

Grant No. 43

47 - Ministry of Water Resources

Medium Terms Expenditure

(Taka in Thousands)

Description	Budget 2017-18	Projection	
		2018-19	2019-20
Non-Development	1251,73,00	1376,90,00	1514,59,00
Development	4674,71,00	5142,18,00	5656,40,00
Total	5926,44,00	6519,08,00	7170,99,00
Revenue	1634,90,50	1646,90,00	1774,43,78
Capital	4291,53,50	4872,18,00	5396,55,22
Total	5926,44,00	6519,08,00	7170,99,00

1.0 Mission Statement and Major Functions**1.1 Mission Statement**

Ensure sustainable development through balanced and integrated management of water resources for the sake of lives and livelihood of the people.

1.2 Major Functions

- 1.2.1 Formulate national policy and provide technical assistance for irrigation, flood control, removal of water logging, improvement of drainage systems, protection from river erosion, prevention of salinity and desertification;
- 1.2.2 Execute all activities related to flood forecasting and warning, flood control infrastructures, identification of causes of flood and assessment of the damage done by flood;
- 1.2.3 Conduct basic and applied researches on river basin management and development, flood control infrastructures and conduct hydrological survey for data collection;
- 1.2.4 Mobilize international co-operation for flood control and development of water resources;
- 1.2.5 Excavate/re-excavate and maintain canals excavated under canal excavation program, construct, maintain and operate water control infrastructures;
- 1.2.6 Deal with the issues related to land conservation and reclamation, expansion of drainage system, removal of water logging and development of Haor and Wetlands areas as well;
- 1.2.7 Deal with the issues related to construction of water reservoirs, embankments and barrages;
- 1.2.8 Carry out dredging to enhance the water conservation capacity of the rivers and protection against erosion;

2.0 Medium Term Strategic Objectives and Activities

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
1. Ensure balanced, integrated and sustainable management of water resources.	<ul style="list-style-type: none"> Excavation and re-excavation of Canals River dredging Construction and repair of irrigation structure 	<ul style="list-style-type: none"> Bangladesh Water Development Board (BWDB)

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
	<ul style="list-style-type: none"> • Construction of Rubber Dams and barrages • Formation and registration of Water Management Group, training and transfer the responsibility of service charge collection to the Group 	
	<ul style="list-style-type: none"> • Conduct feasibility study 	<ul style="list-style-type: none"> • Bangladesh Water Development Board • Department of Bangladesh Haor and Wetlands Development • Water Resources Planning Organization
	<ul style="list-style-type: none"> • Update the National Water Management Plan(NWMP) • Act as Clearing House • Update national data on water Resources. • Monitoring the programs in Coastal areas. 	<ul style="list-style-type: none"> • Water Resources Planning Organization
	<ul style="list-style-type: none"> • Collection, analysis and preservation of data and information regarding water resources 	<ul style="list-style-type: none"> • Water Resources Planning Organization • Joint River Commission.
	<ul style="list-style-type: none"> • Sample test in laboratory 	<ul style="list-style-type: none"> • River Research Institute
	<ul style="list-style-type: none"> • World Water Day celebration 	<ul style="list-style-type: none"> • Secretariat
2. Flood control and protection of river bank from erosion	<ul style="list-style-type: none"> • Construction and repair of flood control and coastal embankment • Excavation and re-excavation of drainage canals • Construction, repair and rehabilitation of flood control and drainage infrastructures • Protection of river bank in order to protect important infrastructures and territorial land from erosion of border rivers 	<ul style="list-style-type: none"> • Bangladesh Water Development Board
3. Development of Haor and Wetlands and water management of Coastal region	<ul style="list-style-type: none"> • Development of Haor and Wetlands 	<ul style="list-style-type: none"> • Department of Bangladesh Haor and Wetland Development
	<ul style="list-style-type: none"> • Construction of cross dams in the coastal area in order to reclaim land from the sea and river. • Distribution of reclaim land for the development of habitat • Protection of costal wetland and the Sundarban from salinity. 	<ul style="list-style-type: none"> • Bangladesh Water Development Board

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
4. River Basin Management	<ul style="list-style-type: none"> Flood forecasting and Warning 	<ul style="list-style-type: none"> Bangladesh Water Development Board
	<ul style="list-style-type: none"> Conduct study of Physical and mathematical models 	<ul style="list-style-type: none"> River Research Institute
	<ul style="list-style-type: none"> Arrangement of bi-lateral and multi-lateral meetings Receive data regarding trans boundary rivers. Joint Flow observation. 	<ul style="list-style-type: none"> Joint River Commission

3.0 Poverty and Gender Reporting

3.1 Impact of Strategic Objectives on Poverty Reduction and Women's Advancement

3.1.1 Ensure balanced, integrated and sustainable management of water resources

Impact on Poverty Reduction: Marginal and poor farmers along with other beneficiaries will be able to increase agricultural production by using the irrigation water available due to excavation of 186 km irrigation canals. This will also augment their income. The irrigation facility and excavation/re-excavation of canal will create employment opportunities for the poor. Construction of 292 irrigation structures, repair and rehabilitation of 838 irrigation structures and dredging of 456 km river will also have a positive impact on the marginal farmers along with other beneficiaries. These activities will create employment opportunities for the poor communities. It is expected that the projects which will be implemented during the next 3 years will create about 15 crore man-days employment opportunities.

Impact on Women's Advancement: Excavation/Re-excavation of canals/river, irrigation programme by Bangladesh Water Development Board will create employment opportunities for 1.70 crore man-days by involving rural women. As a result agriculture production will increase which will in turn, enhance financial and social security of women.

3.1.2 Flood control and River Bank protection

Impact on Poverty Reduction: Drainage systems will be improved through construction of 250 km flood control embankment, repair and rehabilitation of 1623 km. of flood control embankment, excavation and re-excavation of 1748 km of drainage canal and construction and repair of 821 flood control structures (sluice/regulator). This will reduce damage to the crops and property of the poor people. The above activities will create employment opportunities for the poor people. In order to protect land from river erosion, 272 km of river bank protection work will be done by involving poor people. These activities will create employment opportunities for them, protect their properties and make a positive impact on poverty reduction.

Impact on Women's Advancement: Activities for the development of flood control and drainage systems, construction, repair and rehabilitation of flood control embankments, excavation and re-excavation of drainage canals and flood control structures will protect their property which will ensure their social security. These activities will also create employment opportunities for women.

