrastructure Development	To undertake infrastructural development activities relating to upgradation and modernization of computerization and information system, lands and buildings et.c.	12.00	Acquisition of land and buildings for Central Water Commission and CGWB and IT development of MoWR	CWC and CGWB will obtain approval of MoWR	Works of office building of CWC at New Delhi, Hyderabad and Kolkata and of CGWB at Hyderabad and Bangalore were completed. Works of office building of CWC at Guwahati and Jammu and that of CGWB at Guwahati, Bhubaneswar and Bhopal continued.	Acquisition of land and buildings involves various Govt. agencies.

(Rs. Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2007-08	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2008	Remarks
1	2	3	4	5	6	7	8
13	Accelerated Irrigation Benefit Programme	To complete on-going irrigation/multi-purpose project in advanced stage of construction and which are beyond the resources capability of State Government in a time bound manner with a view to (a) create additional irrigation potential and (b) derive envisaged benefits from these projects	3080.00	Creation of additional irrigation potential of 1.50 mha.	Central Assistance is dependent on submission of proposals by states and ceiling limits prescribes by Planning Commission / MoF.	12 major and medium irrigation projects have been completed so far. Irrigation potential of 0.65 mha is created.	Inclusion of proposals under AIBP is subject to mandatory clearances
14	Repair, Renovation and Restoration of Water Bodies directly linked to Agriculture	(i) To restore and augment storage capabilities of water bodies. (ii) To recover and extend their lost irrigation potential	100.00	Creation of additional potential of 0.78 lakh ha through renovation of 1098 water bodies.	Implementation by State Government and monitoring by State and Central Governments. Pilot scheme is to be implemented through Distt. Level implementation committee with active community participation. The programme is to be completed in two full working seasons.	A total of 928 water bodies, viz. states have been confirmed to be completed by the State Govt.. The details are: Orissa- 127, Chattisgarh -10, Himachal Pradesh- 13, Karnataka- 286, West Bengal- 56, J&K- 22, Andhra Pradesh- 250, Jharkand- 53, Rajasthan- 4, Tamil Nadu- 44, Madhya Pradesh- 5, Gujarat- 36, Kerala-21, Maharashtra-1.	
		<b>Grand Total* :</b>	4180.00				

## Ministry of Water Resources

## Performance of 2008-09

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
1	Development of Water Resources Information System	To collect data from network of Hydrological Observation stations for overall resource assessment and analyzing the same for its characteristic (ii) To initiate process for development of water resources information system	46.00	(i) Observation of data for 878 hydrological observatrion sites and collection of other water related data to continue. (ii) Action to be taken for development of Water Resources Information System		Observations of data for 878 sites including 371 water quality observation sites continued. Activities continued for development of water resources information system.	
2	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	44.00	(a)Engagement of 6 Consultancies for the consolidation of HP-I activities and vertical Extension in Hydrological Information System  (b) Implementation of the project components, I.e., institutional strengthening, vertical extension and horizontal expansion in the project Implementing agencies. The activities are to be implemented through the central agencies like, CWC, CGWB etc.	(a) 3 major consultancies are to start functioning from the beginning of the year 2008-09, whereas other 3 consultancies are likely to be in place during the middle of the year 2008-09  (b) Implementation of the project components will actively start from 2008-09 and the activities will continue up to 2012	a) 3 major consultancies are in place. and Evaluation of 4th consultancy for CWC is under progress. TOR needs revision by T&M consultants in respect of other two consultancies b) 31 proposals of Purpose Driven Studies Cleared by CWC & CGWB have been cleared by the world Bank in respect of IAs of Hydrology Project Phase-II. 29 new posts have been cleared by the DOE, MoF;	

