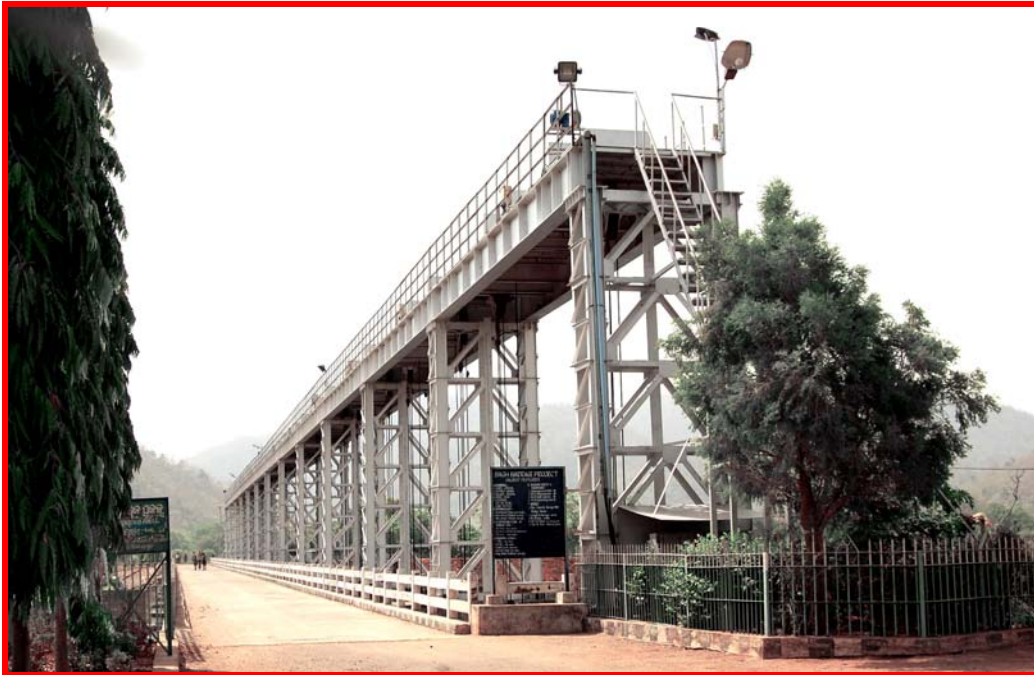




# **OUTCOME BUDGET 2011-12**



**Government of Orissa  
Department of Water Resources**

## **C O N T E N T S**

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# Executive Summary

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The “Outcome Budget” of the Department of Water Resources is intended to convert the “outlays” into “outcomes” by planning the expenditure, fixing appropriate targets and quantifying the deliverables. The document also highlights the status of ongoing and new schemes implemented through the Department along with the physical and financial targets set for the financial year 2011-12.

2. The Outcome Budget 2011-12 broadly consists of the following chapters:

**Chapter-I:** Brief introductory note on the functions of the Department, organizational setup, planning and policy framework and programmes / schemes being implemented by the Department.

**Chapter-II:** Contains a tabular format, indicating the details of financial outlays, projected physical outputs & projected outcomes for 2010-2011 under Plan and Non-plan.

**Chapter-III:** Details reform measures and policy initiatives taken by the Department.

**Chapter-IV:** The physical and financial achievement against financial outlay and quantifiable / deliverable/ physical output of 2010-11 up to December 2010.

**Chapter-V:** It contains financial review covering overall trends in expenditure vis-à-vis Budget Estimates and Revised Estimates in the previous year, Budget Estimates of the Current Financial Year.

**Chapter-VI:** Highlights the outlays provided for the schemes benefiting Women, ST and SC groups along with the corresponding physical output.

## **Implementation, Monitoring & Evaluation Mechanism:**

The Department of Water Resources (DOWR) lays considerable emphasis on systematic and sustained monitoring of irrigation projects executed under different schemes. Two monitoring units are functioning in DOWR and office of Engineer-in-Chief (EIC), Water Resources for centralized project monitoring. The DOWR monitoring unit is headed by a Joint Secretary and is assisted by one Deputy Director, one Deputy Secretary and one Under Secretary with other ministerial staff. Similarly, monitoring unit at EIC office is headed by a Director in the rank of Superintending Engineer and is assisted by other technical personnel such Deputy Directors in the rank of Executive Engineers and Assistant Directors in the rank of Assistant Engineers. At the project level, the monitoring works are being looked after by Asst. to Chief Engineer in charge of the project and is assisted by other sub-ordinate staff. Conventional monitoring mechanism such as field visits, review meetings and periodic report and returns are in place for monitoring of projects.

**1. Data Compilation & Transmission:** The data/ information from field level are being sent to the Monitoring Directorate in the EIC office on monthly/quarterly /annual basis. The Monitoring Directorate reviews the documents/ information of field offices and submits a consolidated report to the Department and other higher offices.

**2. Review meetings:** The State level Plan review meetings with Project Chief Engineers/ Land acquisition Officers are being held regularly under the Chairmanship of Principal Secretary. Various critical issues/ problems/ bottlenecks of the projects are discussed and important decisions are taken in the Plan Review meeting. Senior officers from regional CWC also attend the review meeting. Apart from that, progress of projects is also reviewed from time to time by Hon'ble Chief Minister and Other Senior Officers of the State and Central Government. Similarly, at project level, review meetings are held regularly under the Chairmanship of the Chief Engineer in charge of the project.

**3. Field Visits:** Senior officers from DOWR including the Principal Secretary and Engineer-in-Chief regularly make field visits to monitor the progress of the work. They discuss problems with field functionaries and issue necessary instructions for smooth implementation of projects. Besides, officials from the Funding Agencies viz. Ministry of Water Resources/ NABARD/World

Bank/ ADB etc. also regularly visit to the projects to assess the progress of the work.

4. Inbuilt monitoring mechanism in the guidelines of each scheme ensures that the objectives of the schemes are achieved.

5. The Department of Water Resources is implementing e-Governance in a phased manner using Information and Communication Technology (ICT) in order to improve efficiency in office procedures, information delivery mechanism and ensuring transparency in the system. The initiatives taken are given below.

a. Local Area Network (LAN) has been established for data transfer between DOWR and Engineer-in-Chief office.

b. The Department has developed its website [www.dowrorissa.gov.in](http://www.dowrorissa.gov.in) for dissemination of various information which are useful for the Department officials and the public.

c. Division Automation system has been made functional on a pilot basis in two divisions.

6. **Evaluation:** Concurrent Evaluation Studies for system improvement works done through World Bank funded OWRCF projects have been made by WALMI. OUAT has also been entrusted with performance evaluation of drainage work. There is a proposal to evaluate the performance of flood control works executed under centrally funded FMP schemes. Benchmarking of irrigation projects are being done by the department to measure the performance of a project and practices against the counterparts. These works are carried out on a phased manner in 14 major & medium projects. The evaluation report has been published and there is a programme to extend the studies to all major, medium and minor irrigation projects.

### **Public Information System**

#### **i) Creating awareness about the programmes of the Department:**

- Annual Report and Annual Activity report containing physical and financial achievements of schemes are being published each year for wide circulation for information of the public and Peoples representatives.

- Pani Panchayat samachar is being published quarterly basis for wide publicity of programme. To spread the concept of participatory irrigation management through Pani Panchayat, among the farmers, for better involvement, Pani Panchayat fortnight is being observed throughout the state every year during the period 26<sup>th</sup> December to 9<sup>th</sup> January.

**ii) Ensuring transparency in the implementation of the programmes at the field level.**

- The Department has developed its website [www.dowrorissa.gov.in](http://www.dowrorissa.gov.in) for display of information useful for public.
- To bring about reform in the procurement process, an “e-procurement mission” has been formed in Works Department by bringing in officers from all the engineering departments. The website with the URL <http://www.tendersorissa.gov.in> has been launched containing activities ranging from invitation of N.I.T/ I.F.B to award of contract. This will help in cutting down the processing time, eliminate possibility of tampering, and introduce uniform evaluation. A Programme Management Unit (PMU) is in place to supplement the efforts of the mission. There is a help desk to meet the queries of the officers of the implementing departments and the bidders. A toll free telephone bearing No.18003456765 and an e-mail ID ‘[eprochelpdesk@gmail.com](mailto:eprochelpdesk@gmail.com)’ is in place to meet the queries. Department of Water Resources are making use of the e-procurement process in a big way.
- State Quality Monitoring Cell is engaging Quality Monitors (non-government individual experts in the field of Quality control & Assurance) to inspect the works on sample basis to ensure that quality Management system is operating satisfactorily in the field. Wherever there is some doubt on quality or test results, third party agencies are entrusted with the task of carrying out tests at the expense of contractor.

