## Grant No. 44

# 147 - Ministry of Water Resources

## **Medium Terms Expenditure**

(Taka in Thousands)

| Description             | Budget     | Projection |            |  |  |
|-------------------------|------------|------------|------------|--|--|
| Description             | 2019-20    | 2020-21    | 2021-22    |  |  |
| Operating Expenditure   | 1675,82,00 | 1843,40,00 | 2027,74,00 |  |  |
| Development Expenditure | 6256,63,00 | 6882,29,00 | 7570,52,00 |  |  |
| Total                   | 7932,45,00 | 8725,69,00 | 9598,26,00 |  |  |
|                         |            |            |            |  |  |
| Recurrent               | 2069,45,88 | 2427,00,03 | 2686,42,98 |  |  |
| Capital                 | 5862,95,22 | 6298,65,07 | 6911,79,12 |  |  |
| Financial Asset         | 3,90       | 3,90       | 3,90       |  |  |
| Liability               | 0          | 0          | 0          |  |  |
| Total                   | 7932,45,00 | 8725,69,00 | 9598,26,00 |  |  |

# 1.0 Mission Statement and Major Functions

### 1.1 Mission Statement

Meet the need of water for live and livelihood and ensure sustainable development through balanced and integrated management of water resources in consistence with climate change.

#### 1.2 Major Functions

- 1.2.1 Implementation of centennial Delta Plan-2100 announced by the Honorable Prime Minister Sheikh Hasina;
- 1.2.2 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;
- 1.2.3 Execute all activities related to flood forecasting and warning, flood control infrastructures, identify causes of flood and assess the damage caused by flood;
- 1.2.4 Conduct basic and applied researches on river basin management, flood control infrastructures and conduct hydrological survey and collection of data;
- 1.2.5 International cooperation and trans boundary river related activities for flood control and water resources development;
- 1.2.6 Carry out dredging of rivers and excavation/re-excavation of irrigation canals , construct and operate water control infrastructures to enhance the water conservation capacity of the rivers and protection against erosion;
- 1.2.7 Construct, maintain and d0eal with the issues related to land conservation and reclamation, management of estuary, expansion of drainage system, removal of water logging and development of Haor and Wetlands areas;
- 1.2.8 Construction of water reservoirs, embankments and barrages;

| Medium-Term Strategic<br>Objectives  | Activities   | Implementing<br>Departments/Agencies  |
|--|--|---|
| 1  | 2  | 3   |
| <ol> <li>Ensure balanced and<br/>sustainable management of<br/>water resources.</li> </ol> | <ul> <li>Excavation and re-excavation of<br/>Irrigation Canals</li> <li>River dredging</li> <li>Construction and repair of irrigation<br/>structure</li> <li>Construction of Barrages and Rubber<br/>Dams</li> <li>Formation and registration of Water<br/>Management Group, conduct training<br/>and transfer the responsibility of service<br/>charge collection to the Group</li> </ul> | Bangladesh Water<br>Development Board<br>(BWDB)   |
|  | Conduct feasibility activities for proper<br>management of water resources.  | <ul> <li>Bangladesh Water<br/>Development Board</li> <li>Department of Bangladesh<br/>Haor and Wetlands<br/>Development</li> <li>Water Resources Planning<br/>Organization</li> </ul> |
|  | <ul> <li>Update the National Water Management<br/>Plan (NWMP) for balanced use of<br/>ground and surface water.</li> <li>Act as Clearing House.</li> <li>Update national data base on water<br/>Resources.</li> </ul>  | Water Resources Planning     Organization   |
|  | <ul> <li>Collection, analysis and preservation of<br/>data and information related to water<br/>resources</li> <li>Implementation of water resource<br/>related act.</li> </ul>  | <ul> <li>Water Resources Planning<br/>Organization</li> <li>Joint Rivers Commission,<br/>Bangladesh</li> </ul>  |
|  | Basic and functional research related to<br>water resources and Sample test.   | River Research Institute  |
|  | Celebration of World Water Day   | Secretariat   |
| 2. Flood control and protection of river bank from erosion                                 | <ul> <li>Construction and repair of flood control<br/>dam and coastal embankment</li> <li>Excavation and re-excavation of<br/>drainage canals</li> <li>Construction and repair of flood control<br/>and drainage infrastructures</li> <li>Protection of river bank in order to<br/>protect important installations and</li> </ul>  | <ul> <li>Bangladesh Water<br/>Development Board</li> <li>Joint Rivers Commission,<br/>Bangladesh</li> </ul>   |
| 3. Development of Haor and   | <ul> <li>territorial land from erosion of border<br/>rivers</li> <li>Development of Haor and Wetlands</li> </ul>   | Department of Bangladesh  |
| Wetlands and water<br>management of Coastal  |  | Haor and Wetland<br>Development   |

# 2.0 Medium Term Strategic Objectives and Activities

| Medium-Term Strategic<br>Objectives                     | Activities   | Implementing<br>Departments/Agencies   |
|---|--|--|
| 1   | 2  | 3  |
| region by keeping<br>consistency with climate<br>change | <ul> <li>Construction of cross dams in the coastal area in order to reclaim land from the sea and river.</li> <li>Distribution of reclaimed land for the development of habitat</li> <li>Protection of wetland and the Sundarban from salinity in coastal region.</li> <li>Monitoring the schemes in coastal areas.</li> </ul> | <ul> <li>Bangladesh Water<br/>Development Board</li> <li>Water Resources Planning<br/>Organization.</li> </ul> |
| 4. Management of River Basin                            | Flood forecasting and Warning  | Bangladesh Water     Development Board   |
|   | Conduct study of Physical and<br>mathematical models   | River Research Institute   |
|   | <ul> <li>Arrangement of bi-lateral and multi-<br/>lateral meetings</li> <li>Receive data and information of trans<br/>boundary rivers</li> </ul>   | <ul> <li>Joint Rivers Commission,<br/>Bangladesh</li> </ul>  |
|   | Joint observation of Flow.   |  |

#### 3.0 Poverty, Gender and Climate Change Reporting

### 3.1 Impact of Medium Term Strategic Objectives on Poverty Reduction, Women's Advancement and Climate Change

#### 3.1.1 Ensure balanced 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 re-excavation of 4883 km irrigation canals. The irrigation facility and excavation/re-excavation of canal will create employment opportunities for the poor. Construction of 200 irrigation structures, repair and rehabilitation of 355 irrigation structures and dredging of 510 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. The projects which will be implemented during the next 3 years will create about 8 crore man-days employment opportunities.

**Impact on Women's Advancement:** Irrigation Scheme and excavation/Re-excavation of canals/rivers, by Bangladesh Water Development Board will create employment opportunities for 0.80 croreman-days by involving rural women. This will enhance their social status as well as increase their income. Besides, increased agriculture production will enhance financial and social security of women.

**Impact on Climate Change Adaptation and Mitigation:** Because of the impacts of climate change and reduction in navigability of rivers and canals, water remains stagnant in flood plains weeks after the rainy season. This causes delay in sowing of rice paddy and many other seasonal crops in time. Consequently, in the event of early floods a lot of damage to crops takes place. Excavating irrigation canals and construction of relevant structures along with river dredging will help timely drainage of stagnant water and adapt to climate change impacts. In addition, up to FY2017-2018, under the canal excavation program, it has been possible to extend irrigation facility to 9.65 hectares of land by re-excavating, constructing and maintaining water flow regulating infrastructure. In FY 2018-19, 60.95 percent of all cultivable land of the country will come under the irrigation facility, which will play a significant role in enhancing food security.

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#### 3.1.2 Flood control and protection of river Bank from erosion

**Impact on Poverty Reduction:** Drainage systems will be improved through construction of 250 km flood control embankment, repair and rehabilitation of 1040 km. of flood control embankment, excavation and reexcavation of 1325 km of drainage canal and construction and repair of 590 flood control structures (sluice/regulator). This will reduce damage to the crops and property of the poor people. Above activities will create employment opportunities for the poor people. In order to protect land from river erosion,195 km of river bank protection work will be done by involving poor people. These activities will create employment opportunities for 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, construction and repair of flood control structures and river bank protection works will protect women's property which will ensure their social security. These activities will also create employment opportunities for women.

**Impact on Climate Change Adaptation and Mitigation:** It will be possible to reduce impacts of floods across the country through the construction and repair of flood control embankments, excavation and reexcavation of canals to deal with the impacts of climate change. On the other hand, river bank protection activities will enable protection for infrastructures and houses that are at risk.

# 3.1.3 Development of Haor and wetlands and water management of Coastal region by keeping consistency with climate change

**Impact on Poverty Reduction:** Excavation of 32 lakhs cubic meter of soil in Barni Baor at Gopalganj district has increased the cultivation of native species of fish and irrigation has increased rice production. There are playing a helpful role in reducing poverty. Boro crops are being preserved through prevention of pre-monsoon flood in Haor area. In addition, activities of land reclamation from the sea is going on Nijhum Island of Hatia upazilla in Noakhali District. Re-claimed land from the sea will be distributed among the landless/ poor people. With the implementation of other projects adjacent to the Sundarbans, land will be protected from salinity as well as increase the fertility of land, which will make a positive impact on poverty alleviation and employment will be created for the poor people. By implementation of CDSP 4 project about 34162 families will be rehabilitated with 44410 acres of reclaimed land each through the assistance of implementation agency. Besides, participation of rural marginal farmers is being ensured by formation of Water Management Group. Poor people will be benefited from the implementation of "Landless Contracting Society (LCS)Policy" adopted by the Water Development Board on 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. 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.