3.1.3 Development of Haor and wetlands and water management of Coastal region

Impact on Poverty Reduction: Reclamation of land from sea by implementation of Nijhum Island and Cross Dam Project in Hatiya Upazila of Noakhali District and the activities to protect wetland and the Sundarban from salinity will create employment opportunities for the poor. Re-claimed land from the sea will be distributed properly among the landless poor. About 20,000 families will be rehabilitated with 1.50 acres of reclaimed land each through implementation of CDSP-4 project. Besides, poor men and women will be able to protect their lives and property during cyclone by taking shelter in the cyclone shelters in the

coastal areas. With the implementation of the projects, land will be protected from salinity. This will increase the fertility of the coastal land and make a positive impact on poverty alleviation. Participation of rural marginal farmers in the Water Resources Management Groups and in other related common resources will be ensured. Involvement of the water management groups in the planning, implementation and management activities of water management development project will be ensured, and management responsibilities will be transferred to the groups after one year of completion of the project. The responsibility of collecting service charge of the Teesta Project given to the rural-end farmers along with the W.M.O. They will be imparted training on water management. As result, opportunity for income generation will be created from them. Poor people will be benefitted from the implementation of "Landless Contracting Society (LCS)Policy" adopted by the Water Development Board in earth work for implementation of the project.

Impact on Women's Advancement: Involvement of women in water management and training in water resource management will be ensured. As per guidelines of water management, 33% of total members of water management group must be women. This will promote women's, empowerment and augment their income. 25% of the earth-work of BWDB's project will be executed by women under LCS which will enhance their financial solvency. In FY 2015-16, ownership of 45% to 50% of khas land reclaimed in different irrigation projects will be distributed through associated implementing agencies. Social security of the destitute women will be ensured by such distribution of reclaimed land in coastal area. The houses being constructed in the island and wetland area will also be distributed among the destitute women. Their involvement in "protection of river banks from erosion" projects will be increased. All these activities will create positive impact on women development. Gender issues will be resolved by implementing ongoing projects which have been started for improvement of the livelihood of the people of haor area. Women's participation in economic and social activities in development of haor and wetland area will also enhance their development.

3.1.4 River Basin Management

Impact on Poverty Reduction: If the availability of water is increased by water basin management, the poor farmers will be able to increase their productivity by using increased irrigation facility. As a result, their income will be augmented and it will make a positive impact on poverty reduction.

Impact on Women's Advancement: There is no direct impact.

3.2 Poverty Reduction and Women's Advancement Related Spending

(Taka in Thousands)

Particulars	Budget 2017-18	Projection	
		2018-19	2019-20
Poverty Reduction	4524,42,93	5421,52,13	6160,27,92
Gender	2729,39,20	3804,44,57	4431,15,39

4.1 Priority Spending Areas/Program

Priority Spending Areas/Program	Related Strategic Objectives
<p>1. Excavation/Re-excavation of canals, construction and maintenance of infrastructures to provide irrigation facilities to arable land: Although rivers and canals are the main sources of water for irrigation, they are gradually being silted up. In this situation, necessity of the excavation and re-excavation of the rivers and canals has become indispensable. Accordingly, excavation and re-excavation of rivers and canals, construction and maintenance of the infrastructures have been given the highest priority.</p>	<ul style="list-style-type: none"> Ensure balanced, integrated and sustainable management of water resources.
<p>2. Undertaking repair, modification, re-construction and development of existing embankment, infrastructures; construction and maintenance of new embankments, and forestation in coastal areas:</p>	<ul style="list-style-type: none"> Flood control and protection of town from erosion

Priority Spending Areas/Program	Related Strategic Objectives
For protection of human lives, forests, fisheries, animals and valuable resources from natural calamities such as storms, floods, deluges, high tides etc., re-construction, repair and modification of existing coastal embankments, construction of new embankment and forestation program in the coastal areas have been accorded 2 nd priority.	
<p>3. Construction and maintenance of flood control embankments to protect economically important areas, towns and establishments, human life, property and agricultural crops:</p> <p>Due to river erosion, the existence of many important cities e.g Chandpur, Sirajganj of the country is at stake. This has been causing a heavy economic loss to the country. In order to protect the country from this loss, Ministry of Water Resources has taken the responsibility for protection of economically important area, cities/towns and establishments, life and property of people, crop and agricultural land etc. To ensure normal life and sustainable economic development in the flood affected areas, construction and maintenance of flood control embankment have been given 3rd priority.</p>	<ul style="list-style-type: none"> Haor and Wetland Development and Coastal area water management.
<p>4. Conducting studies to prepare water resources planning/Master plan:</p> <p>The availability of reliable water resources data is essential to prepare, implement and manage different development activities in connection with flood control, drainage systems and construction of embankments. To ensure availability of necessary data, surveys are carried out on various aspects of water resources. For this reason, the above programs have been given 4th priority.</p>	<ul style="list-style-type: none"> Study Programme
<p>5. Reclaiming the fair share of the water of border and common rivers:</p> <p>Establishment of the rights of fair share of water of border and common rivers entails bi-lateral and multilateral programs to collect data and conduct research on climate change, alignment of rivers, floods and draughts. This program, therefore have been given 5th priority.</p>	<ul style="list-style-type: none"> River Basin Management

4.2 Medium Term Expenditure Estimates and Projection (2017-18 to 2019-20)

4.2.1 Expenditure by Department/Agencies/Operational Units

(Taka in Thousands)

Description	Budget	Revised	Budget	Projection	
	2016-17		2017-18	2018-19	2019-20
Bangladesh Water Development Board	4562,17,08	4689,50,04	5732,30,39	6290,56,21	6920,45,22
Joint River Commission	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60
WARPO	10,73,31	11,73,31	20,90,39	59,76,90	64,62,83
River Research Institute	12,43,00	14,45,00	37,67,30	44,19,95	50,13,25
Secretariat	68,52,63	8,60,75	98,73,90	83,83,53	91,99,16
International Organisations	6,00	6,00	6,60	7,26	7,99
Department of Bangladesh Haor and Jolabhumi Development	52,46,31	26,81,11	29,29,44	32,43,59	34,67,95
Grand Total :	4713,17,00	4755,57,93	5926,44,00	6519,08,00	7170,99,00

4.2.2 Expenditure by Economic Group Wise

(Taka in Thousands)

Economic Group	Description	Budget	Revised	Budget	Projection	
		2016-17		2017-18	2018-19	2019-20
	Revenue Expenditure					
4500	Pay of Officers	3,52,27	3,30,00	4,76,58	10,47,80	12,20,30