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
3	Ground Water Management and Regulation	<p>i). Ground Water Management Studies to prepare ground water management plan</p> <p>ii) Ground Water exploration utilizing scientific tools viz. Remote sensing and GIS, Geophysical surveys aided by drilling to locate ground water worthy areas.</p> <p>iii) Monitoring of ground water levels from Ground water monitoring stations</p> <p>iv) Short term water supply investigations for source finding to Central/State Govt. department</p> <p>v) Geophysical studies to selection of sites for ground water exploration and artificial recharge structures and deciphering aquifers</p>	95.00	<ul style="list-style-type: none"> <li>• Ground Water Management studies-1.50 Lakh Sq.Km.</li> <li>• Ground Water Exploration - 800 Wells</li> <li>• Monitoring of Ground Water Observation wells - 15640 4 times monitoring</li> <li>• Short term water supply investigations – Need Based(~300) Geophysical Survey</li> <li>a)Surface VES=2200 &amp; Line Km. = NB b) Sub-Surface Bore hol logging = Need Based</li> <li>• Chemical analysis of water samples – 20000 samples</li> <li>• District reports – 23</li> </ul>	One/Two Year	<ul style="list-style-type: none"> <li>• Ground Water Management studies-1.50 Lakh Sq.Km.</li> <li>• Ground Water Exploration - 800 Wells</li> <li>• Monitoring of Ground Water Observation wells - 15640 4 times monitoring</li> <li>• Short term water supply investigations – Need Based(~300) Geophysical Survey</li> <li>a)Surface VES=2200 &amp; Line Km. = NB b) Sub-Surface Bore hol logging = Need Based</li> <li>• Chemical analysis of water samples – 20000 samples</li> <li>• District reports – 23</li> <li>• Ground Water Year Books = 23</li> <li>• State Reports - 5</li> <li>• State Atlas-2</li> </ul>	
		<p>vi) Chemical studies to assess ground water quality</p> <p>vii) Preparation of Reports, Maps for use by planners and administrators</p> <p>viii) Regulation of Ground Water development by Central Ground Water Authority</p> <p>ix) Demonstrative project for Artificial Recharge to Ground Water for replicating the same by State Govt. and other agencies.</p>		<ul style="list-style-type: none"> <li>• Ground Water Year Books = 23</li> <li>• State Reports - 5</li> <li>• State Atlas-2</li> <li>• Ground Water Exploration Reports-18</li> <li>• District Ground Water Brochures –All District Regulation of ground water development in notified areas by CGWA</li> <li>Demonstrative project for Artificial Recharge -8</li> </ul>		<ul style="list-style-type: none"> <li>• Ground Water Exploration Reports-18</li> <li>• District Ground Water Brochures –All District Regulation of ground water development in notified areas by CGWA</li> <li>Demonstrative project for Artificial Recharge -8</li> </ul>	

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
4	Investigation of Water Resources Development Schemes	Carrying of investigation in respect of identified projects for water resources development	37.00	Investigation and preparation of project report for identified project to continue.	The works of investigation/preparation of project report are covered in more than one year and are carried over to following years	a) The draft report of 10 HE projects in Arunachal Pradesh prepared. b) The work on investigation of ILR projects is continued. c) DPR of Ken Betwa link has been completed by 31.12.2008 d) States of Maharashtra and Gujarat have conveyed their concurrence on the MoU for preparation of DPR of Par Tapi Narmada & Daman Ganga Pinjal Links and work has been started in Jan., 09 & is planned to be completed by 31.12.11.	
5	Research & Development programme in Water Sector	The scheme comprises of various activities related to R&D and training in the water resources sector. These activities are being implemented by the premier research Institutes in the field of hydrology, hydraulics, soil and material sciences, i.e. NIH, CW&PRS and CSMRS and CWC. The outcomes of the programme will be improvement in efficiency of irrigation system, reduction in risk/hazard in water resources project, economic design for project and development of new / improved technology	60.00	The implementation of the scheme will help in capacity building and creation of additional facilities. The research output are generally in terms of technical report & research papers having recommendations for improved techniques for planning & design. Quantifiable deliverables are: (a) Research Reports = 300 (b) Research Papers = 160 (c) Training workshops = 35	The work is to be implemented by various organisations of the Ministry.	(i) Preparation of reports - 461 (ii) Research Papers - 240 (iii) Training and Seminars -40	
6	Pagladiya Dam Project	Flood Control, Irrigation & Incidental Power Generation	1.00	Pre-construction activities to continue.	Activities to be implemented by Brahmaputra Board	Main construction activity of the project has not started due to non completion of the Zirat survey by the Government of Assam the work held up. Only normal R&M works for the assets created for the project are maintained with skeleton staff.	