**iii) Encouraging participation of the people in the development process:**

Participatory Irrigation Management (PIM) has been recognized all over the world as a tool for improving irrigation management along with sustainability of the system. The operation and maintenance of the distribution systems were handed over to Pani Panchayats. Legal status has been provided to Pani Panchayats through enactment of Orissa Pani Panchayat Act-2002 & the Orissa

Pani Panchayat Rule-2003. To provide necessary support to operationalise the PIM concept in the State, a new Directorate of Command Area Development and Participatory Irrigation Management (CAD&PIM ) has been established during 2007-08 under Department of Water Resources. This Directorate will make concerted effort to scale up the CAD & PIM activities in all completed and ongoing projects in the State effectively. Grant-in-aid is being given to the Pani Panchayats for O&M of minors and sub-minors canals handed over to them on achievement of 75% of membership ,

**Promoting the concept of social audit and accountability.**

In some schemes guidelines, social audit is mandatory. Steps are being taken to promote social audit other ongoing schemes in phased manner. To begin with, social audit will be implemented in the CSP scheme Repair, Renovation & Restoration (RRR).

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# Chapter-I

## Introduction

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### **I. Function:**

The Department of Water Resources has the mandate to plan, develop, utilize and manage State's water resources efficiently and effectively. To achieve this objective, the Department formulates Water Policies & Water Plans and undertakes execution, operation and maintenance of irrigation projects, exploration and regulation of ground water, flood control and drainage development, industrial water supply and command area development activities. The subject assigned to the Department as per Orissa Government Rule of Business is as follows.

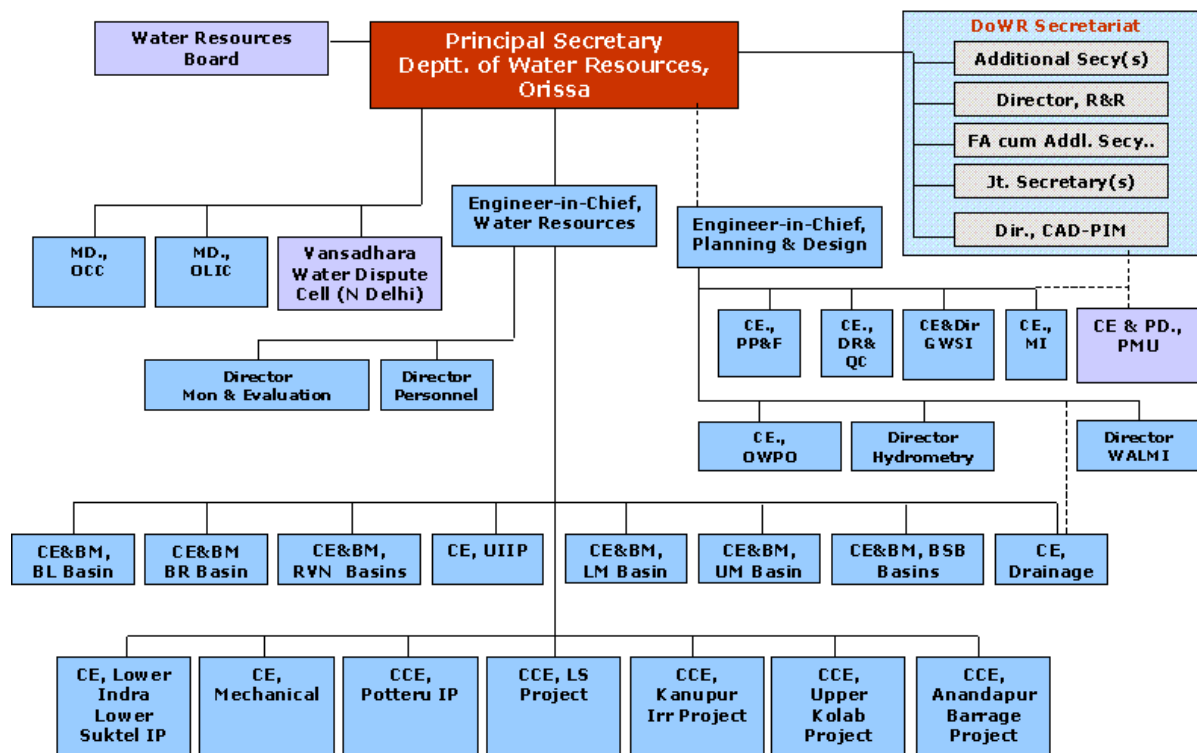
1. Administration of various Navigation, Embankment and Drainage Act and Rules made there under.
2. Water for irrigation and navigation canal, drainage embankments and water storage and all works connected therewith.
3. Maintenance of Indian Waterways.
4. Construction and maintenance of building required solely for the administration of canals and embankments of Major and Medium Irrigation.
5. Flood control and river taming works.
6. All matters relating to civil construction and maintenance of Dam projects except Upper Indravati Hydro-electric Project upto the point of generation in coordination with Energy Deptt.
7. All matters relating to land acquisition, land reclamation and resettlement in connection with the projects pertaining to the Department.
8. Command Area Development.
9. Excavation, execution and maintenance of Minor Irrigation as defined by Govt. of India from time to time and Tank Projects.
10. Lift Irrigation Corporation.
11. Orissa Pani Panchayats.

## II. Organization:

The Department is headed by the Principal Secretary. The functions of the Department are carried out through following organizations /wings, public sector undertakings.

- Major & Medium
- Minor (flow)
- Ground Water Survey & Investigation
- Command Area Development
- Orissa Lift Irrigation Corporation Ltd
- Water & Land Management Institute
- Orissa Construction Corporation Ltd. (OCC)

### Organisation Chart Department of Water Resources, Orissa



### **III. Schemes/ Programme :**

#### **1. Accelerated Irrigation Benefit Programme (AIBP):**

**Objective:** This scheme is being implemented with the assistance of Government of India since 1996. The primary objectives of AIBP are to accelerate implementation of large irrigation projects which are beyond the resource capability of the State Governments, expeditious completion of the projects which were in advanced stage of completion & to realize bulk benefits from irrigation projects.

**Fund Flow Arrangement:** AIBP was started as Central Loan Assistance (CLA). Initially 50% of the project outlay was provided as CLA and the balance 50% was met by State. During 1999-2000, Government of India classified the States as General and Special Category with a view to minimize the regional imbalance of irrigation development. The Special Category States were provided CLA on 3:1 (Centre: State) and General Category States on 2:1 (Centre: State). During 2002-03, funding pattern was relaxed. The States agreed to undertake economic reforms measure under irrigation have been extended CLA in the ratio of 4:1 (Centre: State) for General Category and 1:0 (Centre: State) for Special Category. During 2004-05, funding pattern was changed, 30% of the CLA to non-Special Category States and 90% CLA for Special Category States has been converted into grant. From 2005-06, only grant is being provided and states were to raise the loan portion through market borrowing. In 2006-07, the disbursement pattern was modified again and central assistance is being provided in the form of central grant for 90% of project cost in case of special category states, projects benefiting drought prone area, tribal area and flood prone area and 25% of the project cost in case of non-special category states. The balance cost of the project as the state's share is to be arranged by state government from its own resources or market borrowing. At present, projects in KBK districts and tribal areas of our State are availing 90% central assistance as grant and projects in other areas are availing 25% central assistance grant.

**Implementation Status:** 19 major & medium irrigation projects with latest estimated cost of Rs.11339.22 crore to create irrigation potential of 443.42 thousand hectare and to stabilize 61.62 thousand hectares have been taken up

under this programme. Besides, 81 surface flow minor irrigation projects with latest estimated cost of Rs.218.70 crore to create additional irrigation potential of 23.959 thousand hectare have been included in this programme. From the above, seven major & medium irrigation projects and 24 minor flow projects were completed. By the end of December 2010, an amount of Rs.5683.51 crore under major and medium and Rs.165.05 crore under minor irrigation has been spent and additional irrigation potential of 103.82 thousand hectare (Major & medium-92.28 th.ha, Minor flow- 12.737 th ha) has been created and stabilization of 61.62 thousand hectares have been done. During 2011-12, budget provision of Rs.1264.00 crore (Major & Medium-Rs.1214.00 cr, Minor flow-Rs.50.00 crore) has been made for creation of additional irrigation potential of 44.55 thousand hectare (major & medium- 41.05 th.ha, minor flow- 3.50 th.ha).

**Project Monitoring mechanism:** A comprehensive physical and financial periodical monitoring of major / medium projects is carried out by Central Water Commission / Ministry of Water Resources with emphasis on quality control. The release of subsequent installments of grant is based on physical and financial progress of the work. The latest technique such as Remote Sensing is also used by the Government of India to monitor the progress of works. Monitoring of the minor irrigation (MI) projects is done by the State Government. These projects would also be monitored periodically on sample basis by Central Water Commission. Besides, the State Government monitors the physical and financial progress of the projects on monthly, quarterly, and annual basis.