Economic Group	Description	Budget	Revised	Budget	Projection	
		2016-17		2017-18	2018-19	2019-20
4600	Pay of Establishment	99,37	79,00	1,29,90	6,26,80	6,53,28
4700	Allowances	2,75,21	6,55,54	4,37,09	3,86,36	4,19,58
4800	Supplies and Services	441,60,83	326,52,66	370,11,91	270,65,91	262,94,58
4900	Repairs and Maintenance	25,16,85	23,47,16	17,82,36	5,40,45	3,08,37
5900	Grants in Aid	933,78,06	955,90,07	1236,46,06	1350,15,42	1485,39,68
6100	Contributions to International Organisation	6,00	6,00	6,60	7,26	7,99
6300	Pensions and Gratuities	9,64,91	0	0	0	0
	Total : - Revenue Expenditure	1417,53,50	1316,60,43	1634,90,50	1646,90,00	1774,43,78
	Capital Expenditure					
6800	Acquisition of Assets	253,77,50	73,91,33	311,03,58	193,02,25	140,25,22
6900	Acquisition/Purchase of Land & Landed Properties	132,50,00	159,66,55	396,86,53	208,75,00	109,70,00
7000	Construction and Works	2908,26,00	3205,29,62	3576,90,39	4468,30,75	5145,50,00
7400	Advances to Government Employees	10,00	10,00	10,00	10,00	10,00
7900	Development Import Duty and VAT	0	0	3,48,00	2,00,00	1,00,00
7980	Capital Block Allocation & Misc. Capital Expen.	1,00,00	0	3,15,00	0	0
	Total :- Capital Expenditure	3295,63,50	3438,97,50	4291,53,50	4872,18,00	5396,55,22
	Grand Total :	4713,17,00	4755,57,93	5926,44,00	6519,08,00	7170,99,00

5.0 Key Performance Indicator (KPIs)

Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
			2015-16		2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8	9	10
1. Coverage of flood free and drainage areas (Flood free and drainage areas 10.47 lakh hectare)	1	Percentage	80.70	80.70	80.94	80.85	81.80	82.25	82.95
2. Coverage of flood free zone and drainage improvement areas (Flood free and drainage areas 110 lakh hectare)	2	Percentage	55.95	55.95	56.81	56.00	57.21	58.00	58.90
3. Protection of important establishments									
a. Coverage of flood free area in haor (12.00 lakh hector)	3	Percentage	10.20	10.20	10.45	10.35	11.00	11.25	11.50
b. Coverage of flood free zone in other areas (106 hector)	2		45.75	45.65	46.36	45.90	46.21	46.75	46.95
4. Coverage of Salinity control areas (26.37 lakh hectare of salinity controllable areas)	3	Percentage	50.80	50.80	51.20	51.35	51.80	52.10	52.75
5. River basin management	4	Percentage	100	84	100	100	100	100	100

6.0 Recent Achievements, Activities, Output Indicators and Targets and Expenditure Estimates of the Departments/Agencies

6.1 Secretariat

6.1.1 Recent Achievements: The ministry is working with a view to implementing the objective of vision 2021, Delta Plan 2100, and 7th Five Year Plan. Recently Bangladesh is being treated worldwide with importance for achieving the Sustainable Development Goals (SDG). Honorable Prime Minister is included as one of the respected members of the High Level Panel on Water (HLPW). The World Water Day is observed on 22nd march every year in accordance with the selected slogan of the United Nations. National Water Policy

2013 has been promulgated. Bangladesh Haor and Water Land Development Board has been promoted to directorate..

6.1.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16		2016-17	2017-18	2018-19	
1	2	3	4	5	6	7	8	9	10	11
1. World Water Day	number	1	year	1	1	1	1	1	1	1

6.1.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	8
Operational Units							
4701-0001 - Secretariat	1	11,11,49	18,14,63	8,60,75	13,23,90	24,23,73	26,43,38
4706-4353 - ICID	1	2,50	2,75	2,75	3,00	3,20	3,40
4706-4355 - INWARDAM	1	3,50	3,25	3,25	3,60	4,06	4,59
Total : Operational Units		11,17,49	18,20,63	8,66,75	13,30,50	24,30,99	26,51,37
Total : Non Development		11,17,49	18,20,63	8,66,75	13,30,50	24,30,99	26,51,37
Approved Projects							
4701-5010 - Block allocation for unapproved projects.	1	0	50,38,00	0	85,50,00	59,59,80	65,55,78
Total : Approved Projects		0	50,38,00	0	85,50,00	59,59,80	65,55,78
Total : Development		0	50,38,00	0	85,50,00	59,59,80	65,55,78
Total :		11,17,49	68,58,63	8,66,75	98,80,50	83,90,79	92,07,15

6.2 Bangladesh Water Development Board

6.2.1 Recent Achievements: With the aim of attaining food self-sufficiency different programs for construction of flood control embankment, excavation and reescalation of drainage canal, construction of necessary infrastructure and irrigation facilities have been implemented. As a result, 8.44 lakh hectares of total 10.47 lakh hectares arable land have been brought under irrigation coverage in FY 2015-16. During the same period, out of 110 lakh hectare, 61.545 lakh hectare lands have been made flood-free. Due to construction of new embankments, repair and maintenance of existing ones and forestation programs, out of a total of 26.37lakh hectare land under salinity threat in the southern coastal areas, 13.39 lakh hectares was protected from risk of salinity intrusion in 2015-16. The causes of river bank erosion, siltation on river bed and water logging can be attributed to the climate change. To resolve these problems, a 15 year project called "Capital Dredging and River Management" has been undertaken. Till to date, 286.00 km. river bed of different rivers has been dredged. Under climate change trust fund, 51 projects have been implemented with a cost of Taka 47990.64 lakh while the implementations of another 79 projects are under implementations with cost of Tk.60991.56 lakh. 16.5 Sq. km. land reclaimed after Construction of 4 Nos. of Cross bar's in the river Jamuna which creates opportunities to increase the production of grains. By Implementing the CDSP project a total no of 11298 landless families are allotted 15903 acres of land. By this time CDSP-4 project has allotted 8000.40 acres of land to 6667 families. 300 hectors of land were regained from the downstream closure of Musapur of Laxmipur District.