**Impact on Climate Change Adaptation and Mitigation:** High waves (*afal*) and strong currents in the past years has damaged and weakened the submerged dams in haor areas. Water retention and drainage capacity of rivers is decreasing due to the river bed being filled up with sand and silt. In the past years, as there is excessive rain, the rain water overflowed the submersible embankments and enter into the haor areas. As a result, early flooding occurred which caused massive damage to standing crops. In light of the lessons learned from this kind of disaster, remedial measures like river dredging, repair and construction of submerged embankments with heights suitable for protecting the overflow of water have been taken until the crops are harvested. In addition, following the measures taken to prevent the intrusion of saline water

due to sea level rise, agricultural in the coastal areas will be ensured and biodiversity in the Sundarbans, including ecologically critical areas, will be conserved.

#### 3.1.4 Management of River Basin

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

Impact on Women's Advancement: There will be indirect impact.

**Impact on Climate Change Adaptation and Mitigation:** In the past few years, flood forecasting and early warning system has been improved remarkably. In place of the 3 days' flood forecasting and warning broadcasted in the past, now 5 days' early warning is being sent, and work is underway to scale it up to 10 days. In addition, work is underway to innovate mechanisms to provide early flood warning for *haor* areas.

#### 3.2 Poverty Reduction, Women's Advancement and Climate Change Related Allocation

|                   |            | _                        | (Taka in Thousand) |  |  |  |
|-------------------|------------|--------------------------|--------------------|--|--|--|
| Description       | Budget     | Projection               |                    |  |  |  |
|                   | 2019-20    | <b>20</b> 20- <b>2</b> 1 | 2021-22            |  |  |  |
| Poverty Reduction | 5705,91,77 | 6475,22,81               | 7087,76,18         |  |  |  |
| Gender            | 3601,04,89 | 4946,81,88               | 5373,07,15         |  |  |  |
| Climate Change    | 3015,09,89 | 3393,43,53               | 4030,92,04         |  |  |  |

#### 4.1 Priority Spending Areas/Program

|    | Priority Spending Areas/Program  | Related Strategic Objectives   |
|----|--|--|
| 1. | <b>Excavation/Re-excavation of canals, construction and maintenance</b><br><b>of infrastructures to provide irrigation facilities to arable land:</b><br>Although rivers and canals are the main sources of water for irrigation,<br>they are gradually being silted up. In this situation, necessity of the<br>excavation and re-excavation of the rivers and canals has become<br>indispensable. Accordingly, excavation and re-excavation of rivers and<br>canals, construction and maintenance of the infrastructures have been<br>given the highest priority.   | Ensure balanced and<br>sustainable management of<br>water resources.   |
| 2. | Undertaking repair, modification, re-construction and development<br>of existing embankment, infrastructures; construction and<br>maintenance of new embankments, and forestation in coastal areas:<br>For protection of human lives, forests, fisheries, animals and valuable<br>resources from natural calamities such as storms, floods, deluges, high<br>tides etc; repair, renovation, re-construction and modification of existing<br>coastal embankments, construction of new embankment and forestation<br>program in the coastal areas have been accorded 2 <sup>nd</sup> priority.   | <ul> <li>Flood control and protection<br/>of river bank from erosion</li> </ul>  |
| 3. | Construction and maintenance of flood control embankments to<br>protect economically important areas, towns and establishments,<br>human life, property and agricultural crops:<br>Due to river erosion, the existence of many important cities e.g<br>Chandpur, Sirajganj of the country is at stake. This has been causing a<br>heavy economic loss to the country. In order to protect the country from<br>this loss, Ministry of Water Resources has taken the responsibility for<br>protection of economically important area, cities/towns and<br>establishments, life and property of people, crop and agricultural land etc.<br>To ensure normal life and sustainable economic development in the flood<br>affected areas, construction and maintenance of flood control<br>embankment have been given 3 <sup>rd</sup> priority. | Development of Haor and<br>Wetlands and water<br>management of Coastal<br>region by keeping the<br>consistency with climate<br>change. |

|    | Priority Spending Areas/Program  | Related Strategic Objectives |
|----|--|------------------------------|
| 4. | Receipt of equitable share of the water of trans boundary rivers:  | Management of River Basin    |
|    | Establishing the rights of equitable share of water of trans boundary rivers entails bi-lateral and multilateral programs to collect data and conduct research on climate change, river course, floods and draughts are very important. This programs, therefore have been given 5 <sup>th</sup> priority. |                              |

# 4.2 Medium Term Expenditure Estimates and Projection (2019-20 to 2021-22)

# 4.2.1 Expenditure by Department/Agencies/Institutional Units

| 4.2.1 Expenditure by Department/Agencies/Institutional Units |            |            |            |            |            |  |  |  |  |
|--|------------|------------|------------|------------|------------|--|--|--|--|
| (Taka in Thous   |            |            |            |            |            |  |  |  |  |
| Description  | Budget     | Revised    | Budget     | Projection |            |  |  |  |  |
|  | 2018-19    |            | 2019-20    | 2020-21    | 2021-22    |  |  |  |  |
| Secretariat, Ministry of Water Resources                     | 7068,03,00 | 7655,93,90 | 7926,18,00 | 8711,37,00 | 9573,51,00 |  |  |  |  |
| Department of Bangladesh Hoar and Waterland<br>Development   | 24,77,00   | 23,51,00   | 6,27,00    | 14,32,00   | 24,75,00   |  |  |  |  |
| Grand Total :  | 7092,80,00 | 7679,44,90 | 7932,45,00 | 8725,69,00 | 9598,26,00 |  |  |  |  |

# 4.2.2 Expenditure by Economic Group

|          |   |            |            |            | (Taka      | in Thousands |
|----------|---|------------|------------|------------|------------|--------------|
| Economic | Description   | Budget     | Revised    | Budget     | Projec     | tion         |
| Group    |   | 2018       | 3-19       | 2019-20    | 2020-21    | 2021-22      |
|          | Recurrent Expenditure                                   |            |            |            |            |              |
| 3111     | Wages and salaries in cash                              | 14,95,45   | 10,04,10   | 11,02,27   | 11,42,58   | 12,40,93     |
| 3211     | Administrative expenses                                 | 97,39,27   | 3,10,11    | 1,60,58    | 11,48,83   | 21,46,63     |
| 3221     | Fees, charges and commissions                           | 8,07,00    | 12,00      | 12,00      | 12,00      | 12,00        |
| 3231     | Training  | 21,02,70   | 2,45,33    | 1,22,78    | 1,01,50    | 1,19,35      |
| 3241     | Domestic travel and transfer                            | 0          | 4,00       | 0          | 0          | 0            |
| 3243     | Petrol, oil and lubricants                              | 3,73,84    | 50,53      | 36,20      | 37,20      | 36,20        |
| 3244     | Travel and Transfer                                     | 2,54,28    | 56,97      | 63,50      | 68,50      | 83,50        |
| 3255     | Printing and stationery                                 | 3,17,46    | 60,54      | 52,50      | 52,50      | 47,50        |
| 3256     | General supplies and materials                          | 5,00       | 4,00       | 5,00       | 5,00       | 5,00         |
| 3257     | Professional services, honorariums and special expenses | 248,96,33  | 24,45,56   | 5,83,08    | 4,03,30    | 4,04,30      |
| 3258     | Repairs and maintenance                                 | 6,26,74    | 4,26,47    | 2,34,97    | 2,35,97    | 2,35,97      |
| 3631     | Current grants  | 1465,23,00 | 1637,64,49 | 1640,98,31 | 1808,96,73 | 1990,95,11   |
| 3632     | Capital grants  | 1,11       | 1,11       | 11,74,69   | 10,89,27   | 11,85,89     |
| 3821     | Current transfers not elsewhere classified              | 9,03,33    | 2,00       | 2,00       | 2,00       | 2,00         |
| 3823     | Current transfers for projects                          | 0          | 295,27,85  | 362,89,00  | 524,95,65  | 590,19,60    |
| 3911     | Reserve   | 40,32,47   | 3,93       | 30,09,00   | 50,09,00   | 50,09,00     |
|          | Total : - Recurrent Expenditure                         | 1920,77,98 | 1979,18,99 | 2069,45,88 | 2427,00,03 | 2686,42,98   |
|          | Capital Expenditure                                     |            |            |            |            |              |
| 4111     | Buildings and structures                                | 4714,29,40 | 19,42,50   | 0          | 0          | 0            |
| 4112     | Machinery and equipment                                 | 195,36,29  | 32,17,00   | 1,38,32    | 1,27,82    | 1,37,82      |
| 4113     | Other fixed assets                                      | 54,50      | 4,50       | 4,90       | 3,90       | 8,90         |
| 4141     | Land  | 99,26,83   | 0          | 0          | 0          | 0            |
| 4211     | Capital expenditure for project                         | 0          | 5648,58,00 | 5618,48,00 | 6190,13,35 | 6757,47,49   |
| 4911     | Reserve   | 162,45,00  | 0          | 243,04,00  | 107,20,00  | 152,84,91    |
|          | Total : - Capital Expenditure                           | 5171,92,02 | 5700,22,00 | 5862,95,22 | 6298,65,07 | 6911,79,12   |
|          | Assets  |            |            |            |            |              |
| 7215     | Loans   | 10,00      | 3,90       | 3,90       | 3,90       | 3,90         |
|          | Total : - Assets  | 10,00      | 3,90       | 3,90       | 3,90       | 3,90         |
|          | Grand Total :   | 7092,80,00 | 7679,44,89 | 7932,45,00 | 8725,69,00 | 9598,26,00   |

|    | Indicator   | Related<br>Strategic<br>Objectives | Unit       | Revised<br>Target | Actual | Target | Revised<br>Target | Med     | lium Term Ta | rgets   |
|----|---|------------------------------------|------------|-------------------|--------|--------|-------------------|---------|--------------|---------|
|    |   | Objectives                         |            | 201               | 7-18   | 201    | 8-19              | 2019-20 | 2020-21      | 2021-22 |
|    | 1   | 2                                  | 3          | 4                 | 5      | 6      | 7                 | 8       | 9            | 10      |
| 1. | Coverage of irrigable areas<br>(Irrigable area 15.89 lakh<br>hectare                                    | 1                                  | Percentage | 61.52             | 60.40  | 62.02  | 60.95             | 61.40   | 61.80        | 62.20   |
| 2. | Coverage of flood free zone<br>and drainage areas (Flood<br>free and drainage areas110<br>lakh hectare) | 2                                  | Percentage | 59.63             | 59.35  | 59.83  | 60.10             | 60.55   | 60.95        | 61.15   |
| 3. | Protection of important establishments  |                                    |            |                   |        |        |                   |         |              |         |
|    | <ul> <li>Coverage of early flood<br/>free area in haor (12.00<br/>lakh hector)</li> </ul>               | 3                                  | Descentere | 10.40             | 10.35  | 11.25  | 10.95             | 11.50   | 12.10        | 12.55   |
|    | <ul> <li>b. Coverage of flood free<br/>zone in other areas (106<br/>hector)</li> </ul>                  | 2                                  | Percentage | 46.10             | 46.10  | 46.75  | 46.20             | 46.95   | 47.10        | 47.80   |
| 4. | Coverage of Salinity control<br>areas (26.37 lakh hectare of<br>salinity controllable areas)            | 3                                  | Percentage | 51.80             | 50.95  | 52.00  | 51.40             | 51.85   | 52.30        | 52.65   |