## **2. Rural Infrastructure Development fund (RIDF):**

**Objective :** Government of India in the Budget of 1995-96 announced the scheme for setting up Rural Infrastructure Development fund (RIDF) to be operationalised by NABARD. This fund has emerged as a popular and effective scheme for financing rural infrastructure projects. The main objective of the scheme is to assist State Governments for the completion of ongoing rural infrastructure projects and also taking up new irrigation, flood control & drainage projects etc.

**Fund Flow Arrangement:** NABARD is providing loan assistance to these projects. Mobilisation advance / Start up advance @ 20% of the RIDF Loan sanctioned under the projects is released to the State Governments on conveying

acceptance of the terms & conditions of sanction by the State Government, before incurring expenditure on the projects for procurement and supply of materials, etc. Loans are released on reimbursement basis against the actual expenditure incurred for execution of sanctioned projects. RIDF loans are released to the State Governments by the Regional Office of NABARD.

**Implementation Status:**

**a. Major & Medium sector :** Total 78 projects under major & medium Irrigation sector have been approved under RIDF-I to RIDF- XVI to create additional irrigation potential of 105.78 thousand hectare. By the end of December 2010, 39 projects were completed and additional irrigation potential of 69.18 thousand hectare has been created. Besides, 23 new projects with an estimated cost of Rs.595.42 crore have been approved by HPC for funding under RIDF XVII.

During 2011-12, budget provision of Rs.95.00 crore has been made with a target to create additional irrigation potential of 9.46 thousand hectare.

**b. Minor irrigation (flow):** Total 469 projects sofar have been sanctioned to create additional irrigation potential of 128.12 thousand hectare under this scheme. By the end of December 2010, 172 projects have been completed and additional irrigation potential of 76.68 thousand hectare has been created.

During 2011-12, budget provision of Rs.50.00 crore has been made with a target to create additional potential of 12.50 thousand hectare.

**c. Lift Irrigation:** For development of lift irrigation in Hirakud command area, total 52 projects to create irrigation potential of 1354 hectare have been sanctioned up to 2010-11. By the end of December 2010, 35 projects have been completed and irrigation potential of 932 hectares has been created. During 2011-12, it has been proposed to install 15 LIPs with irrigation potential of 300 hectare. Budget provision of Rs.2.00 crore has been made for the above work during 2011-12.

**d. Flood Control :** Total 67 flood control and 16 road projects with an estimated cost of Rs.355.03 crore has been taken up under this programme. By end of December 2010, 19 flood control projects and 5 road projects have been completed an amount of Rs.110.74 crore has been spent. Besides, 33 new projects amounting to Rs.193.61 crore has been approved by HPC for inclusion under RIDF-XVI. An outlay of Rs.77.39 crore has been proposed in the budget for 2011-12 for execution of ongoing and new projects.

**e. Drainage Work:** Total 77 drainage with an estimated cost of Rs.252.54 crore has been taken up under this programme. By end of December 2010, 24 drainage projects have been completed an amount of Rs.104.03 crore has been spent. Besides, 7 new projects amounting to Rs.78.07 crore has been approved by HPC for inclusion under RIDF-XVI. An outlay of Rs.63.61 crore has been proposed in the budget for 2011-12 for execution of ongoing and new projects.

**Project Monitoring mechanism:** NABARD lays considerable emphasis on systematic and sustained monitoring of the projects sanctioned under RIDF. With a view to ensuring smooth implementation of projects, designated officers from the Head Office and Regional Offices at the state level and the District Development Managers at the district level undertake regular field visits to monitor the progress of projects and discuss the problems with the field level functionaries. Recently, NABARD has introduced a system of holding quarterly meetings with the Secretaries and Heads of the Department implementing the projects. NABARD also organizes capacity building workshops for the Government staff working in various line departments connected with RIDF projects.

### **3. Japan Bank of International co-operation (JBIC):**

**Objective:** Government of Japan is providing ODA (Official Development Assistance) loan through JICA to developing countries at low rates of interest and with long repayment periods to develop and improve the economic and social infrastructure for sustainable economic development.

**Implementation status:** So far 3 Major Projects namely Upper Indravati Irrigation Project (RD 15.00 to 52.00 Km.), Upper Kolab irrigation Project (RD14.00 to 41.78 Km) & Rengali Left Bank Canal (RD 29.177 to 71.313 km.) have been sanctioned under this scheme. Out of three sanctioned projects, two projects namely Upper Indravati and Upper Kolab have been completed. At present, Rengali Left Bank Canal (RD 29.177 to 71.313 Km.) with an cost of Rs.1074.02 crore is under progress since 1997 to create additional irrigation potential of 29.176 thousand hectare. By end of December 2010, an amount of Rs.922.19 crore has been spent and additional irrigation potential of 24.56 thousand hectare has been created. During 2011-12, budget provision of Rs.70.00 crore has been made to the complete the balance work of the project. The project is scheduled for completion by June 2011.

**Project Monitoring Mechanism:** JICA is reviewing the progress of work in periodic interval.

#### **4. Orissa Integrated Irrigated Agriculture & Water Management Investment Project (OIIAWMIP):**

**Objective :** The Orissa Integrated Irrigated Agriculture and Water Management Investment Project (OIIAWMIP) was conceptualized with the support of the Asian Development Bank (ADB) to optimise the state irrigation potential. The project aims to enhance the productivity and sustainability of the existing major, medium, and minor irrigation projects, alongwith strengthening and empowering water users associations (WUAs) and allied institutions like the Water and Land Management Institute (WALMI).

**Fund Flow Mechanism:** Asian Development Bank is providing loan for this project on reimbursement basis against the expenditure incurred. The cost sharing is in the ratio of 70:27.4:2.6 (ADB: State: WUAs).

**Implementation status:** The estimated cost of the Project is Rs.1084.19 crore (US \$ 267.7 million). The project will simultaneously stabilize 2.18 lakh hectare of existing ayacut and create 0.06 lakh hectare additional irrigation potential by modernizing 15 existing major, medium projects namely Taladanda canal, MCII, Machagoan canal, HLC-I, Jajpur canal, Patamudai canal, Gohira, Remal, Sunei, Kansabahal, Ramiala, Kanjhari, Bankabaal, Khadkhai, Nesa and rehabilitating 1400 lift irrigation projects. The project will be implemented in four tranches over a period of 8 years. Loan agreement for tranche-I has been signed during 2008-09. In the first tranche, two major, 3 medium projects viz. MCII( land acquisition etc.), Taladanda Canal, Gohira, Remal, Sunei and 650 lift irrigation projects have been included. The tendering activities of major and medium irrigation projects of Tranche-I and DPR preparation of 100 LI projects is in progress. Budget provision of Rs.50.00 crore has been made during 2011-12 for these works.

**Project Monitoring Mechanism:** ADB is reviewing the progress of work in periodic interval.

#### **5. Flood Management Programme (FMP):**

**Objective :** River management, Flood Control, Anti-erosion, Drainage Development, Flood Proofing works in the critical areas in the country with assistance from Government of India.

**Fund Flow Mechanism:** Government of India is providing central assistance for the schemes in the ratio of 75:25 (Central share: State Share) to General category States. For Special category States, central assistance is being provided in the ratio of 90:10 (Central Share: state Share). Our State has been considered as a General category State under FMP.

**Implementation status:**

**Flood Control Works:** This scheme is being implemented with 75% central assistance from Government of India. 29 Flood control projects with estimated cost of Rs.135.75 crore have been taken up under this scheme. By end of March 2010, 25 projects were completed. It has been programmed to complete 3 projects in 2010-11 and 1 project in 2011-12. An outlay of Rs.33.50 crore has been proposed in the budget 2011-12 for these works.

**Drainage works:** This scheme is being implemented with 75% central assistance from Government of India. 41 drainage projects with estimated cost of Rs.119.59 crore have been taken up under this scheme. By end of March 2010, 14 projects were completed. It has been programmed to complete 18 projects in 2010-11 and 9 projects in 2011-12. An outlay of Rs.26.50 crore has been proposed in the budget 2011-12 for these works.

**Project Monitoring Mechanism:** A comprehensive physical and financial periodical monitoring is carried out by Central Water Commission / Ministry of Water Resources with emphasis on quality control. The release of subsequent installments of grant is based on physical and financial progress of the work.

**6. Hydrology Project (HP-II):**

**Objective :** To provide reliable data sets for long term planning, design and management of water resources and water use systems and research activities with improvement in the infrastructure for data collection. HP-II is a follow on of HP-I aimed to extend and promote the sustained and effective use of the Hydrological Information System by all potential users concerned with water resources planning and management, formulation of design aids and development of design support system for early flood warning, drought monitoring and management.