6.2.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16		2016-17	2017-18	2018-19	
1	2	3	4	5	6	7	8	9	10	11
1. Excavation and re-excavation of irrigation canal	Excavated canals	1	KM	59	18	59	21	61	60	65
	Re-excavated canal			112	75	113	114	117	120	85
2. River dredging	River dredging	1	KM	140	140	151	151	156	150	150

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16	2016-17	2017-18	2018-19		
1	2	3	4	5	6	7	8	9	10	11
3. Construction and repair of irrigation structures	Constructed structures	1	Number	98	36	113	35	117	115	60
	Repaired structures			355	75	362	14	373	400	65
4. Construction of Rubber Dams and Barrages	Constructed Barrages and Rubber Dams	1	Number	1	0	1	0	1	1	1
5. Formation and registration of Water Management Group, arrange training for them and transfer the responsibility of collection service charge to the Group	Formed Group	1	Number (thousand)	5.57	.347	5.68	0.280	5.85	5.90	.250
	Trained people			1440	0.1440	1500	0.1420	1520	1550	1500
	Transferred responsibility			300	0.140	250	0.11	260	280	1500
6. Conduct feasibility study	Completion of survey	1	Number	2	2	4	1	6	5	7
7. Construction and repair of flood control and coastal embankment	Constructed embankment	2	KM	74	57	82	43	84	86	80
	Repaired embankment		KM (thousand)	0.482	.426	0.518	.290	.533	0.540	.550
8. Excavation and re-excavation of drainage canals	Excavated and re-excavated of drainage canals	2	KM	625	302	629	324	648	650	450
9. Construction, repair and rehabilitation of flood control and drainage infrastructures	Constructed and repaired infrastructures	2	Number	239	238	263	132	271	290	260
10. Protection of river bank in order to protect important infrastructures and save territorial land from erosion of border rivers	Protected of river bank	2	KM	75	75	96	62	99	98	75
11. Construction of cross dams in the coastal area in order to reclaim land from the sea and rivers	Constructed cross dams	3	Number	2	1	3	2	4	2	2
	Reclaimed land		Acre	30	16	40	300	60	50	60
12. Distribution of reclaim land for the development of habitat	Development of habitat	3	Number	4000	2000	4000	2000	5000	3000	2500
13. Protection of costal wetland and the Sundarban from the salinity	Reduction of salinity	3	PPT	20	20	20	20	20	20	20
14. Flood Forecasting and Warning	Forecasting and Warning	4	Number	180	184	180	156	156	156	156

6.2.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	8
Operational Units							
4705-3281 - Bangladesh Water Development Board	1-14	891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00
Total : Operational Units		891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00
Total : Non Development		891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00
Approved Projects							
4705-5000 - Rehabilitation of Polder No. 36/1 in Bagerhat District. (01/12/2014-30/06/2019)	9-10	1,00,00	30,00,00	7,50,00	60,00,00	50,00,00	40,00,00
4705-5001 - Protection of Embankment of Polder No. 56/57 from erosion of the Meghna river at Daulatkhan & Borhanuddin Upazila in Bhola District.(01/01/2016-30/06/2020) Approved	9-10	87,90	40,00,00	40,00,00	80,00,00	75,00,00	70,00,00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
4705-5002 - Protective work of left bank of Padma River from Aworangabad to Braha Bazar under Dohar Upazila of Dhaka District (01-01-2015-30/06/2018) Approved	9-10	0	50,00,00	50,00,00	90,00,00	50,00,00	0
4705-5003 - Bank Protective work against Erosion of the Meghna river at rajapur and east ilisha union of Bhola sadar upazilla in bhola district.	9	0	25,00,00	75,00,00	65,00,00	50,00,00	50,00,00
4705-5004 - Strengthening Hydrological Information Services and Early Warning Systems (Component: B) (01/01/2016-30/06/2017)	14	0	6,68,00	62,00	0	0	0
4705-5005 - Rehabilitation of Kashimpur Pump House under Manu River Irrigation Project (01/05/2016-30/06/2018)	1	0	5,00,00	3,00,00	65,16,00	16,10,00	0
4705-5006 - River Bank Protection work for protection of Tajmuddin upazilla sadar in Bhola District from erosion of the Meghna river (01/07/2016-30/06/2019)	9	0	10,00,00	40,00,00	75,00,00	70,00,00	60,00,00
4705-5007 - Strengthening of Dumping Zone of Protective work of Jamalpur town protection project in Jamalpur sadar upazilla of Jamalpur District (01/02/2016-30/06/2018)	9-10	0	2,00,00	8,00,00	12,24,00	0	0
4705-5008 - Temporary Bank Protective work along the left Bank of the Padma at West Narisha Bazar & Meghula Bazar at Dohar Upazila in Dhaka (01/05/2016-30/06/2017) Approved	7,10	0	0	9,00,00	1,00,00	0	0
4705-5009 - Protection of Charfession Pourasava Town from the Erosion of Meghna River in Bhola District	7,9	0	0	40,00,00	70,00,00	75,00,00	50,00,00
4705-5012 - Bank Protective work with CC block along the both bank of Shialjani khal from 0.00m to 2000.00m at Mohangonj Municipal area of Mohangonj up (01/07/2016-30/06/2018) Approved	10	0	0	11,00,00	4,00,00	0	0
4705-5013 - Bank Protection works along the teesta right bank in Gangachara and Rangpur Sadar Upazila in district Rangpur (01/04/2016-30/06/2018) Approved	10	0	0	25,00,00	90,00,00	50,00,00	0
4705-5014 - Protection of Sonaikandi to Bolonpur area in Rajshahi City Corporation from erosion of the Padma River (01/07/2016-30/06/2017) Approved	10	0	0	10,00,00	85,00,00	50,35,00	0
4705-5015 - Drainage Improvement and sustainable water Management of Bhairab River basin (01/07/2016-30/06/2021) Approved	8	0	0	1,00,00	45,00,00	50,00,00	60,00,00
4705-5016 - Rehabilitation of G.K. Irrigation Project	1-2	53,00,00	35,00,00	35,00,00	4,50,00	0	0
4705-5017 - Protection of Bank from erosion of Atrai River in 3 nos. Area in Upazila Patnitala and Re-Excavation of Plashbari Khal in Upazila Manda (01/04/2016-30/06/2018) Approve	8,10	0	0	2,00,00	20,00,00	5,10,00	0
4705-5019 - Drainage Improvement of Dhaka-Narayangonj-Demra (DND) Project (Phase-2) (01/07/2016-30/06/2020) Approve	9	0	0	3,00,00	145,00,00	120,40,00	75,40,00
4705-5022 - Bank Protection work on the right bank of the Matamuhuri river near Alikadam Sena Nibash, Bandarban (01/07/2016-30/06/2018) Approve	10	0	0	3,00,00	19,00,00	0	0
4705-5023 - Re-excavation of Bhadra & Salta River for Removal of Drainage Congestion in Khulna District. (01/07/2016-30/06/2019) Approve	2	0	0	2,00,00	35,00,00	25,00,00	0
4705-5024 - Rehabilitation of BWDB infrastructure for erosion Protection Drainage and Irrigation improvement in the Coastal Area of Polder No. 61/1 (Sitakunda), (Mirersarai) & 72 (Sandwip) in Chittagong District (01/07/2016-30/06/2018) Approve	1,3,10	0	0	6,00,00	52,54,00	35,00,00	0
4705-5025 - Rehabilitation of Coastal Polder No. 62 (Patenga), 63/1A (Anowara) & 63/1B (Anowara & Patiya) in Chittagong District (01/05/2016-30/06/2020) Approve	4	0	0	10,00,00	70,00,00	50,62,00	40,32,00