# 5.0 Key Performance Indicator (KPIs)

# 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 7<sup>th</sup> Five Year Plan. Recently Bangladesh is being treated worldwide with importance for achieving the Sustainable Development Goals (SDG). Honorable Prime Minister has been included as one of the respected members of the High Level Panel on Water (HLPW). The World Water Day is observed on 22<sup>nd</sup> march every year in accordance with the selected slogan of the United Nations. Bangladesh Water Rules, 2018 have been formulated under Bangladesh Water Act, 2013.

#### 6.1.2 Activities, Output Indicators and Targets

| Activities                           | Output<br>Indicator | Related<br>Strategic | Unit   | Revised<br>Target | Actual | Target  | Revised<br>Target | Medium Term Targets |         | rgets   |
|--------------------------------------|---------------------|----------------------|--------|-------------------|--------|---------|-------------------|---------------------|---------|---------|
|                                      |                     | Objectives           |        | 2017-18           |        | 2018-19 |                   | 2019-20             | 2020-21 | 2021-22 |
| 1                                    | 2                   | 3                    | 4      | 5                 | 6      | 7       | 8                 | 9                   | 10      | 11      |
| 1. Celebration of World<br>Water Day | Celebrated day      | 1                    | number | 1                 | 1      | 1       | 1                 | 1                   | 1       | 1       |

| 6.1.3 | Medium Term Ex | penditure Estimates by | y Institutional Unit | , Schemes and Projects |
|-------|----------------|------------------------|----------------------|------------------------|
|-------|----------------|------------------------|----------------------|------------------------|

|   |          |                |          |          |            | (Taka                             | a in Thousands) |  |  |
|---|----------|----------------|----------|----------|------------|-----------------------------------|-----------------|--|--|
| Name of the Institutional Unit/Scheme/                                    | Related  | Related Actual | Budget   | Revised  | Medium Ter | Medium Term Expenditure Estimates |                 |  |  |
| Project   | Activity | 2017-18        | 201      | 8-19     | 2019-20    | 2020-21                           | 2021-22         |  |  |
| 1   | 2        | 3              | 4        | 5        | 6          | 7                                 | 8               |  |  |
| Operating Activities  |          |                |          |          |            |                                   |                 |  |  |
| General Activity  |          |                |          |          |            |                                   |                 |  |  |
| 1470101 - Secretariat, Ministry of Water<br>Resources                     | 1        | 8,11,58        | 17,30,00 | 19,49,41 | 18,89,10   | 19,06,10                          | 20,01,10        |  |  |
| Total : General Activity  |          | 8,11,58        | 17,30,00 | 19,49,41 | 18,89,10   | 19,06,10                          | 20,01,10        |  |  |
| Support Activity  |          |                |          |          |            |                                   |                 |  |  |
| 136006600 - International Commission on<br>Irrigation and Drainage (ICID) | 1        | 2,75           | 3,25     | 3,25     | 0          | 0                                 | 0               |  |  |
| 136010500 - INWARDAM  | 1        | 3,25           | 4,01     | 4,01     | 0          | 0                                 | 0               |  |  |
| Total : Support Activity  |          | 6,00           | 7,26     | 7,26     | 0          | 0                                 | 0               |  |  |
| Total : Operating Activities  |          | 8,17,58        | 17,37,26 | 19,56,67 | 18,89,10   | 19,06,10                          | 20,01,10        |  |  |

| Name of the Institutional Unit/Scheme/                                    | Related  | Actual  | Budget    | Revised  | Medium Term Expenditure Estimates |           |           |  |  |
|---|----------|---------|-----------|----------|-----------------------------------|-----------|-----------|--|--|
| Project   | Activity | 2017-18 | 201       | 8-19     | 2019-20                           | 2020-21   | 2021-22   |  |  |
| 1   | 2        | 3       | 4         | 5        | 6                                 | 7         | 8         |  |  |
| Development Activities  |          |         |           |          |                                   |           |           |  |  |
| Annual Development Program  |          |         |           |          |                                   |           |           |  |  |
| 221000147 - Reserve for unapproved project<br>Ministry of Water Resources | 1        | 0       | 182,45,00 | 0        | 273,04,00                         | 157,20,00 | 202,84,91 |  |  |
| Total : Annual Development Program  |          | 0       | 182,45,00 | 0        | 273,04,00                         | 157,20,00 | 202,84,91 |  |  |
| Total : Development Activities  |          | 0       | 182,45,00 | 0        | 273,04,00                         | 157,20,00 | 202,84,91 |  |  |
| Total :   |          | 8,17,58 | 199,82,26 | 19,56,67 | 291,93,10                         | 176,26,10 | 222,86,01 |  |  |

### 6.2 Bangladesh Water Development Board

6.2.1 Recent Achievements: The flood control embankment of the country is improved along with, excavation/ re-excavation of drainage canal and construction / reconstruction of necessary infrastructures which resulted better coverage of irrigation facilities. 9.66 lakhs hectares among the total area of 15.99 lakhs hectares are brought under the coverage of irrigation along with 1.22 lakhs hectares in FY 2015-16 to FY 2017-18. In flood control and educible, 65.30 lakhs hectare area has been made free from flood among 110 lakhs hectare area during last three years. 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, 0.25 lakhs hectare was protected from risk of salinity intrusion from 2015-16 to 2017-18. Moreover, dredging work has been implemented in 470km of different rivers of the country. It is to be noted that 79 nos of projects have already been completed at the cost of 70108 lakhs under climate change trust fund.16.5 Sq. km. land reclaimed after Construction of 4 Nos. of Cross bar's in the river Jamuna. By this time CDSP-4 project has allotted 8000.40acres of land to 6667 families.300 hectors of land were regained from the downstream closure of Musapur of Laxmipur District. A modern data center/ hydrological network has been set up in Dhaka under WMIP for flood forecasting and warning. About 15 lakhs metric tons boro crops has been protected from pre-monsoon flood by repair/ reconstruction of about 375 km. sinking dam with 727 nos schemes in haor areas during last financial year.

|    | Activities   | Output<br>Indicator                         | Related<br>Strategic | Unit   | Revised<br>Target | Actual | Target  | Revised<br>Target | Mediu   | ım Term T | argets  |      |       |
|----|--|---|----------------------|--------|-------------------|--------|---------|-------------------|---------|-----------|---------|------|-------|
|    |  |   | Objectives           |        | 2017-18           |        | 2018-19 |                   | 2019-20 | 2020-21   | 2021-22 |      |       |
|    | 1  | 2   | 3                    | 4      | 5                 | 6      | 7       | 8                 | 9       | 10        | 11      |      |       |
| 1. | Excavation and re-excavation of<br>irrigation canal  | Excavated<br>canals/ Re-<br>excavated canal | 1                    | KM     | 152               | 152    | 180     | 102               | 169     | 175       | 180     |      |       |
| 2. | River dredging   | River dredging                              | 1                    | KM     | 150               | 150    | 150     | 206               | 199     | 210       | 220     |      |       |
| 3. | Construction and repair of<br>irrigation structures  | Constructed<br>structures                   | 1                    | Number | 70                | 70     | 115     | 93                | 42      | 45        | 50      |      |       |
|    |  | Repaired structures                         |                      | Number | 150               | 150    | 400     | 31                | 93      | 100       | 105     |      |       |
| 4. | Construction of Barrages and Rubber Dams   | Constructed<br>Barrages and<br>Rubber Dams  | 1                    | Number | 0                 | 0      | 1       | 0                 | 1       | 1         | 1       |      |       |
| 5. | Formation and registration of<br>Water Management Group<br>conduct training and transfer the | Formed<br>Group                             |                      |        | 476               | 476    | 490     | 330               | 220     | 230       | 240     |      |       |
|    | responsibility of service charge<br>collection to the Group                                  | Trained people                              | 1                    | 1      | 1                 | Number | 225     | 9225              | 1550    | 10750     | 9000    | 9500 | 10000 |
|    |  | Transferred responsibility                  |                      |        | 4                 | 04     | 28      | 15                | 15      | 18        | 20      |      |       |
| 6. | Conduct feasibility activities<br>forproper management of water<br>resources.                | Completion of<br>survey                     | 1                    | Number | 4                 | 4      | 5       | 4                 | 7       | 5         | 8       |      |       |
| 7. | Construction and repair of flood control and coastal embankment                              | Constructed<br>embankment                   | 2                    | KM     | 70                | 70     | 75      | 75                | 47      | 50        | 55      |      |       |
|    |  | Repaired<br>embankment                      |                      | KM     | 195               | 195    | 250     | 250               | 46      | 55        | 60      |      |       |