**Fund Flow Mechanism :** The project is funded by World Bank and implemented nationwide. Orissa is one of the implementing states in this project.

**Implementation status:** The latest estimated cost of Orissa portion work is Rs.27.51 crore (surface water component –Rs.13.28 crore and ground water component –Rs.14.23 crore). Under Hydrology Ph-I, 56 river gauge stations, all of which are equipped with rain gauges and 9 Full Climatic Stations(FCS) have been constructed. The data collected are processed through softwares like SWDES and HYMOS and exchanged with CWC,IMD for inter agency data validation. Basin wise Hydrological information system network developed through different sources are given in the table below.

**Table-1.1**  
**Hydrological Information System Network**

Basin	Standard Rain Gauge Station (nos)		ARG (nos)	RGS (nos)		FCS (nos)	WQ/Sed laboratories (nos)	
	HP	Non-HP		G.D	WL		Sed.	WQ+Sed
Subernarekha	2	-	1	2	-	-	1	1
Budhabalanga	2	-	-	-	-	1	1	1
Baitarani	2	7	1	2	-	1	1	1
Brahmani	4	-	-	2	2	-	1	1
Mahanadi	29	20	4	21	6	4	10	3
Rushikulya	5	2	3	5	1	1	2	1
Vamsadhara	3	5	-	3	-	1	1	1
Nagabali	2	-	-	2	-	-	2	1
Indravati	3	-	2	4	2	1	1	1
Kolab	4	-	1	3	1	-	-	-
<b>Total</b>	<b>56</b>	<b>34</b>	<b>12</b>	<b>44</b>	<b>12</b>	<b>9</b>	<b>20</b>	<b>11</b>

ARG -Automatic Rain Gauge, RGS-River Gauge Station, GD- Gauge Discharge, WL-Water Level,FCS-Full Climatic Station,WQ-Water Quality, Sed-Sedimentation.

Further, an integrated bathymetry system has been procured to compute the silt deposits in the major reservoirs in the State. At present, reservoir sedimentation survey work in Hirakud reservoir is under progress. Subsequently, such exercise will extend to other reservoirs of the State. Budget provision of Rs.10.00 crore (Surface water-Rs.6.00 crore, Ground water –Rs.4.00 crore) has been made during 2011-12 under this scheme.

**Project Monitoring Mechanism:** Periodical monitoring is being carried out by the World Bank.

## **7. Orissa Community Tank Management Project (OCTMP) :**

Government of Orissa in partnership with Government of India have initiated a project to repair and rehabilitate approximately 900 minor irrigation tanks with command area of 40 ha to 2000 ha and covering 1.20 lakh ha across the state with assistance from World Bank. Meanwhile, the scope of the project has been scaled down and 320 tanks with command area of 0.60 lakh hectare are proposed under this scheme.

**Objective :** The project aims to improve agricultural productivity by renovating irrigation tanks and strengthening water users associations to manage the tank systems effectively.

**Fund Flow Arrangement :** The World Bank is funding the project and has sanctioned US\$ 95,000 for operationalization of the programme on reimbursement basis.

**Implementation Status :** The project will carry out rehabilitation work in about 320 tank systems covering a command area of nearly 0.60 lakh hectares, supported with an institutional framework for participatory irrigation management and livelihood development. Now, the project is being implemented on a pilot basis in 80 projects in Rayagada, Gajapati, Ganjam, Jajpur and Mayurbhanj districts. Tendering activities for 60 projects have been initiated out of which work for 19 projects have been started. Budget provision of Rs.20.00 crore has been made during 2011-12 for this scheme.

**Project Monitoring mechanism :** Regular monitoring of the project is carried by World Bank in respect of physical and financial progress and the outcome.

## **8. Biju Krushak Vikash Yojana(BKVY) :**

**Objective:** To utilise the water resources potential of small streams and rivulets which can provide irrigation to the lands of tribal beneficiaries/ small and marginal farmers suitable for self-management.

**Fund Flow arrangement:** Funding for execution of MIPs and LIPs in KBK districts are basically met from Special Central Assistance (SCA) received under RLTA. Similarly, loan assistance from NABARD is being availed under RIDF schemes for execution of MIPs and LIPs in Non-KBK districts.

**Implementation Status:** By end of March 2010, total 5894 LIPs and 84 Minor flow projects have been sanctioned. Out of which, 75 MIPs and 5259 LIPs have been completed and irrigation potential of 116.004 thousand hectares have been created (LIPs-111.38 thousand hectare, MIPs- 4.624 thousand hectares). During 2010-11, there is a target to install 1980 LIPs to create additional irrigation potential of 39600 hectare. Out of which up , 348 LIPs (OAIC-110 nos, OLIC-238 nos) have so far been completed and irrigation potential of 7814 hectare (OAIC- 2457 hectare, OLIC- 5357 hectare) has been created.

During 2011-12, budget provision of Rs.160.00 crore (RIDF –Rs.150.00 crore, SCA- Rs.10.00 crore) has been made for installation of 1175 LIPs with creation of additional irrigation potential of 23500 thousand hectare.

**Project Monitoring mechanism :** Regular monitoring of the project is being carried out at each stage by the Department.

## 9. Command Area Development & Water Management (CAD&WM):

**Objective :** This is a centrally sponsored scheme being implemented in the State since 1976-77 with the main objective of reducing the gap between irrigation potential created and that utilized. The programme also aims at enhancing agricultural production and productivity in irrigated commands by judicious and equitable distribution of available irrigation water with active involvement of farmers through participatory irrigation management. The main components of the programme are construction of field channel, field drain, reclamation of water logged area, correction of system deficiencies , Topographical survey and farmers training.

**Fund Flow arrangement:** Funding for execution the projects are being made through central assistance. The cost sharing norms for construction of field channel and reclamation of water logged areas are in the ratio of 50:40:10 (centre: state: farmers). For construction of field drain and correction of system deficiencies the cost sharing is 50:50 (centre :State) and for training it is 75:25 (centre: state) .

**Implementation Status:** 21 major and medium projects having CCA of 995861 hectare have been taken up under this scheme out of which 7 projects have been completed. By end of March 2010, field channel covering 496667 hectare, field drain covering 148445 hectare have been constructed and seven projects were

completed. During 2010-11, it has been programmed to construct 28922 hectare of field channel and 9330 hectares of field drain, out of which field channel covering an area of 11136 hectare and field drain covering an area of 1656 hectare have been constructed up to end of December 2010.

An outlay of Rs.76.00 crore has been proposed in the budget of 2011-12 with a target to create to construct 33000 hectare of field channel and 17600 hectare of field drain.

**Project Monitoring Mechanism:** A comprehensive physical and financial periodical monitoring is carried out by Central Water Commission / Ministry of Water Resources with emphasis on quality control. The release of subsequent installments of grant is based on physical and financial progress of the work.

### **New Schemes:**

#### **10. Repair, Renovation and Restoration of Water Bodies with domestic support (RR&R)**

Govt of India has launched the scheme of Repair, Renovation and Restoration (RR&R) of Water Bodies as a State Sector scheme with domestic budgetary support.

#### **Objective**

- a. Comprehensive improvement of selected tank systems including restoration
- b. Improvement of catchment areas of tank
- c. Community participation of self-supporting system for sustainable management for water bodies covered by the programme.
- d. Ground Water Recharge
- e. Capacity Building of communities, user groups standing committee for panchayats and State Government / Central Government Agencies concerned with the planning, implementation and monitoring of the project.
- f. Increase in storage capacity of water bodies.
- g. Improvement in agriculture / horticulture productivity and increase in recharge of ground water in downstream areas of water bodies.

h. Environmental benefits through improved water use efficiency : irrigation benefits through restoration of water bodies, supplementation of groundwater use and promotion of conjunctive use of surface and ground water.

### **Fund Flow Arrangement**

For Special Category States (North-Eastern States including Sikkim, Himachal Pradesh, Jammu & Kashmir, Uttarakhand and undivided Koraput, Bolangir and Kalahandi (KBK) district of Orissa as well as projects benefitting drought prone / tribal / naxal-affected areas, 90 % of the project cost will be provided as Central Assistance (grant) by the Government of India and 10% of the cost by State Governments.

For non-special category States 25% of the cost will be provided as Central Assistance (grant) by Government of India and 75% by State Governments. 10% of the project cost will be earmarked by State Governments for capacity building, awareness and institutional strengthening.

**Implementation Status:** 1761 no of projects has been sanctioned by Govt. of India costing Rs. 576.16 crores for revival of 88293 ha of lost ayacut. An amount of Rs. 72.12 crores has been released by Government of India during 2009-10. At present, baseline survey works are in progress. An outlay of Rs. 80.00 crores has been proposed in budget during 2011-12 for rehabilitation of 597 tanks with revival of 40170 hectare of irrigation potential.