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
4705-5026 - Protection of Dhaka-Mawa-Bhanga-Khulna National Highway Adjacent to Hazi Shariatullah Bridge From the Erosion of Arial Khan River. (01/07/2016-30/06/2019) Approve	10	0	0	9,20,00	20,00,00	15,00,00	0
4705-5027 - Rajoir-Kotalipara Flood Control, Drainage and Irrigation Project (01/08/2016-30/06/2019) Approve	3,9	0	0	2,00,00	35,00,00	25,75,00	0
4705-5029 - Protective Work on The Right Bank of Bhairab River at a Length of K. M. 0.430-0.895 Total 465.00m at Bnstitumir. (01/07/2016-30/06/2018) Approve	10	0	0	1,00,00	16,16,00	12,00,00	0
4705-5031 - Mirsarai Bangladesh Economic Zone Area (BEZA) Flood Control, Road Cum Embankment Protection & Drainage Project in Chit (01/07/2016-30/06/2019) Approved	7	0	0	6,00,00	245,00,00	2642,30,20	3846,88,22
4705-5032 - Bank Protective Work Including Dredging of Char Along the left Bank of the Madhumati River at Dignagar/Pabanbeg Bazar Alfadanga Upazila in Faridpur District. (01/01/2017-30/06/2018) Approved	2,10	0	0	4,00,00	15,00,00	11,00,00	0
4705-5033 - Flood Control & Drainage Improvement Project for Removal of Drainage Congestion in Noakhali Area.(01/07/2015-30/06/2020) Approve	9	0	0	90,00	40,00,00	52,27,00	76,72,00
4705-5034 - Bakkhali River Flood Control, Drainage, Irrigation & Dredging Project(1st Phase) in Cox's Bazar District.	2,3,9	0	0	1,00,00	55,90,00	30,00,00	25,00,00
4705-5041 - Re-construction of Embankment with Protective work in polder 68 of Shahaparir Dwip (Sea-dyke) in Upazila-Teknaf & District-Cox's Bazar	7	0	0	1,00,00	45,00,00	30,00,00	0
4705-5042 - Re-Excavation of Sureswar Khal & Drainage Project (01/07/2016-30/06/2018) Approved	1	0	0	1,00,00	35,00,00	2,60,00	0
4705-5043 - Construction of Combined Water Control Structure over Punarhaba Rver for Supplementary Irrigation (01/01/2017-30/06/2020) Approved	3	0	0	1,00,00	20,00,00	15,00,00	0
4705-5044 - Jabaibel flood control, drainage & irrigation project in upazilla Saphar and Porsha under Naogaon District (01/01/2017-30/06/2020) Approved	3,7	0	0	1,00,00	20,00,00	10,00,00	5,00,00
4705-5046 - Construction of " Pani Bhaban"	5	29,91,00	50,00,00	50,00,00	70,00,00	11,52,00	5,26,00
4705-5047 - Bank Protection work of Korotoya river at Nazirganj & Doikhata Chitmahol (former) in Upazila Boda, District Panchagarh (01/07/2016-30/06/2018) Approved	10	0	0	2,00,00	15,00,00	20,00,00	0
4705-5048 - Re-Excavation of Kumar River Project (01/07/2016-30/06/2019) Approved	2	0	0	6,00,00	80,00,00	53,00,00	45,00,00
4705-5049 - Protection of Ramneoz Launchghat area of Monpura upazila From the erosion of Meghna River and (01/01/2017-30/06/2019) Approved	10	0	0	10,00,00	80,00,00	50,26,00	40,16,00
4705-5050 - Re-Excavation of 83 Rivers/Khals and Increase Navigation of Mongla-Ghasiali Channel in Bagerhat District. (01/12/2016-30/06/2021) Approved	2,1	0	0	2,00,00	75,00,00	70,00,00	50,00,00
4705-5055 - River bank protection along the left & right bank of Dharla river at Goshpara, Dayaltari & Boshtari for the protection of former 119 no Bashkata Chhitmahal area in UZ- Patgram, Dist-Lalmonirhat (01/01/2017-30/06/2019) Approved	10	0	0	1,00,00	15,00,00	8,00,00	0
4705-5057 - Climate Smart Agricultural Water Management Project (CSAWMP) (01/01/2017-31/12/2017) Approved	3	0	0	2,50,00	3,55,00	0	0
4705-5059 - Planning for Flood Management in Bangladesh (Ganges and Brahmaputra Basin)	2,7,9	0	0	0	14,22,00	0	0
4705-5060 - Dredging of The Padma River in Connection with the Protection of the Kuthibari of Great Poet Robindranath Tagore and its adjacent ar	2	0	0	0	20,00,00	0	0