#### 6.2.2 Activities, Output Indicators and Targets

|     | Activities   | Output<br>Indicator                            | Related<br>Strategic | Unit   | Revised<br>Target | Actual | Target  | Revised<br>Target | Mediu   | ım Term T | argets  |
|-----|--|--|----------------------|--------|-------------------|--------|---------|-------------------|---------|-----------|---------|
|     |  |  | Objectives           |        | 201               | 7-18   | 2018-19 |                   | 2019-20 | 2020-21   | 2021-22 |
|     | 1  | 2  | 3                    | 4      | 5                 | 6      | 7       | 8                 | 9       | 10        | 11      |
| 8.  | Excavation and re-excavation of drainage canals  | Excavated and re-excavated of drainage canals  | 2                    | KM     | 398               | 398    | 650     | 580               | 617     | 625       | 630     |
| 9.  | Construction and repair of flood<br>control and drainage<br>infrastructures  | Constructed<br>and repaired<br>infrastructures | 2                    | Number | 117               | 117    | 290     | 112               | 71      | 80        | 90      |
| 10. | Protection of river bank in order to<br>protect important installations and<br>territorial land from erosion of<br>border rivers | Protected of river bank                        | 2                    | KM     | 48                | 48     | 50      | 90                | 94      | 100       | 105     |
| 11. | Construction of cross dams in the coastal area in order to reclaim   | Constructed<br>cross dams                      |                      | Number | 2                 | 2      | 2       | 0                 | 2       | 2         | 2       |
|     | land from the sea and rivers   | Reclaimed<br>land                              | 3                    | Acre   | 50                | 50     | 50      | 0                 | 60      | 50        | 40      |
| 12. | Distribution of reclaimed land for the development of habitat  | Development of<br>habitat                      | 3                    | Number | 3000              | 3000   | 3000    | 3000              | 2500    | 3000      | 2000    |
| 13. | Protection of costal wetland and<br>the Sundarban from salinity in<br>coastal region   | Reduction of salinity                          | 3                    | PPT    | 20                | 20     | 20      | 20                | 20      | 20        | 20      |
| 14. | Flood Forecasting and Warning  | Forecasting and<br>Warning                     | 4                    | Number | 156               | 156    | 156     | 156               | 156     | 156       | 156     |

# 6.2.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

|  |          |           |            |            |            | (Taka         | a in Thousands) |
|--|----------|-----------|------------|------------|------------|---------------|-----------------|
| Name of the Institutional Unit/Scheme/   | Related  | Actual    | Budget     | Revised    | Medium Te  | rm Expenditur | e Estimates     |
| Project  | Activity | 2017-18   | 201        | 8-19       | 2019-20    | 2020-21       | 2021-22         |
| 1  | 2        | 3         | 4          | 5          | 6          | 7             | 8               |
| Operating Activities   |          |           |            |            |            |               |                 |
| Support Activity   |          |           |            |            |            |               |                 |
| 131016000 - Bangladesh Water Development<br>Board  | 1-14     | 928,60,04 | 1431,25,05 | 1606,74,06 | 1618,12,00 | 1781,92,66    | 1961,66,23      |
| Total : Support Activity   |          | 928,60,04 | 1431,25,05 | 1606,74,06 | 1618,12,00 | 1781,92,66    | 1961,66,23      |
| Total : Operating Activities   |          | 928,60,04 | 1431,25,05 | 1606,74,06 | 1618,12,00 | 1781,92,66    | 1961,66,23      |
| Development Activities   |          |           |            |            |            |               |                 |
| Annual Development Program   |          |           |            |            |            |               |                 |
| 222002700 - Feasibility Study for Flood Control,<br>Drainage and Irrigation System at Gowainghat in<br>Sylhet District.  | 3,7      | 0         | 2,55,00    | 2,77,00    | 0          | 0             | 0               |
| 222002800 - Feasibility Study with ESIA for<br>Resuscitation of Ichamoti River in Pabna District.  | 2        | 0         | 3,07,00    | 3,05,00    | 0          | 0             | 0               |
| 222002900 - Feadibility Study in Connection with<br>Construction of Water Treatment Plant for<br>Ponding Area of Goran-Chatbari Pumpo House,<br>Dh   | 1        | 0         | 2,70,00    | 1,00       | 0          | 0             | 0               |
| 222003000 - Technical Feasibility Study and<br>Environmental& Social Impact Assessment<br>(ESIA) of Embankment-Cum-Road and Water<br>Management Systems for Eeconomic Zone -4 at<br>Sonadia-Ghotibhanga Islands, Moheskhali, Cox's<br>Bazar. | 8,9      | 0         | 3,00,00    | 3,15,00    | 0          | 0             | 0               |
| 223009100 - Planning for Flood Management in<br>Bangladesh (Ganges and Brahmaputra Basin)<br>(01/01/2017-30/06/2019)   | 2,7,9    | 0         | 13,14,00   | 13,15,00   | 0          | 0             | 0               |
| 224052305 - Char Development and Settlement<br>Project-4 (01/07/11 - 31/12/2018)   | 10       | 65,27,74  | 17,19,00   | 5,75,00    | 0          | 0             | 0               |
| 224075700 - Protection of Charfession<br>Pourasava Town from the Erosion of Meghna<br>River in Bhola District (01/07/2016 - 30/06/2019)  | 7,9      | 20,00,00  | 63,34,00   | 55,00,00   | 18,13,00   | 0             | 0               |
| 224075900 - Bank Protection works along the<br>teesta right bank in Gangachara and Rangpur<br>Sadar Upazila in district Rangpur (01/04/2016-<br>30/06/2018) Approved   | 10       | 25,00,00  | 19,50,00   | 75,39,00   | 0          | 0             | 0               |

| Name of the Institutional Unit/Scheme/   | Related  | Actual  | Budget    | Revised   | Medium Ter | m Expenditur | e Estimates |
|--|----------|---------|-----------|-----------|------------|--------------|-------------|
| Project  | Activity | 2017-18 | 201       | 8-19      | 2019-20    | 2020-21      | 2021-22     |
| 1  | 2        | 3       | 4         | 5         | 6          | 7            | 8           |
| 224076000 - Protection of Sonaikandi to<br>Bolonpur area in Rajshahi City Corporation from<br>erosion of the Padma River (01/07/2016-<br>30/06/2019) Approved  | 10       | 5,00,00 | 70,00,00  | 156,80,00 | 0          | 0            | 0           |
| 224076100 - Drainage Improvement and<br>sustainable water Management of Bhairab River<br>basin (01/07/2016-30/06/2021) Approved  | 8        | 1,00,00 | 100,00,00 | 50,00,00  | 40,00,00   | 150,00,00    | 0           |
| 224076300 - Drainage Improvement of Dhaka-<br>Narayangonj-Demra (DND) Project (Phase-2)<br>(01/07/2016-30/06/2020) Approve   | 9        | 2,60,00 | 150,00,00 | 150,00,00 | 130,00,00  | 250,00,00    | 300,00,00   |
| 224076500 - Re-excavation of Bhadra & Salta<br>River for Removal of Drainage Congestion in<br>Khulna District. (01/07/2016-30/06/2019) Approve   | 2        | 1,25,00 | 30,00,00  | 14,00,00  | 0          | 0            | 0           |
| 224076600 - *Rehabilitation of BWDB<br>infrastructure for erosion Protection Drainage<br>and Irrigation improvement in the Coastal Area of<br>Polder No. 61/1 (Sitakunda), (Mirersarai) & 72<br>(Sandwip) in Chattogram District (01/07/2016-<br>30/06/2018) Approve | 1,3,10   | 50,00   | 40,00,00  | 56,72,00  | 0          | 0            | 0           |
| 224076700 - Rehabilitation of Coastal Polder<br>No. 62 (Patenga), 63/1A (Anowara) & 63/1B<br>(Anowara & Patiya) in Chattogram District<br>(01/05/2016-30/06/2020) Approve  | 4        | 2,50,00 | 60,00,00  | 70,00,00  | 70,00,00   | 0            | 0           |
| 224076800 - Protection of Dhaka-Mawa-Bhanga-<br>Khulna National Highway Adjacent to Hazi<br>Shariatullah Bridge From the Erosion of Arial<br>Khan River. (01/07/2016-30/06/2019) Approve   | 10       | 4,60,00 | 17,50,00  | 27,29,00  | 0          | 0            | 0           |
| 224076900 - Rajoir-Kotalipara Flood Control,<br>Drainage and Irrigationtion Project (01/08/2016-<br>30/06/2019) Approve  | 3,9      | 1,28,00 | 53,60,00  | 53,60,00  | 10,00,00   | 0            | 0           |
| 224077100 - Mirsarai Bangladesh Economic<br>Zone Area (BEZA) Flood Control, Road Cum<br>Embankment Protection & Drainage Project in<br>Chit (01/07/2016-30/06/2019) Approved   | 7        | 6,00,00 | 250,00,00 | 320,00,00 | 400,00,00  | 0            | 0           |
| 224077300 - Flood Control & Drainage<br>Improvement Project for Removal of Drainage<br>Congestion in Noakhali Area.(01/07/2015-<br>30/06/2020) Approve   | 9        | 21,00   | 100,00,00 | 114,62,00 | 45,00,00   | 50,00,00     | 80,00,00    |
| 224077400 - Bakkhali River Floood Control,<br>Drainage, Irrigation & Dredging Project(1st<br>Phase) in Cox's Bazar District. (01/08/2016 -<br>30/06/2019)  | 2,3,9    | 5,00    | 120,00,00 | 35,00,00  | 40,00,00   | 0            | 0           |
| 224077500 - Re-construction of Embankment<br>with Protective work in polder 68 of Shahaparir<br>Dwip (Sea-dyke) in Upazila-Teknaf & District-<br>Cox's Bazar (01/07/2016 - 30/06/2018)   | 7        | 11,50   | 40,00,00  | 50,00,00  | 1,00       | 0            | 0           |
| 224077600 - Re-Excavation of Sureswar Khal &<br>Drainage Project (01/07/2016-30/06/2018)<br>Approved   | 1        | 50,00   | 33,96,00  | 22,50,00  | 1,00       | 0            | 0           |
| 224077700 - Construction of Combined Water<br>Control Structure over Punarbhaba Rver for<br>Supplementary Irrigation (01/01/2017-<br>30/06/2020) Approved  | 3        | 1,00,00 | 36,00,00  | 30,00,00  | 15,00,00   | 0            | 0           |
| 224077800 - Jabaibeel flood control, drainage &<br>irrigation project in upazilla Saphar and Porsha<br>under Naogaon District (01/01/2017-30/06/2020)<br>Approved  | 3,7      | 50,00   | 31,83,00  | 24,00,00  | 10,19,00   | 0            | 0           |
| 224077900 - Bank Protection work of Korotoya<br>river at Nazirganj & Doikhata Chitmohol (former)<br>in Upazila Boda, District Panchagarh<br>(01/07/2016-30/06/2018) Approved   | 10       | 2,00,00 | 20,00     | 1,00      | 0          | 0            | 0           |
| 224078000 - Re-Excavation of Kumar River<br>Project (01/07/2016-30/06/2019) Approved   | 2        | 1,00,24 | 50,00,00  | 25,00,00  | 31,86,00   | 0            | 0           |
| 224078100 - Protection of Ramneoaz<br>Launchghat area of Monpura upazila From the<br>erosion of Meghna River and (01/01/2017-<br>30/06/2019) Approved  | 10       | 25,00   | 100,00,00 | 80,00,00  | 60,00,00   | 0            | 0           |
| 224078200 - Re-Excavation of 83 Rivers/Khals<br>and Increase Navigation of Mongla-Ghasiali<br>Channel in Bagerhat District. (01/12/2016-<br>30/06/2021) Approved   | 2,1      | 1,00,00 | 50,00,00  | 25,00,00  | 40,00,00   | 150,00,00    | 100,00,00   |

