

**MINISTRY OF WATER RESOURCES**

DEMAND NO. 104

**Ministry of Water Resources**

A. The Budget allocations, net of recoveries, are given below:

Major Head	Actual 2009-2010			Budget 2010-2011			Revised 2010-2011			<i>(In crores of Rupees)</i> Budget 2011-2012			
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
Revenue	416.94	455.41	872.35	592.50	403.20	995.70	476.50	487.56	964.06	624.20	500.93	1125.13	
Capital	75.35	2.05	77.40	107.50	1.80	109.30	83.50	1.80	85.30	95.80	1.80	97.60	
<b>Total</b>	<b>492.29</b>	<b>457.46</b>	<b>949.75</b>	<b>700.00</b>	<b>405.00</b>	<b>1105.00</b>	<b>560.00</b>	<b>489.36</b>	<b>1049.36</b>	<b>720.00</b>	<b>502.73</b>	<b>1222.73</b>	
1. Secretariat-Economic Service	3451	...	32.62	32.62	...	31.25	31.25	...	63.44	63.44	...	69.98	69.98
<b>Major and Medium Irrigation</b>													
2. Central Water Commission	2701	2.53	150.38	152.91	4.00	115.72	119.72	3.00	144.96	147.96	3.00	149.50	152.50
3. Central Soil & Materials Research Station	2701	...	7.63	7.63	...	5.92	5.92	...	7.80	7.80	...	8.31	8.31
4. Central Water & Power Research Station	2701	...	36.10	36.10	...	25.47	25.47	...	33.06	33.06	...	35.67	35.67
5. National Institute of Hydrology	2701	...	10.04	10.04	...	6.50	6.50	...	9.80	9.80	...	8.50	8.50
6. Research and Development Programme	2701	32.85	...	32.85	53.50	...	53.50	41.50	...	41.50	45.89	...	45.89
7. Others													
7.01 Boards and Committees	2701	...	1.66	1.66	...	2.66	2.66	...	2.79	2.79	...	2.95	2.95
	4701	...	...	...	...	...	...	...	...	...	...	...	...
	<i>Total</i>	...	1.66	1.66	...	2.66	2.66	...	2.79	2.79	...	2.95	2.95
8. Non-Plan Grants to States													
8.01 Assistance for Sutlej Yamuna Link Canal Project	3601	...	...	...	...	20.00	20.00	...	8.94	8.94	...	2.06	2.06
9. Development of Water Resources Information System	2701	48.30	...	48.30	50.50	...	50.50	29.32	...	29.32	46.84	...	46.84
	2702	...	...	...	...	...	...	0.07	...	0.07	0.06	...	0.06
	3601	14.74	...	14.74	14.34	...	14.34	11.00	...	11.00	11.04	...	11.04
	3602	0.06	...	0.06	0.16	...	0.16	0.10	...	0.10	0.06	...	0.06
	<i>Total</i>	63.10	...	63.10	65.00	...	65.00	40.49	...	40.49	58.00	...	58.00
10. Infrastructure Development	2701	1.28	...	1.28	3.00	...	3.00	3.00	...	3.00	3.00	...	3.00
11. Hydrology Project													
11.01 EAP Component	2701	20.50	...	20.50	43.00	...	43.00	29.07	...	29.07	76.00	...	76.00
11.02 Non EAP Component	2701	1.04	...	1.04	10.00	...	10.00	1.93	...	1.93	4.00	...	4.00
<i>Total- Hydrology Project</i>		21.54	...	21.54	53.00	...	53.00	31.00	...	31.00	80.00	...	80.00

(In crores of Rupees)