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
4705-5061 - Protection of the both bank of Halda River by Bank Protective Work at different location in Hathazari & Rauzan Upazila in Chittagong	10	0	0	0	60,00,00	0	0
4705-5075 - Strengthening Hydrological Information Services and Early Warning Systems (Component: B) (01/07/2016-30/06/2021) Approved	6,14	0	0	0	25,00,00	0	0
4705-5109 - Protection of Alatuli Area of Chepai Nababgonj District From Padma River Erosion (01/09/2012-30/06/2015)	9	75,12,00	110,00,00	120,00,00	31,50,00	25,00,00	30,00,00
4705-5110 - Protection of Sonahat Bridge and Bhurungamari-Madarganj Road from the Erosion of Dudhkumar River at Bhurungamri Upazila & Bank Revetment work at left bank of Tista River from Gunaigach to Bazras Senior Madrasa at Ulipur Upazila in Kurigram District(01/07/2012 - 30/06/2015)	9	6,00,00	20,07,00	22,51,00	0	0	0
4705-5113 - Protection of Left bank of Padma River from Komorpur of Irshardi Upazila of Pabna District to Sara Jhaudia and Tilacpur-Garipur of Nator District Project (01/07/2012-30/06/2017)	9	55,00,00	95,00,00	118,20,00	0	0	0
4705-5114 - Protection of Boiraghat and Chilmari Port of Chilmari and Ulipur Upazila of Kurigram District from the Erosion of Bhramaputra River (2nd phase) (01/11/2012-30/06/2016)	9	56,00,00	66,00,00	129,50,00	0	0	0
4705-5119 - Bank protection work along the left and right Bank at Different of Karnofuli river, Boalkhali and Raikhali khal in Chittagong District	10	25,00,00	17,46,00	6,00,00	0	0	0
4705-5120 - Bank River Bank protection of Vulnerable Part at lalmohan Upazila Under Bhola District	10	35,00,00	45,00,00	75,00,00	0	0	0
4705-5122 - Rehabilitation of Bhutiar Beel and Barnal-Salimpur-Kolabashukhali Flood Control and Drainage Project Khulna District (Phase-II)	9	36,95,00	62,00,00	60,00,00	70,00,00	0	0
4705-5123 - Blue Gold Program	7	59,15,43	77,21,00	88,03,00	137,60,00	95,55,00	75,05,00
4705-5124 - Coastal Embankment Improvement Project Phase-1	7	149,91,67	450,00,00	225,00,00	400,00,00	72,12,00	66,62,00
4705-5129 - Bhairah River Re-Excavation Project	2	34,98,00	27,60,00	32,20,00	0	0	0
4705-5130 - Flood and Riverbank Erosion Risk Management Investment Program (Tranche-1)	7-11	208,43,12	260,40,00	203,20,00	272,35,00	131,00,00	95,00,00
4705-5131 - Irrigation Management Improvement Project (IMIP) (For Muhuri Irrigation Project)	1-2	17,80,59	92,44,00	50,00,00	68,71,00	59,11,00	56,11,00
4705-5132 - West Gopalganj Integrated Water Management Project	1-13	57,00,00	40,00,00	55,00,00	0	0	0
4705-5133 - Protection of Ramgati and Komol Nagar upazila and adjacent areas under Lakshmpur district from the continuing erosion of Meghna River (Phase-1)	10	45,73,00	60,68,00	50,68,00	35,70,00	25,00,00	0
4705-5134 - Bank Protection of Jamuneswary, Chikny and Charalkata river in Kishorganj, Taraganj and Badarganj Upazila.	10	25,00,00	50,00,00	46,00,00	0	0	0
4705-5135 - Haor Flood and Livelihood Improvement Project (BWDB Part)	1-13	27,53,65	162,00,00	108,00,00	200,00,00	149,70,00	148,70,00
4705-5136 - Protection of Left Bank of Meghna River through Bank Revetment Work at Maniknagar of Nabinagar Upazila in Brahmanbaria District."	10	2,77,25	15,00,00	20,00,00	7,16,00	0	0
4705-5137 - Rehabilitation of Damaged Polders under the District of Cox's Bazar.	9-10	6,00,00	49,57,00	60,00,00	80,00,00	70,00,00	50,00,00
4705-5138 - Rehabilitation of BWDB infrastructures Damaged by Natural Disaster in the Coastal Area of Polder No. 64/1A/64/1B & 64/1C at Banskhalia Upazilla in Chit	9-10	1,00,00	60,00,00	90,00,00	120,00,00	80,00,00	70,00,00
4705-5139 - River Bank Protection work on the both banks of Shangu & Chandkhali river in Chandanaish and Satkania Upazilas of Chittagong District	10	8,00,00	50,00,00	90,00,00	35,00,00	10,00,00	0
4705-5140 - Protection of the Kutihbari and adjacent areas of Great Poet Robindronath Tagore along the right Bank of Padma River.	10	1,43,80	50,00,00	50,00,00	100,00,00	17,99,00	0