| Name of the Institutional Unit/Scheme/   | Related  | Actual    | Budget    | Revised   | Medium Ter | m Expenditure Estimates |          |  |  |
|--|----------|-----------|-----------|-----------|------------|-------------------------|----------|--|--|
| Project  | Activity | 2017-18   | 201       | 8-19      | 2019-20    | 2020-21                 | 2021-22  |  |  |
| 1  | 2        | 3         | 4         | 5         | 6          | 7                       | 8        |  |  |
| 224078500 - River bank protection along the left<br>& right bank of Dharla river at Goshpara,<br>Dayaltari & Boshtari for the protection of former<br>119 no Bashkata Chhitmahal area in UZ-<br>Patgram, Dist-Lalmonirhat (01/01/2017-<br>30/06/2019) Approved | 10       | 1,00,00   | 3,75,00   | 2,88,00   | 0          | 0                       |          |  |  |
| 224078700 - Protection of the both bank of Halda<br>River by Bank Protecttive Work at different<br>location in Hathazari & Rauzan Upazila in<br>Chattogram (01/07/17 - 30/06/2020)   | 10       | 0         | 45,00,00  | 70,00,00  | 45,00,00   | 0                       |          |  |  |
| 224078800 - Strengthening Hydrological<br>Information Services and Early Warning Systems<br>(Component: B) (01/07/2016-30/06/2021)<br>Approved   | 6,14     | 0         | 68,41,00  | 39,00,00  | 84,00,00   | 90,00,00                | 100,00,0 |  |  |
| 224078900 - Rehabilitation of Polder No. 36/1 in<br>Bagerhat District. (01/12/2014-30/06/2019)   | 9-10     | 7,50,00   | 50,00,00  | 2,00,00   | 60,00,00   | 100,00,00               |          |  |  |
| 224079000 - Protection of Embankment of Polder<br>No. 56/57 from erosion of the Meghna river at<br>Daulatkhan & Borhanuddin Upazila in Bhola<br>District.(01/01/2016-30/06/2020) Approved  | 9-10     | 20,00,00  | 100,00,00 | 165,00,00 | 50,00,00   | 50,00,00                | 1        |  |  |
| 224079100 - *Protective work of left bank of<br>Padma River from Aworangabad to Braha Bazar<br>under Dohar Upazila of Dhaka District (01-11-<br>2015-30/06/2018) Approved  | 9-10     | 37,50,00  | 1,00      | 140,00,00 | 0          | 0                       |          |  |  |
| 224079200 - Bank Protective work against<br>Erosion of the Meghna river at rajapur and east<br>ilisha union of Bhola sadar upazilla in bhola<br>district.(01/12/2015 - 30/06/2018)   | 9        | 75,00,00  | 60,00,00  | 70,00,00  | 50,00,00   | 80,00,00                |          |  |  |
| 224079400 - River Bank Protection work for<br>protection of Tajumuddin upazilla sadar in Bhola<br>District from erosion of the Meghna river<br>(01/07/2016-30/06/2019)   | 9        | 20,00,00  | 100,00,00 | 160,00,00 | 82,00,00   | 0                       |          |  |  |
| 224079600 - Rehabilitation of G.K. Irrigation<br>Project (01/07/2012 - 30/06/2017)   | 1-2      | 23,47,00  | 1,00      | 8,85,00   | 0          | 0                       |          |  |  |
| 224079700 - Construction of Pani Bhaban".<br>(01/07/2013 - 30/06/2018)   | 5        | 60,00,00  | 21,00,00  | 76,41,00  | 0          | 0                       |          |  |  |
| 224079900 - *Rehabilitation of Bhutiar Beel and<br>Barnal-Salimpur-Kolabashukhali Flood Control<br>and Drainage Project Khulna District (Phase-II)<br>(01-10-13 - 30-06-18)  | 9        | 60,00,00  | 74,29,00  | 82,95,00  | 25,00,00   | 0                       |          |  |  |
| 224080000 - Blue Gold Program (01/01/13 -<br>31/12/18)   | 7        | 79,75,61  | 132,35,00 | 131,33,00 | 198,22,00  | 250,00,00               | 250,00,0 |  |  |
| 224080100 - Coastal Embankment Improvement<br>Project Phase-1 (01/07/13 - 30/06/20)  | 7        | 224,96,27 | 800,00,00 | 650,00,00 | 800,00,00  | 800,00,00               | 900,00,0 |  |  |
| 224080200 - Flood and Riverbank Erosion Risk<br>Management Investment Program (Tranche-1)<br>(01/07/2014 - 30/06/2019)   | 7-11     | 226,47,43 | 197,30,00 | 172,63,00 | 100,70,00  | 150,00,00               | 100,00,0 |  |  |
| 224080300 - Irrigation Management Improvement<br>Project (IMIP) (For Muhuri Irrigation Project)<br>(01/07/2014 - 30/06/2020)   | 1-2      | 32,51,36  | 64,52,00  | 56,98,00  | 107,88,00  | 150,00,00               | 150,00,0 |  |  |
| 224080400 - *Protection of Ramgati and Komol<br>Nagar upazila and adjacent areas under<br>Lakshmipur district from the continuing erosion of<br>Meghna River (Phase-1) (01/07/2014 -<br>30/06/2018)  | 10       | 50,68,00  | 14,00,00  | 5,00,00   | 40,00,00   | 0                       |          |  |  |
| 224080500 - Haor Flood and Livelihood<br>Improvement Project (BWDB Part) (July 2014 to<br>June 2022)   | 1-13     | 83,54,93  | 270,00,00 | 230,00,00 | 250,00,00  | 250,00,00               | 300,00,0 |  |  |
| 224080700 - Rehabilitation of Damaged Polders<br>under the District of Cox's Bazar. (01/03/2015 -<br>30/06/2017)   | 9-10     | 65,00,00  | 80,00,00  | 40,00,00  | 50,00,00   | 0                       |          |  |  |
| 224080800 - * Rehabilitation of BWDB<br>infrastructures Damaged by Natural Disaster in<br>the Coastal Area of Polder No. 64/1A/64/1B &<br>64/1C at Banskhali Upazilla in Chit (01/05/2015 -<br>30/06/2018)   | 9-10     | 89,87,50  | 45,00,00  | 50,00,00  | 1,00       | 0                       |          |  |  |
| 224080900 - River Bank Protection work on the<br>both banks of Shangu & Chandkhali river in<br>Chandanaish and Satkania Upazilas of<br>Chattogram District (01/04/2015 - 30/06/2018)   | 10       | 90,00,00  | 1,00      | 17,96,00  | 0          | 0                       |          |  |  |