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
7	Farakka Barrage Project.	(i)Maintenance of Farakka Barrage Project and its appurtenant structure including feeder canal, Jangipur Barrage etc. (ii)Anti-erosion works for protection of banks along river Ganga and its tributaries to train the river along main barrage.	75.00	(i) Maintenance of Farakka Barrage Project and its appurtenant structure including feeder canal, Jangipur Barrage etc. (ii) Erosion control in the extended jurisdiction of FBP from 40 km u/s to 80 km d/s of Farakka Barrage to save land, crops, orchards, public buildings etc. along river Ganga-Padma.	Implemented by Farakka Barrage Project. Activities continued throughout the year.	(i) Maintenance of Farakka Barrage, its appurtenant structures & anti-erosion works along river Ganga – Padma & its tributaries were continued, as per requirement. (ii)Anti-erosion works in a length of 4789m, amounting to Rs. 36 crore were completed	
8	River Basin Organisation/ Authority	The scheme is to encourage formulation of River Basin Organisation with the primary objective of providing a forum to all the co-basin states for taking up necessary studies and evaluation etc., with a view to identify the most appropriate alternative for optimum utilisation of resources and meeting the aspirations of all state-holders.	1.00	The creation of RBO has to be preceded by consultations with State Governments. Process of consultations was to be initiated during this year. A token provision has been kept in this regard		Ministry has sent proposal to the concerned states for constitution of the RBO for Mahanandi & Godavari rivers. The response of the state Government has not been received. The matters is being pursued with the concerned states.	
9	Dam Safety Studies and Planning	(i) Instrumentation Museum in CWC (ii) Preparation and digitisation of PMP atlases of 4 Basins and 6 Regions (iii) Development of	1.60	(i) Installation of Model / Fixtures and instrumentation for Museum (ii) Infrastructure improvement in HSO, CWC (iii) Preparation of Atlases for Ganga and Brahmaputra Basin	March, 09	1. Work of Environmental & Social Assessment(ESA)Studies have been completed. 2. Procurement of models/fixtures is under progress	

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
10	Flood Management	To provide financial assistance to various state governments for river management, flood control, anti-erosion, drainage development, flood proofing works in the critical areas in the country.	649.00	(i) River Management works in the critical areas. (ii) Anti-erosion works, drainage improvement works, etc. as suggested by Task-Force-2004 on Flood Management and Erosion Control in respect of Ganga and Brahmaputra Basin states. (iii) Coastal erosion works in maritime states. (iv) De-silting/ dredging of river sections in the selected reaches.	Central assistance is being provided to the State Governments on submission of detailed project proposals. The new proposals are considered by a Committee headed by Secretary (Expenditure) for release of the central assistance.	(i) A total of 53 proposals amounting to Rs. 1182 crore submitted by 10 states were included for providing central assistance. (ii) Funds amounting to Rs. 561 crore (including Rs. 39 crore for spilled over works of X plan) were released to States.	
11	Infrastructure Development	1. To procure land and construct office & residential buildings for the Ministry of Water Resources and its attached/ subordinate organizations and  2. Provision of necessary infrastructure for implementation of IT Plan in MoWR, CWC and CGWB.	38.00	(i) Acquisition of Land (ii) Construction of office/ residential buildings (iii) Procurement, upgradation and maintenance of latest I.T. hardware and software besides networking of database in field offices with Headquarters to facilitate e-governance and training of personnel in I.T. facilities.	As acquisition of Land & Buildings is a time consuming process involving various agencies, some of the targeted works have spilled over to next year.	Procurement of consumables and peripherals, AMC of IT equipment, expansion of Local Area Network, procurement of server, training on IT aspects has been completed in Ministry (Proper) and CWC. Work of office buildings of CWC at New Delhi, Hyderabad Kolkata and Guwahati were completed and these buildings were occupied. Funds were released for construction of boundary wall at BBSSR, divisional workshop & store at Guwahati and land acquired for Regional & Divisional office at Ahmedabad of CGWB. Latest audio/video conferencing facility along with related infrastructure etc. were installed in the Conference Hall of the Ministry	There is a risk of spill over due to the fact that acquisition of land and construction of buildings is a time consuming process involving various Central & State Govt. authorities