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
4705-5141 - Development of Smart Project Monitoring and Management Information Systems (SPMMIS)	1-13	0	1,76,00	1,87,00	0	0	0
4705-5144 - Protection work along the right Bank of Padma River at Philipnagar, Abed's ghat and Islampur are of Daulatpur Upazilla under the District Kusthia	10	25,00,00	50,00,00	61,66,00	0	0	0
4705-5145 - Shibpur Flood Control, Drainage and Irrigation Project under Shibpur Upazila in Narsingdi District.	10	2,00,00	15,00,00	13,00,00	15,00,00	8,00,00	0
4705-5146 - Re-excavation of Titas River (Upper) Under Brahmanbaria District	1	42,00	15,00,00	10,00,00	30,00,00	32,00,00	35,00,00
4705-5147 - Re-excavation of Curzon khal and its adjacent branch khal for irrigation and drainage improvement Project in the district Comilla.	1	50,00	8,25,00	8,25,00	2,52,00	0	0
4705-5148 - Construction of Retired Embankment including Protection of Right Bank of the Jamuna River from Kurnibari to Chandanbaisha at Sariakandi Upazila in Bogra.	10	21,06,00	47,84,00	80,00,00	100,00,00	0	0
4705-5149 - Protection of the Rajshahi Cadet College and adjacent important establishment from the erosion of the Padma River	10	8,00,00	50,00,00	60,00,00	14,00,00	0	0
4705-5150 - Maliara-Bakhhine-Vandergaon Flood Control Drainage and Irrigation Project (2nd Phase) in Upazila-Patiya, District-Chittagong.	1-5	2,25,00	15,00,00	20,00,00	0	0	0
4705-5151 - Southwest Area Integrated Water Resources Planning & Management Project – 2nd Phase	1-14	2,28,93	35,35,00	20,15,00	70,00,00	71,30,00	79,45,00
4705-6000 - *Protection of left bank of the Jumuna river Bahadurabad Ghat to Pingna Bazar and Islampur Upazilla, Harindora in Hargilla under Jamalpur District (01/04/10 - 30/06/13) Approved	9	135,00,00	95,00,00	80,00,00	0	0	0
4705-6010 - Buriganga River Restoration project (01/04/10 - 31/12/13) Approved	5	25,00,00	30,00,00	45,00,00	60,00,00	45,10,00	39,10,00
4705-6020 - * Capital (Pilot) Dredging of River System in Bangladesh (01/03/10 - 30/06/14) Approved	5	90,36,85	95,00,00	94,08,00	0	0	0
4705-7115 - Removal of water logging of kobadak river basin	9	72,30,00	91,83,00	100,35,00	0	0	0
4705-8050 - Emergency Cyclone Recovery and Rehabilitation Project (SIDR/01/08/08 - 31/12/2017) Approved	6	117,37,57	145,80,00	100,80,00	178,60,00	0	0
4705-8150 - Gorai River Restoration Project (2nd phase).	9	30,00,00	40,00,00	81,58,00	0	0	0
4705-8180 - Charfession and Monpura town protection project in Bhola district.	9	30,00,00	30,00,00	45,00,00	0	0	0
4705-8200 - Re-excavation of Connecting Rivers, development of Irrigation Facilities and Fish Culture project of Gazner Beel area under Sujaganagar Upazila in Pabna district.	1,8	82,00,00	60,00,00	52,00,00	60,00,00	45,00,00	0
4705-8250 - * Protection of right bank Jamuna river at Sirajganj sadar and Kazipur upazila in Sirajganj District. (01/10/2010-30/06/2017)	9	120,00,00	80,00,00	80,00,00	0	0	0
4705-8260 - Purchase of Dredgers and Ancillary accessories for dredging Rivers of Bangladesh (01/07/2010-31/12/2016)	5	217,65,00	250,00,00	65,25,00	150,00,00	101,00,00	91,00,00
4705-8310 - Char Development and Settlement Project-4	10	39,10,60	80,00,00	78,94,00	51,07,00	0	0
4705-8636 - Water Management and Improvement Project (WMIP) (1/7/2004-30/6/2016) Approved	4	40,86,61	30,00,00	4,36,00	0	0	0
4705-9120 - New Dakatia & Old Dakatia Little Feni River Drainage Project Part of South Comilla and North Noyakhali Comprehensive Project (01/07/03 - 30/06/17) Approved	7,8	100,00,00	30,00,00	36,92,00	0	0	0
4705-9160 - Teesta Barrage Project (2nd Phase)(1st Unit) (2nd Revised) (01/07/06 - 30/06/2015) Revised Unapproved	3	52,00,00	13,00,00	54,00,00	20,00,00	0	0
4705-9324 - Kalni-Kushiyara River Management Project (01/04/11-30/06/16) approved	5,6,11	30,00,00	40,00,00	40,00,00	50,00,00	44,45,00	45,35,00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
4705-9498 - Tarail Panchuria Integrated Water Management project (01/03/2010-30/06/15) approved	4	36,90,36	45,00,00	115,00,00	0	0	0
4705-9533 - Protection of Shahbazpur Gas field from the erosion of Meghna river under Bhola district.(01/03/10 - 30/06/15) approved	9	17,27,00	9,00,00	78,00,00	0	0	0
4705-9548 - River bank protection work along River Padma at Sujanager in Pabna district and at Raghunatpur ghat D/S. under Bera Upazilla (01/01/11-30/06/2016) approved	9	60,00,00	50,00,00	35,00,00	0	0	0
4705-9552 - Re-excavation of Bemalia, Longon and Balvadra river in Nasirnagar Upazilla at district Brahmanbaria (01/11/10 - 30/06/15) approved	1	10,70,76	10,00,00	17,65,00	0	0	0
4705-9589 - Pre-Monsoon Flood Protection and Drainage Improvement in Haor Areas	8	45,00,00	80,00,00	100,00,00	75,00,00	60,50,00	50,50,00
Total : Approved Projects		2431,69,09	3656,94,00	3760,90,00	4527,48,00	4974,09,20	5471,62,22
Total : Development		2431,69,09	3656,94,00	3760,90,00	4527,48,00	4974,09,20	5471,62,22
Total :		3323,24,09	4562,17,08	4689,50,04	5732,30,39	6290,56,21	6920,45,22

6.3 River Research Institute

6.3.1 Recent Achievements: 8 Physical model studies and 6 mathematical model studies have been conducted and reports have been submitted to the client. Total 16880 Nos. of Soil, Concrete, sediment & chemical samples have been tested. Besides, a study named "Investigation of the sustainability and effectiveness of the material used in the launching apron in order to protect the river bank" had started from 2014-15 and was finished in FY 2015-16, on river pollution around Dhaka and find out the ways to reduce pollution.

6.3.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16	2016-17	2017-18	2018-19		
1	2	3	4	5	6	7	8	9	10	11
1. Sample tests in Laboratory	Sample test	1	Number	9.50	6540	6000	5000	6000	6200	6200
2. Conduct study of physical and mathematical models	Model study	4	Number	11	6	7	7	8	9	10

6.3.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17		2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
Operational Units							
4705-3289 - River Research Institute	1-2	10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25
Total : Operational Units		10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25
Total : Non Development		10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25
Approved Projects							
4705-5051 - Pilot Project for the River Bank Erosion Protection of Different Location in the Jamalpur and Sherpur District (01/01/2017-30/06/2019) Approved	2	0	0	1,00,00	12,00,00	29,16,00	35,00,00
4705-5052 - The Pilot Project of the Bamboo Bandalling Structures for protection from the erosion of the Old Brahmaputra, the Dasani River at Jamalpur Sadar, Melandha and Islampur Upazilla of Jamalpur District.(01/01/2017-30/06/2019) Approved	2	0	0	1,00,00	12,00,00	84,00	0
Total : Approved Projects		0	0	2,00,00	24,00,00	30,00,00	35,00,00
Total : Development		0	0	2,00,00	24,00,00	30,00,00	35,00,00
Total :		10,71,32	12,43,00	14,45,00	37,67,30	44,19,95	50,13,25

6.4 Water Resources Planning Organization

6.4.1 Recent Achievements: Bangladesh Water Act-2013 has been enacted in the year 2013. During the period of 2009-2015, the additional 145 data layers were added to the existing no. of 406 of National Water Resources database (NWRD). Likewise, additional 138 layers have been included to the Integrated Coastal Resources Database (ICRD) of 421 layers. As described in the National Water Policy (NWPO), WARPO has been performing "Clearing House" activities to examine the project of Bangladesh Water Development Board (BWDB) in the light of National Water Management Plan (NWMP) on experimental basis. Under Clearing House function, WARPO has already made comments on the 210 DPP of BWDB and provided clearance certificate. Moreover, comments and clearance were made to the 8 small scale projects of Local Government Division (LGD). Assessing the condition of surface water (SW) and ground water (GW) is also going on.