| Name of the Institutional Unit/Scheme/  | Related  | Actual    | Budget    | Revised   | Medium Ter | rm Expenditur | e Estimates |
|---|----------|-----------|-----------|-----------|------------|---------------|-------------|
| Project   | Activity | 2017-18   | 201       | 8-19      | 2019-20    | 2020-21       | 2021-22     |
| 1   | 2        | 3         | 4         | 5         | 6          | 7             | 8           |
| 224081100 - Shibpur Flood Control, Drainage<br>and Irrigation Project under Shibpur Upazila in<br>Narsingdi District. (01/04/2015 - 30/06/2018)   | 10       | 13,00,00  | 1,00      | 16,93,00  | 0          | 0             | C           |
| 224081200 - Re-excavation of Titas River<br>(Upper) Under Brahmanbaria District (01/09/2015<br>- 30/06/2020)  | 1        | 5,77,00   | 25,00,00  | 25,00,00  | 40,00,00   | 50,00,00      | C           |
| 224081300 - Re-excavation of Curzon khal and<br>its adjacent branch khal for irrigation and<br>drainage improvement Project in the district<br>Cumilla. (01/07/2015 - 30/06/2018)   | 1        | 5,91,50   | 8,50,00   | 3,00,00   | 0          | 0             | C           |
| 224081400 - *Construction of Retired<br>Embankment including Protection of Right Bank<br>of the Jamuna River from Kurnibari to<br>Chandanbaisha at Sariakandi Upazila in Bogura.<br>(01/04/2015 - 30/06/2018)   | 10       | 87,25,00  | 50,00,00  | 52,00,00  | 0          | 0             | C           |
| 224081600 - Southwest Area Integrated Water<br>Resources Planning & Management Project –<br>2nd Phase (01/07/2015 - 30/06/2022)   | 1-14     | 18,32,55  | 75,30,00  | 89,25,00  | 89,50,00   | 260,00,00     | 250,00,00   |
| 224081700 - Buriganga River Restoration project<br>(01/04/10 - 30/06/2020) Approved   | 5        | 154,12,00 | 100,00,00 | 100,00,00 | 120,00,00  | 0             | C           |
| 224081900 - Re-excavation of Connectiong<br>Rivers, development of Irrigation Facilities and<br>Fish Culture project of Gazner Beel area under<br>Sujanagar Upazila in Pabna district. (01/01/10 -<br>30/06/17)   | 1,8      | 52,00,00  | 157,20,00 | 165,10,00 | 0          | 0             | 0           |
| 224082000 - Purchase of Dredgers and Ancilliary<br>accessories for dredging Rivers of Bangladesh<br>(01/07/2010-31/12/2016)   | 5        | 62,50,00  | 100,00,00 | 25,02,00  | 20,00,00   | 0             | C           |
| 224109800 - Kolni - Kushiara River Management<br>Project (2nd revised) (01/04/2011 - 30/06/2016)<br>Approved revised  | 5,6,11   | 30,00,00  | 100,00,00 | 170,00,00 | 0          | 0             | C           |
| 224109900 - Early flood prevention and disposal<br>project in Haor area (01/07/2011 - 30/06/2017)<br>approved   | 8        | 40,00,00  | 150,00,00 | 160,00,00 | 0          | 0             | C           |
| 224118000 - River Bank Protective work with CC<br>Blocks along the left bank of Dhaleswari River<br>from km 10.920 to km 13.050=2.130 km, to<br>protective the Embankment, Gachkumulli9,<br>Baropakhia & Ghonapara in upazila Delduar &<br>Nagorpur dist. Tangail | 10       | 0         | 30,00,00  | 45,00,00  | 30,00,00   | 0             | 0           |
| 224118100 - Construction od Cross Dam Over<br>the Maskata River for Land Reclamation as well<br>as Improvement of Communication between<br>Mehendigonj Upazila sadar and Barisa sadar<br>(01/07/2017-30/06/2019) Approved   | 11       | 0         | 10,00,00  | 2,51,00   | 5,00,00    | 0             | C           |
| 224118200 - Noboganga River Re-Exacavation<br>(01/07/2017-30/06/2019) Approved  | 2        | 0         | 20,00,00  | 37,07,00  | 0          | 0             | C           |
| 224118300 - Rehabilitation of Satla-Bagda<br>Project Polder in Barishal District.   | 9,10     | 0         | 10,00,00  | 2,51,00   | 20,00,00   | 0             | C           |
| 224118400 - Old Dakatia-New Dakatia River<br>Irrigation and Drainage Project in the District<br>Cumilla.  | 3,8      | 0         | 12,00,00  | 15,00,00  | 15,00,00   | 0             | C           |
| 224121100 - Re-excavation of Arialkha River,<br>Haridoya River, Brahmaputra River, Paharia<br>River, Meghna Branch River and Old<br>Brahmaputra Branch River Project under<br>Narsingdi District  | 2        | 0         | 100,00,00 | 100,00,00 | 100,00,00  | 150,00,00     | 150,00,00   |
| 224121200 - Rajbari Town Protection Project<br>(Phase-II)   | 10       | 0         | 50,00,00  | 60,00,00  | 100,00,00  | 100,00,00     | 50,00,00    |
| 224121300 - Protection of Horina Ferryghat area<br>in Sadar Upazila and Charbhairabi Katakhal<br>Bazar in Haimchar upazila in the District<br>Chandpur from the erosion of the Meghna River   | 10       | 0         | 50,00,00  | 25,00,00  | 50,00,00   | 50,00,00      | 50,00,00    |
| 224121400 - Protection of Left Bank of Jamuna<br>River from Kaolibari Bridge to Shakharia in<br>Gopalpur & Bhuapur Upazila of Tangail District.   | 10       | 0         | 30,00,00  | 65,00,00  | 70,00,00   | 0             | С           |
| 224121500 - Border Rivers Bank Protection and Development Project, Phase-2.   | 10       | 0         | 40,00,00  | 20,00,00  | 60,00,00   | 150,00,00     | 100,00,00   |
| 224121700 - Protection of Khudbandi, Singrabari<br>and Shuvagacha area of Kazipur upazila in<br>Sirajganj district erosion of the Jamuna river  | 10       | 0         | 100,00,00 | 100,00,00 | 90,00,00   | 100,00,00     | 100,00,00   |

| Name of the Institutional Unit/Scheme/  | Related  | Actual  | Budget   | Revised   | Medium Te | rm Expenditur | e Estimates |
|---|----------|---------|----------|-----------|-----------|---------------|-------------|
| Project   | Activity | 2017-18 | 201      | 8-19      | 2019-20   | 2020-21       | 2021-22     |
| 1   | 2        | 3       | 4        | 5         | 6         | 7             | 8           |
| 224121800 - Protection of Bhuapur-Tarakandi<br>road through Protection of left Bank of Jamuna<br>River in Sharishabari Upazila of Jamalpur District   | 10       | 0       | 40,00,00 | 72,12,00  | 40,00,00  | 0             | 0           |
| 224121900 - Protection of left Bank of Jamuna<br>River in between Kulkandi hard Point and Gutail<br>hardpoint at Belgacha union of Isl  | 10       | 0       | 35,00,00 | 70,00,00  | 70,00,00  | 0             | 0           |
| 224122000 - Rehabilitation of Erosion Prone<br>area With Slope Protection Work in Polder no-72,<br>Sandwip, Chattogram  | 9        | 0       | 40,00,00 | 31,45,00  | 60,00,00  | 120,00,00     | 100,00,00   |
| 224122100 - Strengthening Vulnerable locations<br>Haizda Embankment Mohangonj Upazila under<br>Netrokona District.  | 7        | 0       | 20,00,00 | 30,00,00  | 1,00      | 0             | 0           |
| 224122200 - River Bank Protection Work to<br>Protect herbaria Area From the Erosion of<br>Kirtonkhola River at Barishal SadarUpazila in<br>Barishal District.   | 10       | 0       | 30,00,00 | 30,00,00  | 45,00,00  | 110,00,00     | 100,00,00   |
| 224122600 - River Bank Protection of Arujuna<br>area from erosion of Jamuna River in Gopalpur<br>Upazila of Tangail District.   | 10       | 0       | 40,00,00 | 40,00,00  | 75,00,00  | 100,00,00     | 50,00,00    |
| 224122900 - Protection of different infrastructures<br>from the right bank erosion of Jamuna River at<br>Gaibandha Sadar &Fulchari Upazila including<br>Ganakabor in Gaibandha District.  | 10       | 0       | 95,00,00 | 23,75,00  | 60,00,00  | 100,00,00     | 150,00,00   |
| 224123000 - Protection of Singra Pourasava<br>Area from Erosion of the River Atrai and Nagor in<br>Natore District.   | 10       | 0       | 12,00,00 | 14,00,00  | 13,76,00  | 0             | 0           |
| 224139700 - Protection of Proposed Economic<br>Zone and Development of Reclaimed Land from<br>Jamuna river in Sirajganj district.   | 10,11    | 0       | 30,00,00 | 75,20,00  | 70,00,00  | 120,00,00     | 100,00,00   |
| 224139800 - Bank Protection Work of the Sangu<br>and Dalu Rivers in Satkania and Lohagara<br>Upazilas of Chattogram District.   | 10       | 0       | 10,00,00 | 15,00,00  | 80,00,00  | 120,00,00     | 110,00,00   |
| 224140000 - Protection the Right Bank of Padma<br>River at Naria and Janjira Upazila of Shariatpur<br>district.   | 10       | 0       | 50,00,00 | 140,00,00 | 200,00,00 | 150,00,00     | 155,01,09   |
| 224206700 - Protection of Dakhin Satar Nadirkul<br>and Monipur Area under Chagolnaiya & Fulgazi<br>Upazila of Feni District from the Erosion of left<br>Bank of The Muhuri River  | 10       | 0       | 19,00,00 | 14,85,00  | 0         | 0             | 0           |
| 224206800 - Construction of Crossdam at Hargila<br>from Protection of left bank of Jamuna River in<br>Islampur Upazila of Jamalpur District   | 10,11    | 0       | 2,00,00  | 12,07,00  | 15,42,00  | 0             | 0           |
| 224206900 - River Bank Protection Work from<br>the erosion of Meghna River at Swarnadwip<br>(Jahizzar Char) in Hatiya and Subornachar<br>Upazila of Noakhali Disrict  | 10       | 0       | 5,00,00  | 5,00,00   | 50,00,00  | 50,00,00      | 50,00,00    |
| 224207000 - Protection from Bokshi launchghat<br>to Badurhat launchghat area from the Erosion of<br>Tentulia River including Dredging Work and<br>Flood Protection Protection in Kukri-Mukri Island<br>at Charfession upazila under Bhola District. | 2,7,10   | 0       | 31,66,00 | 59,00,00  | 73,00,00  | 150,00,00     | 120,00,00   |
| 224207100 - Drainage improvemet of Upper<br>Bhadra river, Horihar river, Buri-Bhadra River &<br>adjacent khals in Monirampur & Keshebpur<br>Upazilla, District- Jashore.  | 1,2      | 0       | 10,00,00 | 15,00,00  | 25,00,00  | 0             | 0           |
| 224207200 - Dredging of Mohamanda River and<br>Fubber Dam Project in Sadar Upazila of Chapai<br>Nawabganj District (01/10/2017-30/06/2020)<br>Approved  | 2,4      | 0       | 12,00,00 | 3,01,00   | 40,00,00  | 150,00,00     | 80,00,00    |
| 224207300 - Protection of Lord Hardinge and<br>Dholigournagar Bazar of Lalmohon Upazilla from<br>the erosion of the Meghna River in Bhola<br>District.  | 10       | 0       | 30,00,00 | 50,00,00  | 60,00,00  | 150,00,00     | 150,00,00   |
| 224207400 - Rehabilitation of Polder's (67/A, 67,<br>67/B & 68) along border river of Naf for Improving<br>Bangladesh-Myanmar security at Ukhia & Teknaf<br>Upazilla in Cox's Bazar District.   | 9,10     | 0       | 20,00,00 | 5,00,00   | 30,00,00  | 50,00,00      | 50,00,00    |
| 224235900 - River Bank Protection work at<br>Ulania-Gabindapur area under Mehendiganj<br>upazila from erosion of the Meghna river in<br>Barisal District.   | 10       | 0       | 0        | 25,00,00  | 50,00,00  | 50,00,00      | 100,00,00   |