	Major Head	Actual 2009-2010			Budget 2010-2011			Revised 2010-2011			Budget 2011-2012		
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
12. Investigation of Water Resources Development Scheme	2701	37.01	...	37.01	52.00	...	52.00	44.00	...	44.00	52.00	...	52.00
13. Information, Education and Communication	2701	10.85	...	10.85	15.00	...	15.00	14.10	...	14.10	25.00	...	25.00
14. Dam Safety Studies and Planning	2701	0.34	...	0.34	1.50	...	1.50	1.00	...	1.00	3.00	...	3.00
15. River Basin Organization/Authority	2701	...	...	...	0.50	...	0.50	0.01	...	0.01	4.00	...	4.00
<b>Total-Major and Medium Irrigation</b>		<b>169.50</b>	<b>205.81</b>	<b>375.31</b>	<b>247.50</b>	<b>176.27</b>	<b>423.77</b>	<b>178.10</b>	<b>207.35</b>	<b>385.45</b>	<b>273.89</b>	<b>206.99</b>	<b>480.88</b>
<b>Minor Irrigation</b>													
16. Central Ground Water Board	2702	...	108.81	108.81	...	98.31	98.31	...	102.29	102.29	...	105.02	105.02
17. Rajiv Gandhi NGWT&RI	2702	1.78	...	1.78	6.00	...	6.00	3.40	...	3.40	3.00	...	3.00
18. Ground Water Management and Regulation	2702	68.82	...	68.82	97.00	...	97.00	75.00	...	75.00	117.00	...	117.00
19. Infrastructure Development	4702	2.15	...	2.15	9.50	...	9.50	9.00	...	9.00	10.40	...	10.40
<b>Total-Minor Irrigation</b>		<b>72.75</b>	<b>108.81</b>	<b>181.56</b>	<b>112.50</b>	<b>98.31</b>	<b>210.81</b>	<b>87.40</b>	<b>102.29</b>	<b>189.69</b>	<b>130.40</b>	<b>105.02</b>	<b>235.42</b>
<b>Flood Control</b>													
20. Central Water Commission	2711	...	68.53	68.53	...	56.74	56.74	...	72.38	72.38	...	75.35	75.35
21. Emergent flood protection works in Eastern & Western Sectors	7601	...	3.00	3.00	...	3.00	3.00	...	3.00	3.00	...	3.00	3.00
22. <i>Other Schemes of Flood Control</i>													
22.01 Flood Forecasting	2711	17.38	...	17.38	33.00	...	33.00	22.00	...	22.00	34.00	...	34.00
22.02 River Management Activities and Works related to border Areas	2711	59.46	...	59.46	19.00	...	19.00	15.00	...	15.00	14.00	...	14.00
	3601	100.00	...	100.00	100.00	...	100.00	100.00	...	100.00	100.00	...	100.00
	<i>Total</i>	<i>159.46</i>	<i>...</i>	<i>159.46</i>	<i>119.00</i>	<i>...</i>	<i>119.00</i>	<i>115.00</i>	<i>...</i>	<i>115.00</i>	<i>114.00</i>	<i>...</i>	<i>114.00</i>
22.03 Infrastructure Development	4711	4.25	...	4.25	14.00	...	14.00	10.50	...	10.50	13.00	...	13.00
<i>Total- Other Schemes of Flood Control</i>		<i>181.09</i>	<i>...</i>	<i>181.09</i>	<i>166.00</i>	<i>...</i>	<i>166.00</i>	<i>147.50</i>	<i>...</i>	<i>147.50</i>	<i>161.00</i>	<i>...</i>	<i>161.00</i>
<b>Total-Flood Control</b>		<b>181.09</b>	<b>71.53</b>	<b>252.62</b>	<b>166.00</b>	<b>59.74</b>	<b>225.74</b>	<b>147.50</b>	<b>75.38</b>	<b>222.88</b>	<b>161.00</b>	<b>78.35</b>	<b>239.35</b>
23. <i>Provision under schemes for the benefit of North Eastern Region and Sikkim</i>													
23.01 Research and Development Programme	2552	...	...	...	0.50	...	0.50	0.50	...	0.50	0.30	...	0.30
23.02 Pagladia Dam Project	2552	...	...	...	0.50	...	0.50	0.01	...	0.01	0.01	...	0.01
23.03 Development of Water Resources Information System	2552	...	...	...	1.00	...	1.00	1.00	...	1.00	1.00	...	1.00
23.04 Ground Water Management and Regulation	2552	...	...	...	3.00	...	3.00	3.00	...	3.00	3.00	...	3.00
23.05 Investigation Water Resources Development Scheme	2552	...	...	...	2.00	...	2.00	2.00	...	2.00	2.00	...	2.00
23.06 Flood Forecasting	2552	...	...	...	3.00	...	3.00	3.00	...	3.00	2.00	...	2.00
23.07 River Management Activities and Works related to Border Areas	2552	...	...	...	80.00	...	80.00	73.49	...	73.49	74.00	...	74.00