**Project Monitoring Mechanism-** Regular monitoring of the project is to be carried out at each stage. Monitoring will be done with the association of the Standing Committee of Pani Panchayat the appropriate level

### **11. Construction of Check Dams (In-Stream Storage):**

**Objective :** To conserve water at the end of monsoon for drinking water, ground water recharge and incidental irrigation. Preference will be given to blocks having less than 35% irrigation coverage, areas where farmers are using traditional irrigation by constructing temporary cross bunds on streams and where farmers are willing to take up O&M of the project.

**Fund Flow arrangement:** Funding for execution of Check Dams in KBK districts are to be met from Special Component Assistance (SCA) and Additional Central Assistance (ACA). Similarly, State's own fund are to be utilised for execution of Check Dams in Non-KBK districts.

**Implementation Status:** This is new scheme and started during 2010-11. financial year. There is a target to construct about 1000 check dams during current financial year. By end of December 2010, 263 Check Dams have been completed. Budget provision of Rs.200.00 crore (ACA-25.00 cr, State Plan fund-175.00 cr) has been made during 2011-12 with a target to construct 2000 check dams.

## **12. Deep Borewell Scheme:**

**Objective:** The exploitation of ground water in the State is very low. For providing irrigation by exploiting ground water through deep bore wells covering 2 hectares in blocks having less than 35% irrigation coverage, a new scheme in line of BKVY is proposed to be taken up during the Annual Plan 2010-11.

**Fund flow Arrangement :** Funds are provided in the Budget of Agriculture Department under RKVY, State Plan for taking up these deep bore-wells.

**Implementation Status :** The scheme would be implemented through OLIC. 4000 bore wells to irrigate around 10000 hectares are targeted for completion during 2010-11 in seventeen hard rock districts of the state. By end of December 2010, drilling work in 658 borewells have been completed and energisation work in progress. During 2011-12, 6000 such bore wells which will irrigate approximately 12000 hectares of land in these blocks will be taken up through this scheme.

**13. Mega Lift Scheme:** The scheme has been proposed to be launched during 2011-12 for providing irrigation to the upland areas by lifting waters from river. During 2011-12, budget provision of Rs.50.00 crore has been made with a target to create additional irrigation potential of 7200 hectare.

## **SCHEME IN PIPELINE:**

### **14. Dam Rehabilitation & Improvement Project (DRIP):**

**Objective :** Rehabilitation and improvement of Dam Structure through proper maintenance and improve the safety and operational performance of selected existing dams.

**Fund Flow arrangement:** This project will be taken up with loan assistance of World Bank.

**Implementation Status:** 38 dams proposed to be included in this scheme with estimated cost of Rs.147.75 crore. Loan agreement is likely to be signed during current financial year. 5 dams will be taken up in the pilot phase.

**15. Orissa Water Sector Improvement Programme(OWSIP):**

**Objective :** The proposal envisages modernization of irrigation projects, construction of new irrigation projects besides flood control and drainage development in Mahanadi Basin.

**Fund Flow arrangement:** The projects will be posed to World Bank for funding.

**Implementation Status:** Preliminary activities such as survey, investigation & project report preparation is under progress. After signing of loan agreement, the project will be implemented in a phased manner.

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## Chapter-II

### Outcome Budget: 2011-12

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The exercise is primarily meant for converting financial outlays into measurable and monitorable outcome. It is a performance measurement tool that helps in better service delivery, decision making, evaluating programme performance and results & improving programme effectiveness. The Outcome Budget is also aimed at changing the outlook of the agencies entrusted with the responsibility of programme execution and implementation. The idea is to make the programme implementing agencies more result oriented by shifting the focus from “Outlays” to “Outcomes”.

The scheme-wise details, wherever necessary of the Outcome Budget for 2011-12 are indicated in the attached statement.

**OUTCOME BUDGET -2011-12**  
**STATEMENT OF OUTLAYS AND OUTCOME / TARGETS: ANNUAL PLAN 2011-12**

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
<b>A</b>	<b>State Plan</b>						
<b>1</b>	<b>Accelerated Irrigation Benefit Programme (AIBP)</b>		To complete on-going irrigation projects and to accelerate implementation of large irrigation projects in a time bound manner with a view to create additional irrigation potential and derive envisaged benefits from these projects with central assistance	Additional irrigation potential (Net) of <b>44546</b> hectare as given below. a. Major & Medium -41046 ha. b. minor flow projects -3500 ha.	i) To bring more and more additional cultivable area under irrigation coverage ii) Expeditious completion of major, medium & minor irrigation projects	i) Revised MOU has been signed to complete the major & medium projects in four financial year i.e by 2013-14. ii) For Minor Flow projects, Revised MOU to be signed to complete the projects by 2011-12	i) Delay in Land Acquisition ii) Rehabilitation and Resettlement work iii) Forest clearance iv) Peoples agitation v) Contractual litigation vi) Delay in completion of Railway line crossing and NH crossing
	a. Major & Medium	12140000					
	b. Minor (flow)	500000					
	c. Minor (lift)	0					
	<b>Sub-Total (AIBP)</b>	<b>12640000</b>					
<b>2</b>	<b>Rural infrastructure Development Fund (RIDF)</b>		Completion of ongoing rural infrastructure projects and also taking up new projects under irrigation, flood control, drainage, agriculture and rural connectivity sectors with assistance from NABARD under RIDF.	Additional irrigation potential(Net) of <b>22264</b> hectare a. Major & Medium-9464 hectare b. Minor (flow) - 12500 hectare c. Lift Irr. under Hirakud- 300 hectare d. Retrieval of water logged Area 8000 ha. e. Flood protection to 11000 ha of agricultural land	Infrastructure development for betterment of livelihood of rural masses and creation of additional irrigation potential	Three (3) year time period for projects sanctioned under each tranche by NABARD followed by one year grace period	i) Delay in Land Acquisition ii) Clearance of New Projects by NABARD
	a. Major & Medium	950000					
	b. Minor (flow)	500000					
	c. Lift Irr. under Hirakud	20000					
	d. Flood Control & draiange	1410000					
	<b>Sub-Total (RIDF)</b>	<b>2880000</b>					
<b>3</b>	<b>Biju Krushak Vikash Yojana (BKVY)</b>		To utilise the water resources potential of small streams and rivulets which can provide irrigation to the lands of tribal beneficiaries/ small and marginal farmers and suitable for self-management under assistance from RIDF and Special Central Assistance for KBK.	Additional irrigation potential(net) of <b>23500</b> hectare a. BKVY (RIDF)-1100 new LIPs to be taken up for creating additional irrigation potential of 22000 hectare b. BKVY (SCA) - 75 new LIPs to be taken up for creating additional irrigation potential of 1500 hectare	To bring more cultivable areas under irrigation coverage by constructing river lift and by exploiting ground water	One Year time period from the date of sanction of project under this programme	i) Energisation of Lift Points ii) Clearance of New Projects by NABARD
	LIPs under RIDF	1500000					
	LIPs under SCA	100000					
	<b>Sub-Total (BKVY)</b>	<b>1600000</b>					

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
<b>4</b>	<b>Instream Storage Structure (Check Dam) funded from State's own resources, ACA &amp; SCA</b>		To conserve water at the end of monsoon for drinking water, ground water recharge and for incidental irrigation. Preference will be given to blocks having less than 35% irrigation coverage, areas where farmers are using traditional irrigation by constructing temporary cross bunds on streams and where farmers are willing to take up O&M of the project.	Construction of 2000 check dams during current financial year. Incidental Irrigation benefit	i) To meet drinking water requirement ii) Recharging ground water potential iii) Rationalise irrigation development in the State	One Year time period from the date of sanction of project under this programme. Implementation through Departmental Organisation	New Scheme, Risk factor is yet to be ascertained
	a. Major & Medium (State fund)	250000					
	b. Minor (flow)						
	i. State fund	1500000					
	ii. ACA	250000					
	iii. SCA	0					
	<b>Sub-Total (Check Dam)</b>	<b>2000000</b>					
<b>5</b>	<b>Externally Aided Project</b>						
i	<b>Rengali Left Bank Canal, RD.29.177 to 71.313 km with assistance from JICA</b>	700000	Government of Japan is providing official development assistance (ODA) to developing countries at low rate of interest and with long repayment periods to develop and improve the economic and social infrastructure for sustainable economic development.	Completion of balance work of the project	a. Expansion of Irrigation coverage b. On farm development & entry point activities	The scheme is likely to be closed by June 2011. Implementation through Departmental Organisation	Delay in Land Acquisition