# 

| Name of the Institutional Unit/Scheme/  | Related  | Actual  | Budget | Revised   | Medium Ter | m Expenditur | e Estimates |
|---|----------|---------|--------|-----------|------------|--------------|-------------|
| Project   | Activity | 2017-18 | 201    | 8-19      | 2019-20    | 2020-21      | 2021-22     |
| 1   | 2        | 3       | 4      | 5         | 6          | 7            | 8           |
| 224236000 - Bank Protection work of Bahadurpur<br>village in 7 no. Kazirchar union from erosion of<br>the Koyla canal at Muladi upazila in Barisal<br>District.   | 4,7      | 0       | 0      | 8,00,00   | 2,60,00    | 50,00,00     | 40,00,00    |
| 224236100 - Re-excavation of canals for<br>irrigation in coastal polders under Barguna<br>District.   | 1,3,8    | 0       | 0      | 7,00,00   | 18,16,00   | 20,00,00     | C           |
| 224247000 - Bank Protective Work & Dredging<br>Project in the Right Bank of Padma River in<br>Upazilla: Charbhadrasan, District: Faridpur   | 2,10     | 0       | 0      | 10,00,00  | 65,00,00   | 100,00,00    | 100,00,00   |
| 224248900 - Bank Protection and Flood control<br>of Halda River & Dhurong Khal in Fatikchari &<br>Hathazari Upazila of Chattogram District.   | 4,7,9    | 0       | 0      | 2,00,00   | 40,00,00   | 100,00,00    | 120,00,00   |
| 224249200 - Bank Protective Work of<br>Rahmatkhali Khal at Sadar Upazila and Dakatia<br>River at Raipur Upazila in Lakshmipur District.   | 10       | 0       | 0      | 2,00,00   | 20,00,00   | 50,00,00     | 45,00,00    |
| 224249300 - Protection of Left Bank of Meghna<br>River through Bank Revetment Work at Rajapur<br>of Sarail Upazila in Brahmanbaria District.  | 10       | 0       | 0      | 50,00     | 10,66,00   | 50,00,00     | 50,00,00    |
| 224249400 - River Bank Protection Work along<br>the both bank of Karnafuli & Ichamoti River and<br>Shilok Khal at different locations in Rangunia &<br>Boalkhali Upazila of Chittagong District & Kaptai<br>Upazila of Rangamati Hill District. | 9        | 0       | 0      | 5,00,00   | 70,00,00   | 100,00,00    | 100,00,00   |
| 224249500 - Dredging and Bank Protective Work<br>along the Left Bank of Padma River from Majhir<br>Char to Moksedpur via Narishabazar at Dohar<br>Upazila under Dhaka District.   | 2,10     | 0       | 0      | 20,00,00  | 150,00,00  | 180,00,00    | 180,00,00   |
| 224249600 - Construction of Embankment and<br>Slope Protection at Joydharkandi and Telikandi<br>Area under Sarail Upazila in Brahmanbaria<br>District.  | 4,7      | 0       | 0      | 50,00     | 20,00,00   | 40,00,00     | 45,00,00    |
| 224250000 - Re-excavation of Bhuboneshwar<br>River and protection of structures/properties from<br>the erosion of Pona River & Bhubonehwar River<br>in Bhandaria Upozila of Perojpur District   | 10       | 0       | 0      | 4,00,00   | 15,00,00   | 50,00,00     | 50,00,00    |
| 224250100 - Bank protection work from the<br>continuous erosion of Atrai river at different<br>places of Khansama upazila in Dinajpur district  | 10       | 0       | 0      | 5,00,00   | 25,00,00   | 50,00,00     | C           |
| 224250500 - River Bank Protection & Re-<br>excavation of Jamuneswari, Ghagot and<br>Korotoya River in Upazilla Mithapukur, Pirgacha,<br>Pirgonj & Rangpur Sadar under District Rangpur  | 8,10     | 0       | 0      | 10,00,00  | 50,00,00   | 100,00,00    | 120,00,00   |
| 224250600 - Feasibility Study for re-excavation of<br>small and medium khals, beels in the country  | 2        | 0       | 0      | 2,77,00   | 2,20,00    | 0            | C           |
| 224250700 - Land Development, Wave<br>Protection and River Bank Protection Work for<br>Proposed Mithamain Army Installations at<br>Mithamain Upazila of Kishoregonj District.   | 7,2      | 0       | 0      | 1,00,00   | 45,00,00   | 150,00,00    | 120,00,00   |
| 224250800 - Post Project Evaluation and Impact<br>Assessment of 10 BWDB Projects  | 6        | 0       | 0      | 1,36,00   | 2,08,00    | 0            | C           |
| 224251900 - Re exacavation of small river, khals<br>& water bodies in 64 districts (phase-1)  | 1,2,8    | 0       | 0      | 200,00,00 | 350,00,00  | 295,09,00    | 900,00,00   |
| 224252000 - Rehabilitation and Drainage<br>Improvement of Polder No, 64/2A (Puichari Part)<br>of Puichari Union Under Banskhali Upazilla of<br>Chittagong District.   | 8        | 0       | 0      | 2,00,00   | 9,00,00    | 0            | C           |
| 224252100 - Gorai River Dredging & Bank<br>Protection Project   | 2        | 0       | 0      | 10,00,00  | 60,00,00   | 120,00,00    | 120,00,00   |
| 224254900 - Rehabilitation of Charbagadi Pump<br>House and Hajimara Regulator of Chandpur<br>Irrigation Project   | 3        | 0       | 0      | 5,00,00   | 24,99,00   | 50,00,00     | 50,00,00    |
| 224255000 - Bank Protective Work & Dredging in<br>Arial Khan River in Faridpur District   | 2,10     | 0       | 0      | 1,00,00   | 65,00,00   | 100,00,00    | 120,00,00   |
| 224255100 - Protection of Important Government<br>Infrastructures of Khulna City from the erosion of<br>Bhairab and Rupsha River  | 10       | 0       | 0      | 2,00,00   | 18,00,00   | 50,00,00     | 40,66,00    |
| 224255500 - Dredging/Re-excavation of Bangali-<br>Karotoa-Fuljor-Hurasagor River System with<br>Bank Protection   | 2,8,10   | 0       | 0      | 1,00,00   | 100,00,00  | 200,00,00    | 800,00,00   |
| 224275400 - River Bank Protection work along<br>the Left Bank of Ichamati River at Nangla under<br>Polder No.3 in Sathkhira District.   | 10       | 0       | 0      | 1,00,00   | 10,00,00   | 0            | C           |

| Name of the Institutional Unit/Scheme/   | Related          | Actual     | Budget     | Revised    | Medium Ter | m Expenditur | e Estimates |
|--|------------------|------------|------------|------------|------------|--------------|-------------|
| Project  | Activity 2017-18 |            | 201        | 8-19       | 2019-20    | 2020-21      | 2021-22     |
| 1  | 2                | 3          | 4          | 5          | 6          | 7            | 8           |
| 224285600 - Construction of embankment along<br>the left bank of Old Brahmaputra River to protect<br>Char Algi Union in Upazila- Gafforgaon, Dist-<br>Mymensingh           | 7,10             | 0          | 0          | 0          | 5,00,00    | 10,00,00     | 5,00,00     |
| 224286000 - Protection of Shaheberchar village<br>& adjacent area from left bank erosion of Old<br>Brahmaputra river at Hossainpur upazilla under<br>Kishoreganj district. | 9,10             | 0          | 0          | 0          | 5,00,00    | 20,00,00     | 20,00,00    |
| 224286100 - Protection of Right Bank from the<br>Erosion of Brahmaputra River in Chilmari &<br>Ulipur Upazila of Kurigram District.  | 9,10             | 0          | 0          | 0          | 50,00,00   | 10,00,00     | 2,00,00     |
| Total : Annual Development Program   |                  | 1857,79,63 | 5332,90,00 | 5943,77,00 | 5952,39,00 | 6695,09,00   | 7322,67,09  |
| Total : Development Activities   |                  | 1857,79,63 | 5332,90,00 | 5943,77,00 | 5952,39,00 | 6695,09,00   | 7322,67,09  |
| Total :  |                  | 2786,39,67 | 6764,15,05 | 7550,51,06 | 7570,51,00 | 8477,01,66   | 9284,33,32  |

#### 6.3 River Research Institute

**6.3.1 Recent Achievements:** 11 physical model survey and 13 mathematical model survey had been conducted and reports were submitted to the clients. Total 19592 nos. of soil, concrete, sediment and chemical samples has been tested. Besides, a study named "Investigation of the sustainability and effectiveness of the material used in launching apron in order to protect the river bank" and study on river pollution around Dhaka and find out the ways to reduce pollution had completed in 2015-16. Hydro-morphological and environmental research of Kornopholi river was finished in 2016-17.Study of the impact of concrete block with filter was finished in 2017-18 by the basis of laboratory physical model.