6.4.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16	2016-17	2017-18	2018-19		
1	2	3	4	5	6	7	8	9	10	11
1. Conduct feasibility Study	Report	1	Number	3	0	4	4	2	3	5
2. Update the National Water Management Plan(NWMP)	Updated Planning	1	Number	4	0	4	0	2	3	5
3. Act as clearing House	Review of projects	1	Number	35	35	35	35	35	50	60
4. To update national data on water resources	Increase data layer	1	Number	50	50	50	10	10	10	10
	Collected Data			25	25	50	50	50	50	50
5. Monitoring the programmes in coastal areas	PIP implementation monitoring	3	Number	1	0	2	0	2	2	2
	Development planning report of 19 districts			1	0	1	0	1	1	1
6. Collection analysis and preservation of data regarding water resources	Preserved data	1	Number	1	0	1	1	1	1	1

6.4.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	8
Operational Units							
4705-3287 - WARPO	1-4	7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83
Total : Operational Units		7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83
Total : Non Development		7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83
Approved Projects							
4705-5054 - Feasibility Study and Detailed Engineering Design of Brahmaputra Barrage (01/01/2017-30/06/2021) Approved	1,6	0	0	1,00,00	9,50,00	48,49,00	52,22,00
4705-5127 - Institutionalization of integrated Water Resources Management (IWRM) Process in Compliance with Bangladesh Water Act-2013	1-4	85,37	1,40,00	1,40,00	1,15,00	0	0
Total : Approved Projects		85,37	1,40,00	2,40,00	10,65,00	48,49,00	52,22,00
Total : Development		85,37	1,40,00	2,40,00	10,65,00	48,49,00	52,22,00
Total :		7,91,43	10,73,31	11,73,31	20,90,39	59,76,90	64,62,83

6.5 Bangladesh Haor and Wetlands Development Board

6.5.1 Recent Achievements: 20 years long Haor Development Master Plan has been formulated to improving the life standard of 20 million peoples of the north eastern seven districts of Bangladesh at the cost of 28043 million taka. Aquaculture of indigenous fish species by excavation of 32 million cubic meter earth, increase production of rice cultivation by irrigation and plantation to conserve environment has been done

under the Borni Baor Development project. Along with that study projects on classification of wetlands and hydro-morphology of haor's rivers also carried out to enrich integrated wetland database.

6.5.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16		2016-17	2017-18	2018-19	
1	2	3	4	5	6	7	8	9	10	11
1. Feasibility Study	Study	1	Number	1	1	1	1	1	1	1
2. Development of Haor & Wetlands	Development	3		30	1	2	1	20	20	20

6.5.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	8
Operational Units							
4731-0001 - Department of Bangladesh Haor and Jolabhumi Development	1-2	28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95
Total : Operational Units		28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95
Total : Non Development		28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95
Approved Projects							
4731-5000 - Study for Investigation and Expansion of Ground Water Irrigation in Habiganj, Maulvibazar, Sylhet, Sunamganj, Netrokona and Kishorganj Districts.	1-2	0	10,00,00	5,00,00	5,00,00	4,81,90	4,81,90
4731-5001 - Impact Assessment of Structural Interventions on Haor and Innovation for Solution	1-2	0	3,02,00	1,00,00	2,08,00	0	0
4731-5002 - Study of Interaction bet Haor and River Ecosystem including Development of Wetland Inventory and Wetland Management Framework	1-2	0	35,00,00	15,50,00	20,00,00	25,18,10	27,18,10
4731-5142 - Classification of Wetlands of Bangladesh(01/07/2015-30/06/2017)	1-2	47,90	1,14,00	1,14,00	0	0	0
4731-5143 - Model Validation on Hydro-Morphological Process of the River system in the Subsiding Sylhet Haor Basin.	1-2	39,11	1,29,00	1,29,00	0	0	0
Total : Approved Projects		87,01	50,45,00	23,93,00	27,08,00	30,00,00	32,00,00
Total : Development		87,01	50,45,00	23,93,00	27,08,00	30,00,00	32,00,00
Total :		1,15,40	52,46,31	26,81,11	29,29,44	32,43,59	34,67,95

6.6 Joint River Commission

6.6.1 Recent Achievements: Initiatives have been taken for international cooperation to improve the quality of people through sharing and management of 54 trans-boundary rivers between India and Bangladesh. The framework of interim agreements for sharing the waters of the Teesta and the Feni rivers has been finalized. Bangladesh and India share the Ganga/Ganges waters at Farakka, India during 01 January to 31 May every year. During the last three years 17 meetings were held between Bangladesh and India at different levels. Besides Joint Working Group on sub-regional cooperation with Bhutan, India and Bangladesh held one meeting. Bangladesh is conducting a joint study on Impact Assessment of the proposed Tipaimukh Hydro-electric (Multi-purpose) project of India and preparation of position papers including database of trans-boundary rivers. In this regard discussions are being continued. India assured that India would not take any step that would adversely affect Bangladesh. Bangladesh is being able to provide 120 hours lead time flood forecasting using the flood related data provided by India, Nepal and China. River bank protection works of border rivers along the border areas are being implemented since 2009-10 that had been stopped for long. As a consequence, valuable lands, BOPs, and important installations can be protected. The Joint River Commission is conducting a survey on the impact of Tipaimukh Bahumukhi Jalbiddut project as proposed by India.

6.6.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2014-15	2015-16	2016-17	2017-18	2018-19		
1	2	3	4	5	6	7	8	9	10	11
1. Collection analysis and preservation of data regarding water resources	Prepare river based position papers of trans-boundary rivers	1	Number	1	1	1	1	1	1	1
2. Arrangement of bi-lateral and multi-lateral meetings	Holding meeting on Joint River Commission and different committees	4	Number	4	5	5	5	6	6	6
	Holding meeting on Nepal- Bangladesh joint expert committee			0	0	1	1	1	1	1
	Holding meeting on China - Bangladesh joint research-oriented and technical committee			1	1	1	1	1	1	1
3. Received data regarding trans-boundary rivers	Receiving of flood related data from India, Nepal and China	4	Number	7	7	7	7	7	7	7
4. Joint observation of flow	Observation and sharing of Ganges waters at Farakka as per Treaty	4	Number	1	1	1	1	1	1	1

6.6.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	8
Operational Units							
4705-3283 - Joint River Commission	1-2	5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60
Total : Operational Units		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60
Total : Non Development		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60
Total :		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60