(In crores of Rupees)

	Major Head	Actual 2009-2010			Budget 2010-2011			Revised 2010-2011			Budget 2011-2012			
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
23.08	Infrastructure Development	4552	...	...	2.00	...	2.00	2.00	...	2.00	2.00	...	2.00	
<i>Total- Provision under schemes for the benefit of North Eastern Region and Sikkim</i>			...	...	92.00	...	92.00	85.00	...	85.00	84.31	...	84.31	
<b>Other Transport Services</b>														
24.	Farakka Barrage Project	3075	...	39.64	39.64	...	40.63	40.63	...	42.10	42.10	...	43.59	43.59
		5075	68.95	...	68.95	82.00	...	82.00	62.00	...	62.00	70.40	...	70.40
		5075	...	-0.95	-0.95	...	-1.20	-1.20	...	-1.20	-1.20	...	-1.20	-1.20
	<i>Net</i>		68.95	38.69	107.64	82.00	39.43	121.43	62.00	40.90	102.90	70.40	42.39	112.79
<b>Grand Total</b>			<b>492.29</b>	<b>457.46</b>	<b>949.75</b>	<b>700.00</b>	<b>405.00</b>	<b>1105.00</b>	<b>560.00</b>	<b>489.36</b>	<b>1049.36</b>	<b>720.00</b>	<b>502.73</b>	<b>1222.73</b>
	Head of Dev	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	
<b>C. Plan Outlay</b>														
1.	Major and Medium Irrigation	12701	169.50	...	169.50	247.50	...	247.50	178.10	...	178.10	273.89	...	273.89
2.	Minor Irrigation	12702	72.75	...	72.75	112.50	...	112.50	87.40	...	87.40	130.40	...	130.40
3.	Flood Control and Drainage	12711	181.09	...	181.09	166.00	...	166.00	147.50	...	147.50	161.00	...	161.00
4.	Other Transport Services	13075	68.95	...	68.95	82.00	...	82.00	62.00	...	62.00	70.40	...	70.40
5.	North Eastern Areas	22552	...	...	...	92.00	...	92.00	85.00	...	85.00	84.31	...	84.31
<b>Total</b>			<b>492.29</b>	...	<b>492.29</b>	<b>700.00</b>	...	<b>700.00</b>	<b>560.00</b>	...	<b>560.00</b>	<b>720.00</b>	...	<b>720.00</b>

1. **Secretariat Economic Services:** Non Plan provision is for secretariat expenditure of the Ministry.

2. **Central Water Commission:** The provision is made for Central Water Commission and National Water Academy to cover the activities related to training to in-service engineers from State and Central organizations in the area of Water Resources Development and particularly Integrated River Basin Planning and Management and other subjects related to Water Resources Development and Management.

6. **Research and Development Programme for Water Sector:** The objectives of the scheme are (i) To find practical solutions to water resources related problem of the country and to improve available technology and engineering methods and procedures and in particular to take up research studies for improvement of the efficiency of the existing facilities (ii) To create and upgrade research facilities and equipments of the premier organization at National level to keep pace with the present technology (iii) To support research works to be taken up by the various institutions in the country in the water sector.