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
ii	<b>Orissa Integrated Irrigated Agriculture Water Management Investment Programme (OIAWMIP) with assistance from Asian Development Bank</b>	500000	The project aims to modernise 15 major & medium and 1400 lift irrigation projects in four river basins for enhancing the productivity and sustainability of the existing projects and simultaneously strengthening and empowering WUAs and allied institutions like WALMI	a.Extension,Renovation & Modernisation of selected 2 major canal system MCH ,Taladanda canal & 3 medium projects viz.Gohira, Remal,Sunei are in progress during current financial year. b.Sustainable water management with PIM &IWRM. c. conduct further studies for preparation of Basin Development Plans. iv) Construction activities to commence during current financial year	a.To optimise utilisation of irrigation potential b. Increase income and reduce poverty through productive irrigation.	The scheme has been funded by Asian Development Bank (ADB) and will continue in four tranches for a peiod of eight years comencing from 2009-10.Implementation through Departmental organisation.	Co-ordination among various departments such as Agriculture, Water Resources, Fisheries and Animal Husbandry & PR institutions
iii	<b>Orissa Community Tank Management Project (OCTMP) with assistance from World Bank</b>	200000	a. Renovation of tanks and realisation of full irrigation potential. b.To improve agricultural productivity and water users' associations to manage tank systems effectively. c.To create enabling legal and institutional environment to implement the solutions emerging out of participatory and demand driven processes. d. include the whole of the tank user community involving other users like landless farm families, livestock owners, fishermen community etc.	i) Extension,Renovation & Modernisation work has been implemented on pilot basis in Rayagada, Gajpati,Ganjam,Jajpur & Mayurbhanj districts. ii) Implementation activities initiated in 80 tanks,out of which work has been started in 19 tanks.	Sustainability of the restored systems through community participation and empowerment facilitated by Support Organizations (SO)/ other agencies to have self-supporting groups at the level of water body.	The scheme has been funded by World Bank and will continue for a peiod of five years comencing from 2009-10.Implementation through Orissa Community Tank Development & Management Society (OCTDMS) and Departmental Organisation	Co-ordination among various departments such as Agriculture, Water Resources, Fisheries and Animal Husbandry & PR institutions

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
iv	<b>Hydrology Project Phase II with World Bank assistance</b>		Sustained and effective use of the Hydrological Information System with water resources planning and management.	<b>Surface Water:</b> i) Conducting Training Programme-30 nos ii) Study Tour-7 nos iii) Awareness programme-12 nos iv) construction of administrative building <b>Ground Water:</b> i) Installation of Piezometer & Renovation existing Piezometer ii) Procurement of Audiovisual equipment iii) Procurement of Software & hardwares for database management	(a) Improved data accessibility for Implementing Agencies (b) Improved tools for water resources planning and management. (c) Improved data system and tools for management of flood and drought.	Project now under implementation through World Bank funding. To be completed in 2012-13. Implementation through Director, Hydrometry and Director, GWS&I	Co-ordination between central and state agencies.
	a. Surface Water	60000					
	b. Ground Water	40000					
	<b>Sub-Total (HP-II)</b>	<b>100000</b>					
	<b>Total (EAP)</b>	<b>1500000</b>					
6	<b>Projects funded from States own resources</b>		To take up pre-project activities Renovation work of major and medium projects, other ancillary works.	a. Payment of NPV, initiation of Land Acquisition, Infrastructure development of Pipeline Projects b. Renovation of selected distribution system of major & medium projects. c. Additional irrigation potential of 3350 ha for minor flow projects	a. Shorten the project cycle through completion of pre-project activities. Separate funding arrangement is firmed up b. To optimise utilisation of irrigation potential	Completion of pre-project activities for the projects funded by other agencies. Payment of decretal dues. Rehabilitation and renovation of old projects	
	a. Major & Medium	500000					
	b. Minor (flow)	90000					
	c. GWS&I	24000					
	d. Flood Control & draiange	690000					
	<b>Sub-Total (State fund)</b>	<b>1304000</b>					

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
7	<b>Repair, Renovation and Restoration of Water Bodies with Domestic Support</b>		Comprehensive improvement of selected water bodies including catchment treatment and command areas development, increase instorage capacity of water bodies, ground water recharge, improvement in agriculture/horticulture productivity, development of tourism, cultural activities and increased availability of drinking water.	i) 597 water bodies to be taken up during current financial year ii) Revival of existing command area of 40170 hectare	Revival of derelict and partly derelict water bodies and realise their full irrigation potential	Scheme taken up during 11th Five year Plan funded by Government of India. Three year time period is allowed for completion of each project from the date of sanction.	
	Minor flow	800000					
	<b>Sub-Total (RR&amp;R)</b>	<b>800000</b>					
8	<b>Command area Development &amp; Water Management</b>		i) To bridge the gap between irrigation potential created and that utilised through micro level infrastructure development and efficient farm water management	i) construction of field channel- 33000 hectare ii) Construction of field drain - 17600 hectare iii) Reclamation of Water logged area- 250 hectare iv) Conducting Farmers training Programme-149 nos v) Topographical survey -51500 hectare	i) Optimum utilisation of water resources ii) Enhance agricultural production and productivity ii) Improve socio-economic conditions of the farmers.	Programme started by GOI since 1974. There is no strict time schedule for completion of the project. One New project will be taken up on completion of one ongoing project	Donation of land by farmers in the command area for taking up field channel & field drain work.
	CAD&WM	760000					
	<b>Sub-Total (CAD&amp;WM)</b>	<b>760000</b>					
9	<b>Flood Management Programme</b>		River management, Flood Control, Anti-erosion, Drainage Development, Flood Proffing works in the critical areas in the country with central assistance	i) Flood protection for 12000 ha of agricultural land ii) Retrieval of Water Logged Area 10000 hectare	The output would help in reducing damages due to flood, river bank erosion and coastal erosion. Two year time period has been allowed for completion of each project	Scheme taken up during 11th Five year Plan funded by Government of India. Two year time period is allowed for completion of each project from the date of sanction. Implementation through Departmental organisation	i) Clearance of New Projects Under FMP ii) Delay due to contractual problem
	<b>a. Ongoing Projects</b>	571000					
	<b>b. Pipeline project</b>	29000					
	<b>Sub-Total (FMP)</b>	<b>600000</b>					

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	Project Outcomes	Process / Timelines	Remark/ Risk Factor
1	2	3	4	5	6	7	8
10	<b>Megalift Projects</b>	<b>500000</b>	To provide irrigation to the upland areas by lifting water from river	i) New Megalift projects to be taken up during current financial year ii) Creation of Additional irrigation potential of 7200 hectare	To bring more cultivable areas under irrigation coverage by constructing mega river lift projects	Two Year time period from the date of sanction of project under this programme	New Scheme, Risk factor is yet to be ascertained
11	<b>Deep Borewell Scheme</b>	Budget Provision made in Agril sector	To provide irrigation to the farmers by exploiting ground water in non-irrigated hard rock areas of the State	i) 6000 projects to be taken up during current financial year ii) Creation of Additional irrigation potential of 12000 hectare	To bring more cultivable areas under irrigation coverage	One Year time period from the date of sanction of project under this programme. Implementation through Departmental	New Scheme, Risk factor is yet to be ascertained
	<b>Total</b>	<b>24584000</b>					

## OUTCOME BUDGET -2011-12

### STATEMENT OF OUTLAYS AND OUTCOME / TARGETS: ANNUAL PLAN 2011-12 (Non-Plan )

Sl. No	Name of Scheme/ Programme	Outlay 2011-12 (in TRS)(Non-Salary Deliverables, Physical outputs	Objective of the scheme	Quantifiable/ Deliverables Physical outputs	ProjectOutcomes	Process / Timeliness	Remark/ Risk Factor
1	2	3	4	5	6	7	8
<b>A Major &amp; Medium Irrigation</b>							
1	Works	2797100	Annual Maintenance of different components such as repairing of Main canals, distribution systems, Silt clearance, Roads,Buildings, Head works and other ancilliary works of Major & Medium Projects including 13FC grant	Normal & Special repair works.Targets could not be quantified	Continued activity	Annual Repair & Maintenance	
	<b>Sub-Total</b>	<b>2797100</b>					
<b>B Flood Control &amp; Drainage</b>							
1	Works	825000	Annual Maintenance of erosion and embankment works	Normal & Special repair works.Targets could not be quantified	Continued activity	Annual Repair & Maintenance	
	<b>Sub-Total</b>	<b>825000</b>					
<b>C Minor Irrigation</b>							
1	Works	850200	Annual Maintenance of different components such as repairing of Main canals, distribution systems, Silt clearance, Roads,Buildings, Head works and other ancilliary works of Major & Medium Projects including 13FC grant	Normal & Special repair works.Targets could not be quantified	Continued activity	Annual Repair & Maintenance	
	<b>Sub-Total</b>	<b>850200</b>					
<b>D CAD&amp;WM</b>							
1	Works	57600	Annual Maintenance of Field Channel & Field Drain	Normal & Special repair works.Targets could not be quantified	Continued activity	Annual Repair & Maintenance	
	<b>Sub-Total</b>	<b>57600</b>					