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
12	Information, Education and Communication	<p>(i) To create awareness for optimal sustainable development, maintenance of quality and efficient use of country's water resources to match the growing demands on this precious natural resources with active involvement of all stakeholders in order to achieve accelerated, equitable, economic development of the country.</p> <p>(ii) To create awareness for the urgent need for mutual cooperation and adopting integrated planning and participatory approach in management.</p> <p>iii) To create awareness among the people about necessity of water conservation.</p>	13.00	To create awareness among the pepole, to provided education for sustainable development and utilization of Water Resources	countinuing activity	<p>The following Mass Awareness Activities were carried out:-</p> <ol style="list-style-type: none"> <li>1. Electronic media campaign on various channels of Doordarshan and various stations of AIR;</li> <li>2. National Colloquium on WALMIs;</li> <li>3. Participation in IITF-2008;</li> <li>4. Advertisement of Bhoomijal Samvardhan Puruskars;</li> <li>5. Printing of 6 lakh Meghdoot postcards;</li> <li>6. Participation in Indian Science Congress at Shillong;</li> <li>7. Participation in ASOM International Trade Fair at Guwahati;</li> <li>8. Preparation of a documentary film on Farmers' Participatory Action Research Programme</li> <li>9. Advertisement of World Water Day-2009;</li> </ol>	
		<p>(iv) To promote advocacy on the tenets of National Water Policy with focus on learning, documenting and dissemination of knowledge of water science and technology and issues concerning sustained development of water resources.</p> <p>(v) To create awareness about necessity of adopting measures for rainwater harvesting and artificial recharge of ground water to meet persent and future needs of water.</p> <p>(vi) To strengthen awareness infrastructure specially campaign mechanism and support structure</p>				<p>10. organisation of workshops/training programmes/ impact evaluation studies etc. on Command Area Development and Water Management.</p>	

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
13	River Management Activities and Work Related to Border Areas	Hydrological observations and investigations of Water Resources Projects with neighboring countries besides river management works on common/border rivers. Flood control, Anti-erosion & Drainage development works by Brahmaputra Board. Maintenance of flood protection works of Kosi and Gandak Projects (in Nepal)	160.00	(i) Continuation of Joint Hydrological observations on river Ganga with Bangladesh, and (ii) Preparation of Joint Detailed Project Reports (DPR). (iii) Breach closure of left afflux bund of Kosi barrage in Nepal. (iv) Anti-erosion & Flood protection works of Majuli Island. (v) Transmission of flood related data from / to neighboring countries, (vi) Development works on common/border rivers.	Implemented by Central Water Commission, Ganga Flood Control Commission, Brahmaputra Board and State Governments of Bihar, Uttar Pradesh, Tripura, West Bengal & Jammu & Kashmir.	(i) Survey & Investigation of Pancheswar and Sapta Kosi projects (in Nepal) continued. (ii) Flood related data transmitted to Bangladesh. (iii) Joint Hydrological observations on river Ganga with Bangladesh continued as per Treaty of 1996. (iv) Anti-erosion & Flood protection works of Majuli Island continued. (v) in order to close the Kosi breach in eastern afflux bund in Nepal, an amount of Rs. 69.90 crore was released to the state government of Bihar. The state government of Bihar constructed three coffer dams and a diversion channel to divert the water towards western bank and thereafter, plugged the breached section up to a height of 82.50 meter during the year 2008-09.	Works delayed due to law & order problem in Nepal.
14	National Water Academy	Training for in service Engineers / Induction Engineers in Water Resources Planning, Development and Management	2.30	42 Training Programmes	An annual training schedule prepared	27 training programmes completed	
15	Rajiv Gandhi National Ground Water Training & Research Institute	Training of CGWB and other Central/ State Govt. officers and staff on ground water aspect	2.10	16 Training Courses	one year	Fifteen training courses have been conducted successfully and 308 trainees have been trained	Capacity building of professionals and sub-professionals in GW investigations, development and management techniques and also in administrative matters and management aspects.