9. **Development of Water Resources Information System:** The management of water resources is a highly complex task that involves multidisciplinary domains including data acquisition, numerical modeling, optimization, data warehousing, and the analysis of socio-economic,

environmental and legal issues. In view of water's vital role 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 play a vital role in achieving optimal utilization of the resources. The objective of the scheme is to develop a water resources system and made it fully operational at the earliest. Water Resources Information System dedicated to the management of water resources.

10. **Infrastructure Development:** This scheme will include the activities related to Lands & Building and IT Development along with activities related to (i) Land and Buildings of CWC, (ii) Lands and Buildings of CGWB, (iii) IT Development of MoWR and (iv) Up-gradation and Modernization of Computerization and Information System of CWC.

11. **Hydrology Project:** 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 Puducherry. 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.

12. **Investigation of Water Resources Development Scheme:** To carry out the activities related to survey, field investigation, preparation of Pre-feasibility/Feasibility Reports (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.

13. **Information, Education and Communication:** The main objectives of the scheme are (i) To promote advocacy on the tenets of National Water Policy for adopting in projects setting, learning, documenting and dissemination. (ii) To create awareness among the people of necessity 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 enable the public to have direct access to various database on techniques of conservation of water. (vi) To make conservation of water a mass campaign and to induce population to voluntarily adopt various water saving measures. (vii) To make special efforts to reach women and children through specially targeted messages. ₹ 2.00 crore has been kept for TSP component of the scheme.

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

15. **River Basin Organization/Authority:** The objective of 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 stake-holders.

16. **Central Ground Water Board:** Central Ground Water Board (CGWB) is a subordinate office of Ministry of Water Resources and its headquarter is located at Fairdabad, Haryana. The provision under this head is made for meeting mainly establishment related expenditure. The important activities of CGWB are ground water management studies, ground water monitoring, geophysical studies, exploratory drilling, artificial recharge and rain water harvesting studies, regulation of ground water development etc.

17. **Rajiv Gandhi Institute of Training and Research:** This scheme will cover 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.

18. **Ground Water Management and Regulation:** The main objectives of the scheme are (i) To carry out ground water management studies to design area specific ground water development and management plan, (ii) To carry out ground water exploration aided by drilling to delineate ground water worthy areas, (iii) To periodically assess ground water resources to revise the methodology of the country, (iv) To monitor ground water levels and quality from ground water observation wells, (v) To carry out demonstrative artificial recharge and rain water harvesting studies to develop area specific methodologies, (vi) Establishing, updation of data storage and information system to store, process and disseminate ground water data, (vii) Regulate and control ground water development in coordination with

State Government Organization, (viii) To carry out geophysical studies through surface and sub surface methods to delineate potential aquifers and pinpointing of suitable sites for ground water exploration, artificial recharge, (ix) Coordinate with State Governments with a view to establish benchmark methodologies for ground water studies, (x) Promote awareness and water quality consciousness, (xi) Develop linkages with Science Institutions on aspects of ground water saving and sharing, (xii) Assessment of ground water quality for determining their suitability for various types of uses including use for agriculture, industrial and allied purposes, (xiii) Preparation of Reports, Maps, Ground Water Atlas and Brochures for uses by planners and administrators and (xiv) Strengthening of infrastructure by way of procurement of state of the art equipment which will aid in achieving the above objectives. ₹ 9.60 crore has been kept for TSP component of the scheme.

22.01. **Flood Forecasting:** To strengthening and improvement of the flood forecasting and inflow forecasting network in India and development of forecast information system.

22.02. **River Management Activities in Border Areas:** In view of the international issues involved, it is necessary to take up river management activities on priority in a systematic method which include hydrological observation, investigation and necessary flood control, measures in cooperation with neighbouring countries wherever necessary.

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

24. **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'.