**Abstracts showings schemes, outlay and quantifiable deliverables/  
physical outputs in Annual Plan 2011-12**

Sl.No	Name of Scheme	Financial outlay(TRS)	Quantifiable deliverables/physicals
1	AIBP	12640000	Irr.Pot-44546 hectare
2	RIDF	2880000	Irr.Pot-22264 hectare
3	BKVY	1600000	Irr.Pot-23500 hectare
4	In-stream storage structure(Check Dam)	2000000	2000 check dam
5	Rengali Left Bank Canal with assistance from JICA	700000	Completion of balance work of the project
6	OIIAWMIP with assistance from ADB	500000	2major canal system, 3medium projects and 650 lift irrigation projects
7	OCTMP with World Bank assistance	200000	Modernization of 60 tanks
8	State fund	1304000	Irr. Pot-3350 hectare
9	Repair, Renovation & Restoration of Water Bodies	800000	597 water bodies
10	Command Area Development & Water Management	760000	i) construction of field channel-33000 hectare ii) Construction of field drain-17600 hectare
11	Flood Management Programme	600000	i) Flood protection for 12000 ha agricultural land ii) Retrieval of 10000 ha. of waterlogged land
12	Megalift Projects	500000	Irr.Pot-7200 hectare
13	Hydrology Project	100000	
14	Borewell scheme	Provision made in Agril. Budget	Irr.Pot -12000 hectare

**N.B**

- Creation of additional irrigation potential of 112860 hectare
- Retrieval of waterlogged area of 10000 hectare
- Construction of field channel of 33000 hectare
- Construction of field drain of 17600 hectare

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## Chapter-III

### Reform measures & Policy initiatives

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#### **Change in design & delivery mechanism of existing schemes:**

Majority of the schemes presently under implementation for development of water resources are funded by Government of India, World Bank, Asian Development Bank, JICA and NABARD. These funding agencies have formulated guidelines for smooth implementation of the concerned schemes. They have also modified their guidelines from time to time on review of the performance of the schemes. The Department on its own can not change the design and delivery mechanism of these schemes. However, suggestions regarding change in design and delivery mechanism of the schemes are given in different forums such as Workshops, Seminars and Meetings etc.

#### **Policy Initiatives:**

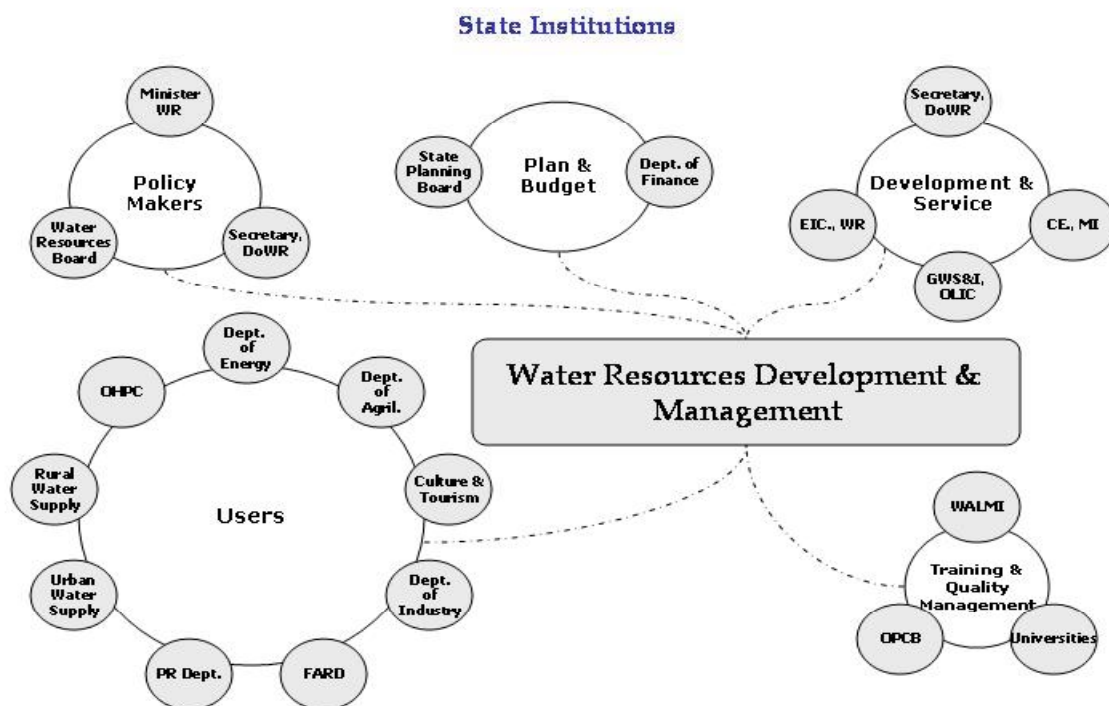
**State Water Policy :** Water resources available in the state should be brought within the category of utilizable resources to the maximum possible extent. Competing demands on water resources from industrial, domestic, environmental, Irrigation and other sectors essentially warrants an integrated water resources development and management approach. To achieve this objective, policy initiatives have been taken at the state and national level. The state formulated its first State Water Policy in 1994 following the principle enunciated in the National Water Policy 1987. In the meantime, a number of developments have taken place; new information and knowledge are now available and new issues and challenges have emerged in the field of development and management of water resources. It was therefore felt necessary by the State Government to review the State Water Policy, 1994 and a new Water Policy called “Orissa State Water Policy-2007” has been approved. The river basin is taken as a logical hydrological unit of management. The priority in allocation of water as per State Water Policy 2007 is given below.

1. Drinking water and domestic use (human and animal consumption)
2. Ecology

3. Irrigation, Agriculture and other related activities including Fisheries.
4. Hydro Power
5. Industries including Agro Industries.
6. Navigation and other uses such as tourism.

**State Water Plan:** The State Water Plan will not only allocate the water resource to different sectors of priority, it will also have a perspective plan for development of these resources in important areas like drinking water, irrigation, hydro-power etc. While developing these resources, people's need preservation of the ecological balance and enrichment of the ecosystem would receive adequate attention. The plan will be holistic, participatory and environmentally sustainable.

### **Institutional Framework:**



**(A) State Planning Board:** A key organization of State Government, the Board provides policy direction in formulating plan scenario and both short term and long term development objectives. The Board has a member for Water Resources Development of the State.

**(B) Water Resources Board:** Government of Orissa constituted the Water Resources Board, the apex body in water sector with Chief Secretary of the State as Chairman. The Water Resources Board has ten departmental Secretaries as members and Engineer-in-Chief as Member- Secretary. The Board is the highest forum to ensure interdepartmental co-ordination and is involved in water planning and development processes such as formulation of State water policy, integrated planning of water resources, allocation of water resources to various water use sectors, prioritization of water resources development, environment management plan, etc.

**(C) Water Resources Department:** The Department is responsible for planning, developing and managing the State's water resources for irrigation, bulk water supply, flood control and drainage along with implementation of Major, Medium, Minor irrigation projects and their operation and maintenance.

### **Legal Framework:**

**(A) Orissa Irrigation Act and Rule:** The Orissa Irrigation Act came into force in 1959 and the Orissa Irrigation Rules in 1961. The Act covers the legal aspects related to construction and maintenance of irrigation works. It also prescribes the basic water rates to be made applicable to various class of irrigation systems for which water is to be supplied. The Orissa Irrigation Rules were amended in 2002 for revision of basic water rates for various class of irrigation system & as well as for crops other than the basic cereal crops. Rates for water supplied for purposes other than irrigation works were also amended in 1998 to cover the industrial and municipal water supply.

**Orissa Pani Panchayat Act & Rule:** The primary objective of this Act is to ensure optimum utilization of water by farmers for improving agricultural production, to involve farmers' organizations in the management and maintenance of the irrigation system to ensure dependable supply and distribution of water. The Pani Panchayat Rule provides guidelines for formation, membership, duties and responsibilities of Water Users' Associations.

**Rehabilitation & Resettlement Policy:** Government of Orissa has been pursuing various development initiatives to improve the quality of lives. Ensuring social justice being one of the major cornerstones of development, the

Government always proactively tries to make sure people's participation in development process. In spite of Government's intention to bring development to the people, development interventions do at times create undesirable consequences. Displacement due to large development projects is one such phenomenon. Government of Orissa has been responding to this problem through various projects specific Resettlement & Rehabilitation Policy and plans. The basic objectives of R&R policy 2006 are:

- To minimize displacement as far as possible
- Recognise the concern of the affected communities
- Pay special attention to the needs of vulnerable sections like women, indigenous people, children, physically challenged etc.
- To ensure livelihood and environment sustainability through participatory and transparent process
- To ensure proper implementation, monitoring, conflict resolution and grievance redressal through appropriate mechanism.