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2008- 09	Quantifiable Deliverables	Process/ Timelines	Achievements w.r.t Col (5) as on 31.3.2009	Remarks
1	2	3	4	5	6	7	8
16	Flood Forecasting.	To maintain the network of Hydrological observations sites across the country by CWC covering 20 river basins to provide timely flood forecasts at 175 stations to the local administration.	23.00	Collection of real time data, its analysis and issue of flood forecasts. About 6000 forecasts are issued every year.	Implemented by Central Water Commission throughout the year.	A total of 6675 forecasts were issued; out of which 6529 were within permissible limits of accuracy.	Nil
17	Scheme for repair, renovation and restoration of water bodies.	i) To restore and augment the capacity of water bodies. (ii) To recover and expand their irrigation potential.	250.00	Projects of T.N., AP & Karnataka will cover CCA of 4 lakhs ha, 2.5 lakh ha. & 0.52 ha. respectively.	The State Govts. were responsible for implementation of the scheme.	<p>The Govt. of Tamil Nadu has taken up 2000 schemes and an amount of Rs.181.8 cr. has been released for the project.</p> <p>The Govt. of A.P. has taken up 1000 schemes and an amount of Rs.41.9 cr. has been released for the project.</p> <p>The Govt. of Karnataka has taken up 300 schemes and an amount of Rs.9.3 cr. has been released for the project.</p> <p>The Orissa project became effective in the month of March, 2009.</p>	

**Information regarding Accelerated Irrigation Benefits 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, Uttaranchal, Jammu and Kashmir, Himachal Pradesh and Koraput, Bolangir and Kalahandi Districts of Orissa have also been provided Central Loan Assistance(CLA) under this programme since 1999-2000. Grant component has been introduced in the programme from April, 2004 like other Central sector schemes. As per the existing AIBP criteria effective from December, 2006, grant amounting to 25% of the project cost for major and medium irrigation projects in non-special category States and 90% grant of the project cost for major/medium/minor irrigation projects in special category States (including Koraput, Bolangir and Kalahandi districts of Orissa) are provided to the selected projects. The minor irrigation schemes in non-special category States falling in drought prone/tribal areas are treated at par with special category States and are released 90% grant of the project cost. Major and medium projects providing irrigation benefit to drought prone/Tribal area and flood prone area are also eligible for 90% grant of the project cost. The State Governments have been provided an amount of Rs.36417.59 crore as CLA/Grant under AIBP since inception of this programme till 13.4.2009 for 267 major/medium irrigation projects and 9874 Surface minor irrigation schemes. After commencement of this Programme 100 major/medium and 5805 Surface MI Schemes have so far been completed. An additional irrigation potential of 4.932 million hectare has been created through major/medium irrigation projects and an irrigation potential of 0.271 million hectare has been created through Surface MI Schemes upto March, 2008. The provision under Union Budget for AIBP and other water related schemes for 2009-10 has been kept at Rs.8700 crore. Out of this, an allocation of Rs.7000 crore has been made for AIBP by the Planning Commission. The Government of India has provided additional allocation of Rs.2300 crore for AIBP under Prime Minister's stimulus package during 2008-09. The total grant released for various schemes under AIBP for 2008-09 amounts to Rs.7598.2213 crore. An additional amount of Rs.1633.811 crore was also released on 13.04.09 for the pending proposals of 2008-09. The grant released during 2008-09 also includes Rs.450 crore released to Gosikhurd Project of Maharashtra under AIBP for National Project.

As per the prevailing AIBP guidelines, projects benefiting drought prone/tribal area, projects included in the Prime Minister's relief package for agrarian distress districts of Maharashtra, Karnataka, Andhra Pradesh and Kerala and projects in the States having irrigation development below national average could be included in AIBP in relaxation to one to one criteria of inclusion of new project under AIBP. Of the 65 major/medium projects initially included in the Prime Minister's relief package for agrarian distressed districts of Andhra Pradesh, Karnataka, Kerala and Maharashtra, so far 38 projects have been funded under AIBP. The grant released so far for these projects is Rs.4369.183 crore.

For the year 2009-10, projected grant requirement of AIBP is Rs.12285 crore for creation of an additional irrigation potential of 10.50 lakh ha. A Budget allocation of Rs.7000 crore has already been made by the Planning Commission for AIBP for 2009-10.