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**Chapter-IV**  
**Performance of Programmes & Schemes during 2010-11**

Sl. No	Name of Scheme/ Programme	Outlay 2010-11 (in TRS)	Achievement by December 2010 (TRS)	Physical Details	Target 2010-11	Achievement by December 2010
1	2	3	4	5	6	7
<b>A</b>	<b>State Plan</b>					
<b>1</b>	<b>AIBP</b>					
	a. Major & Medium	11450000	5974237	Irrigation Potential (in ha)	38550	0
	b. Minor (flow)	450000	195359	Irrigation Potential (in ha)	4774	1200
	c.Minor (lift)	100000	0	New LIPs (No).Work to be started after approval by MOWR	454	0
	<b>Sub-Total (AIBP)</b>	<b>12000000</b>	<b>6169596</b>			
<b>2</b>	<b>RIDF</b>					
	a. Major & Medium	1050000	248230	Irrigation Potential (in ha)	7830	150
	b. Minor (flow)	500000	269149	Irrigation Potential (in ha)	15400	571
	c.Lift Irr.under Hirakud	20000	0	Irrigation Potential (in ha)	400	0
	d.Flood Control & drainge	1450000	495692	Retrieval of Water logged area (ha)	6000	2202
				Flood protection to Agril Land (ha)	10000	2000
	<b>Sub-Total (RIDF)</b>	<b>3020000</b>	<b>1013071</b>			
<b>3</b>	<b>BKVY</b>					
	LIPs under RIDF	1970000	419171	Irrigation Potential (in ha)	35000	7674
	LIPs under SCA	230000	229978	Irrigation Potential (in ha)	4600	140
	<b>Sub-Total (BKVY)</b>	<b>2200000</b>	<b>649149</b>			
<b>4</b>	<b>Check Dam</b>					
	a. Major & Medium	200000	0	Check Dam (no)	160	54
	b. Minor (flow)	800000	224593	Check Dam (no)	840	209
	<b>Sub-Total (Check Dam)</b>	<b>1000000</b>	<b>224593</b>			
<b>5</b>	<b>Externally Aided Project</b>					
i	Rengali LBC (JICA)	605000	441590	Irrigation Potential (in ha)	4620	0
ii	OIIAWMIP (ADB)	425000	170352	Modernisation work	No quantifiable target	
iii	OCTMP (World Bank)	440000	105000	Modernisation work	No quantifiable target	
iv	HP-II (World Bank)					

Sl. No	Name of Scheme/ Programme	Outlay 2010-11 (in TRS)	Achievement by December 2010 (TRS)	Physical Details	Target 2010-11	Achievement by December 2010
1	2	3	4	5	6	7
	a. Surface Water	60500	28553	Procurement of GD ,Rain Gauge & Telemetry	85	In progress
	b. Ground Water	20000	9527	Procurement & Renovation of Piezometer	100	In progress
	<b>Sub-Total (HP-II)</b>	<b>80500</b>	<b>38080</b>			
v	DRIP (Proposed under World Bank)	5000	0	Work to be taken up after approval by funding agency		
vi	OWSIP (Proposed under World Bank)	5000	192	Work to be taken up after approval by funding agency		
	<b>Total (EAP)</b>	<b>1560500</b>	<b>755214</b>			
<b>6</b>	<b>States own resources</b>					
	a. Major & Medium	400000	99903	Project initiation activities	No quantifiable target	
	b. Minor (flow)	110000	0	Irrigation Potential (in ha)	3000	79
	c. GWS&I	11500	8843	Water table & water quality monitoring	No quantifiable target	
	d.Flood Control & drainge	691200	326137	Strengthening of embankments	No quantifiable target	
	<b>Sub-Total (State fund)</b>	<b>1212700</b>	<b>434883</b>			
	<b>Total (State Plan)</b>	<b>20993200</b>	<b>9246506</b>			
<b>B</b>	<b>Centrally Sponsered Plan</b>					
<b>1</b>	<b>RR&amp;R with Domestic Support</b>	<b>910000</b>	<b>33688</b>	Revival of Irrigation Potential (ha)	4599	0
<b>2</b>	<b>CAD&amp;WM</b>					
	State Share	304300	105109	Construction of Field Channel (ha)	28922	11136
	Central Share	360056	122440	Construction of Field Drain (ha)	9330	1656
	<b>Sub-Total (CAD&amp;WM)</b>	<b>664356</b>	<b>227549</b>			
<b>3</b>	<b>Flood Management Programme</b>					
	a.Ongoing Projects	716000	257573	Flood protection to Agril Land (ha)	30000	5000
				Retrieval of Water logged area (ha)	13000	2704
	b.New projects	217600	0	Work to be taken up after approval by MOWR		
	<b>Sub-Total (FMP)</b>	<b>933600</b>	<b>257573</b>			
	<b>Total (CSP)</b>	<b>2507956</b>	<b>518810</b>			
	<b>G.Total</b>	<b>23501156</b>	<b>9765316</b>			

## Chapter-V Financial Review

Financial outlay under Non-Plan, State Plan & Centrally Sponsored Plan in both revenue and capital account for the financial years 2009-10, 2010-11 & 2011-12 will be furnished after finalisation of Demand for Grant booklet.

IN THOUSAND RUPEES

Sl. No.	Sector / Scheme	2009-10			2010-11(BE)			2010-11(RE)			2011-12 (BE)		
		Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Non-Plan	4805063	0	4805063	6103527	0	6103527	6301700	3000	6304700	7927138	0	7927138
	State Plan	1277098	14571186	15848284	2680800	18860101	21540901	1444300	15455501	16899801	2435000	22149001	24584001
	Centrally Sponsered Plan	412487	656226	1068713	360056	1600200	1960256	360056	1603849	1963905	0	0	0
	<b>Total</b>	<b>6494648</b>	<b>15227412</b>	<b>21722060</b>	<b>9144383</b>	<b>20460301</b>	<b>29604684</b>	<b>8106056</b>	<b>17062350</b>	<b>25168406</b>	<b>10362138</b>	<b>22149001</b>	<b>32511139</b>

## Chapter-VI Gender and SC/ST Budgeting

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**Gender Budgeting:** The schemes implemented for development of water resources sector benefit the community as a whole. Therefore, Gender component is not captured.

### **SC/ST Budgeting:**

**Tribal Sub-Plan :** As per 2001 census, the tribal population constitute 22.13% of the total population of the state. About 95% reside in rural areas and majority of workers are agricultural labourers. They are generally in a state of social, educational and economic backwardness. The objective of TSP is to uplift the socio-economic status of the tribal community. The State Government accord priority for bringing additional irrigation coverage in tribal areas. This would enhance the agricultural productivity of the tribal cultivators as well as agricultural labourers. The budget provision under TSP during 2011-12 under different schemes implemented through Department of Water Resources is given in the table below.

**Table-6.1**

Sl. No.	Scheme	Total budget provision (Rs. in lakh)	Out of which flow to TSP (Rs. in lakh)
1.	Major & Medium	151000.00	54705.39
2.	Minor Flow	43400.00	10300.00
3	Lift Irrigation	16200.00	3403.60
4	CAD&WM	7600.00	3062.50
5	GWSI	640.00	0.00
6	Flood control & Drainage	27000.00	0.00
	<b>Total</b>	<b>245840.00</b>	<b>71471.49</b>

**SC Sub-Plan :** There are 93 scheduled caste (SC) communities in the state. As per 2001 census, the SC population constitute 16.53% of the total population of the state. About 88% reside in rural areas and majority of workers are agricultural labourers. They are generally in a state of social, educational and

economic backwardness. The objective of SCSP is to raise the socio-economic status of the SC community and to reduce poverty. The State Government has given priority for bringing additional irrigation coverage for SC community. The budget provision under SCSP during 2011-12 under different schemes implemented through Department of Water Resources is given in the table below.

**Table-6.2**

Sl. No.	Scheme	Total budget provision (Rs. in lakh)	Out of which flow to SCSP (Rs. in lakh)
1.	Major & Medium	151000.00	45316.34
2.	Minor Flow	43400.00	7100.00
3	Lift Irrigation	16200.00	2252.70
4	CAD&WM	7600.00	1554.80
5	GWSI	640.00	100.00
6	Flood control & Drainage	27000.00	13550.00
	<b>Total</b>	<b>245840.00</b>	<b>69873.84</b>

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