### **NATIONAL PROJECTS**

The Union Cabinet in its meeting held on 7<sup>th</sup> February 2008 has given its consent to the proposal of the Ministry of Water Resources on Implementation of National Projects with central assistance of 90% of the cost of the project as grant falling in the following selection criteria:

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

The approval of Union Cabinet to the scheme of National Project is subject of modalities of funding to be finalized in consultation with Ministry of Finance and Planning Commission. Consequently, Ministry of Water Resources has finalized modalities of funding and guidelines for implementation of scheme of National Projects in consultation with Planning Commission and Ministry of Finance and has sent the same to all the states and Union Territories. During the year 2008-09, proposal of Gosikhurd Project of Maharashtra for funding under the scheme of National Project was received for which grant amounting to Rs.450 crore has been released under the AIBP for implementation of project under the scheme of National Project.

							<b>ANNEXURE -IV</b>	
<b>STATEMENT SHOWING DETAILS OF MINISTRY OF WATER RESOURCES BUDGET VIS-À-VIS XI PLAN OUTLAY</b>								
(Rs. in Crore/Net)								
Sector/Orgn/ Scheme	XI Plan Outlay	Heads of Accounts	B.E. 2007-08	Actual 2007-08	B.E. 2008-09	R.E. 2008-09	B.E. 2009-10	
<b>Major &amp; Medium Irrigation</b>								
1. National Water Academy	15.00	2701	2.00	1.86	2.30	2.64	2.60	
2. Research & Development Programme	260.00	2701	30.00	33.28	60.00	50.00	52.00	
3. Hydrology Project	180.00	2701	33.00	6.98	44.00	25.51	38.10	
4. Development of Water Resources Information	200.00	2701	30.00	18.65	46.00	46.00	70.00	
5. Infrastructure Development	**	2701	4.00	1.33	5.00	2.35	1.00	
6. Investigation of Water Resources Development	260.00	2701	30.00	25.09	37.00	37.59	42.00	
7. Information, Education and Communication	90.00	2701	2.00	1.32	13.00	12.10	12.00	
8. Dam Safety Studies and Planning	10.00	2701	1.00	0.48	1.60	0.58	1.00	
9. River Basin Organisation/Authority	50.00	2701	0.50	0.00	1.00	0.01	0.50	
<b>Total: Major and Medium Irrigation</b>	<b>1065.00</b>		<b>132.50</b>	<b>88.99</b>	<b>209.90</b>	<b>176.78</b>	<b>219.20</b>	
<b>Minor Irrigation</b>								
<b>Surface Water Schemes</b>								
10. Ground Water Management and Regulation	460.00	2702	62.00	48.11	95.00	65.26	70.00	
11. Rajiv Gandhi NGWT&RI	25.00	2702	1.50	0.60	2.10	0.81	2.00	
12. Infrastructure Development	**	4702	4.55	1.27	7.00	4.60	6.00	
<b>Total: Minor Irrigation</b>	<b>485.00</b>		<b>68.05</b>	<b>49.98</b>	<b>104.10</b>	<b>70.67</b>	<b>78.00</b>	
13. Command Area Development Programme	\$\$	2705	300.00	277.84	0.00	0.00	0.00	
<b>Total: CAD &amp; WM</b>			<b>300.00</b>	<b>277.84</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
<b>Flood Control Sector</b>								
14. Flood Forecasting	130.00	2711	16.00	13.91	23.00	19.72	25.00	
15. Infrastructure Development	**	4711	3.45	1.54	26.00	14.12	8.00	
16. River Management Activities and works related to Border Rivers	601.00	2711	46.00	51.44	160.00	192.03	199.30	
17. Pagladia Dam Project	500.00	2552	1.00	1.35	2.00	1.00	0.50	
<b>Total: Flood Control Sector</b>	<b>1231.00</b>		<b>66.45</b>	<b>68.24</b>	<b>211.00</b>	<b>226.87</b>	<b>232.80</b>	
<b>Transport Sector</b>								
18. Farakka Barrage Project	350.00	5075	33.00	30.99	75.00	75.68	70.00	
<b>** Total allocation for XI Plan</b>	<b>115.00</b>							
<b>\$\$ Scheme has been transferred to State Sector w.e.f. 2008-09</b>								
<b>Grant Total</b>	<b>3246.00</b>		<b>600.00</b>	<b>516.04</b>	<b>600.00</b>	<b>550.00</b>	<b>600.00</b>	