#### 6.3.2 Activities, Output Indicators and Targets

| Activities  | Output<br>Indicator | Related<br>Strategic<br>Objectives | Unit   | Revised<br>Target | Actual  | Target | Revised<br>Target | Mediu | ım Term T | argets  |
|---|---------------------|------------------------------------|--------|-------------------|---------|--------|-------------------|-------|-----------|---------|
|   |                     |                                    |        | 201               | 2017-18 |        | 2018-19           |       | 2020-21   | 2021-22 |
| 1   | 2                   | 3                                  | 4      | 5                 | 6       | 7      | 8                 | 9     | 10        | 11      |
| 1. Basic and functional research related to water resources and | Research conducted  |                                    | Number | 3                 | 3       | 3      | 3                 | 5     | 5         | 5       |
| Sample test.  | Sample test         |                                    | Number | 6200              | 5930    | 6250   | 6200              | 6250  | 6250      | 6500    |
| 2. Conduct study of physical and mathematical models            | Model study         | 4                                  | Number | 8                 | 9       | 10     | 10                | 10    | 10        | 11      |

### 6.3.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

|   |          | •        |          |          | -          | (Taka         | a in Thousands) |
|---|----------|----------|----------|----------|------------|---------------|-----------------|
| Name of the Institutional Unit/Scheme/  | Related  | Actual   | Budget   | Revised  | Medium Ter | rm Expenditur | e Estimates     |
| Project   | Activity | 2017-18  | 201      | 8-19     | 2019-20    | 2020-21       | 2021-22         |
| 1   | 2        | 3        | 4        | 5        | 6          | 7             | 8               |
| Operating Activities  |          |          |          |          |            |               |                 |
| Support Activity  |          |          |          |          |            |               |                 |
| 131016100 - River Research Institute  | 1-2      | 12,45,00 | 14,39,20 | 15,39,20 | 15,50,00   | 16,09,00      | 17,70,00        |
| Total : Support Activity  |          | 12,45,00 | 14,39,20 | 15,39,20 | 15,50,00   | 16,09,00      | 17,70,00        |
| Total : Operating Activities  |          | 12,45,00 | 14,39,20 | 15,39,20 | 15,50,00   | 16,09,00      | 17,70,00        |
| Development Activities  |          |          |          |          |            |               |                 |
| Annual Development Program  |          |          |          |          |            |               |                 |
| 224078300 - Pilot Project for the River Bank<br>Erosion Protection of Different Location in the<br>Jamalpur and Sherpur District (01/01/2017-<br>30/06/2019) Approved   | 2        | 1,00,00  | 1,00     | 2,41,00  | 0          | 0             | 0               |
| 224078400 - The Pilot Project of the Bamboo<br>Bandalling Structures for protection from the<br>erosion of the Old Brahmaputra, the Dasani River<br>at Jamalpur Sadar, Melandha and Islampur<br>Upazila of Jamalpur District.(01/01/2017-<br>30/06/2019) Approved | 2        | 1,00,00  | 1,00     | 4,74,00  | 0          | 0             | 0               |
| 224122300 - The pilot project in different areas of<br>Bangladesh using Bamboo Bandeling Structures<br>to reduce river bank erosions land reclamation<br>and increase navigation.   | 2        | 0        | 11,00,00 | 9,93,00  | 11,50,00   | 12,00,00      | 15,00,00        |

| Name of the Institutional Unit/Scheme/   | Related  | Actual   | Budget   | Revised  | Medium Term Expenditure Estimates |          |          |  |
|--|----------|----------|----------|----------|-----------------------------------|----------|----------|--|
| Project  | Activity | 2017-18  | 201      | 8-19     | 2019-20                           | 2020-21  | 2021-22  |  |
| 1  | 2        | 3        | 4        | 5        | 6                                 | 7        | 8        |  |
| 224139900 - Institutional Development and<br>Capacity Building of River Research Institute<br>(Phase-II) | 1-2      | 0        | 10,64,00 | 37,94,00 | 9,48,00                           | 8,00,00  | 10,00,00 |  |
| Total : Annual Development Program   |          | 2,00,00  | 21,66,00 | 55,02,00 | 20,98,00                          | 20,00,00 | 25,00,00 |  |
| Total : Development Activities   |          | 2,00,00  | 21,66,00 | 55,02,00 | 20,98,00                          | 20,00,00 | 25,00,00 |  |
| Total :  |          | 14,45,00 | 36,05,20 | 70,41,20 | 36,48,00                          | 36,09,00 | 42,70,00 |  |

#### 6.4 Water Resources Planning Organization

6.4.1 Recent Achievements: Under Bangladesh Water Act-2013, Bangladesh Water Regulations 2018 have been formulated for achieving integrated development of water resources, management, collection, distribution, use, protection and prevention. During the last 3 years , a report was submitted on 171 proposed development projects under "Clearing House" which was described in National Water Regulations.145 additional data layers were added with 406 data layers existing in National Water Resources database (NWRD). Moreover, additional 138 layers have been included to the Integrated Coastal Resources Database (ICRD) of 421 layers.

|    | Activities  | Output<br>Indicator                               | Related<br>Strategic | Unit                       | Revised<br>Target | Actual | Target | Revised<br>Target | Mediu   | ım Term T | argets  |
|----|---|---|----------------------|----------------------------|-------------------|--------|--------|-------------------|---------|-----------|---------|
|    |   |   | Objectives           |                            | 2017              | 7-18   | 201    | 8-19              | 2019-20 | 2020-21   | 2021-22 |
|    | 1   | 2   | 3                    | 4                          | 5                 | 6      | 7      | 8                 | 9       | 10        | 11      |
| 1. | Conduct feasibility activities for<br>proper management of water<br>resources in Haor area.                 | Report  | 1                    | Number                     | 2                 | 2      | 3      | 5                 | 5       | 6         | 2       |
| 2. | Update the National Water<br>Management Plan (NWMP) For<br>balanced use of groundwater and<br>surface water | Updated<br>Planning                               | 1                    | Number                     | 2                 | 2      | 3      | 5                 | 5       | 1         | 1       |
| 3. | 3. Act as clearing House  | Review of<br>projects                             | 1                    | Number                     | 35                | 35     | 50     | 60                | 60      | 60        | 60      |
| 4. | Update national data base on water Resources.   | Increase data<br>layer                            |                      | Number                     | 10                | 10     | 10     | 10                | 10      | 50        | 50      |
|    |   | Collected<br>Data                                 | 1                    | Number of<br>Data provider | 50                | 50     | 50     | 50                | 60      | 60        | 60      |
| 5. | Monitoring the Schemes in coastal areas   | PIP<br>implementation<br>monitoring<br>report     | 3                    | Number                     | 2                 | 2      | 2      | 2                 | 1       | 1         | 1       |
|    |   | Development<br>planning report<br>of 19 districts |                      |                            | 1                 | 1      | 1      | 1                 | 1       | 1         | 1       |
| 6. | Collection, analysis and<br>preservation of data and<br>information related to water<br>resources           | Preserved<br>data                                 | 1                    | Number                     | 1                 | 1      | 1      | 1                 | 1       | 1         | 1       |

#### 6.4.2 Activities, Output Indicators and Targets

| rojects |
|---------|
| )       |

|  | Deleted             | Actual  | Budget   | Revised  | Medium Ter | m Expenditure | a in Thousands |
|--|---------------------|---------|----------|----------|------------|---------------|----------------|
| Name of the Institutional Unit/Scheme/<br>Project            | Related<br>Activity | 2017-18 | 201      |          | 2019-20    | 2020-21       | 2021-22        |
| 1  | 2                   | 3       | 4        | 5        | 6          | 7             | 8              |
| Operating Activities   |                     | -       |          |          |            |               |                |
| Support Activity   |                     |         |          |          |            |               |                |
| 131016200 - Water Resources Planning<br>Organization (WARPO) | 1-4                 | 9,33,31 | 11,29,30 | 11,29,30 | 12,50,00   | 13,04,34      | 14,34,77       |
| Total : Support Activity                                     |                     | 9,33,31 | 11,29,30 | 11,29,30 | 12,50,00   | 13,04,34      | 14,34,77       |
| Total : Operating Activities                                 |                     | 9,33,31 | 11,29,30 | 11,29,30 | 12,50,00   | 13,04,34      | 14,34,77       |

| Name of the Institutional Unit/Scheme/   | Related  | Actual  | Budget   | Revised  | Medium Te | rm Expenditur | e Estimates |  |
|--|----------|---------|----------|----------|-----------|---------------|-------------|--|
| Project  | Activity | 2017-18 | 201      | 8-19     | 2019-20   | 2020-21       | 2021-22     |  |
| 1  | 2        | 3       | 4        | 5        | 6         | 7             | 8           |  |
| Development Activities   |          |         |          |          |           |               |             |  |
| Annual Development Program   |          |         |          |          |           |               |             |  |
| 222000200 - Feasibility Study and Detailed<br>Engineering Design of Brahmaputra Barrage<br>(01/01/2017-30/06/2021) Approved                        | 1,6      | 0       | 48,49,00 | 1,00     | 0         | 0             | 0           |  |
| 222006800 - Online Processing and Tracking of<br>Water Resources Project Clearance and No<br>Objection Certificates for Groundwater<br>Abstraction | 4        | 0       | 0        | 0        | 4,00,00   | 0             | 0           |  |
| 222006900 - Study on Developing Operational<br>Shadow Prices for Water to Support Informed<br>Policy and Investment Decision Making Process        | 1,2      | 0       | 0        | 0        | 4,00,00   | 0             | 0           |  |
| Total : Annual Development Program   |          | 0       | 48,49,00 | 1,00     | 8,00,00   | 0             | 0           |  |
| Total : Development Activities   |          | 0       | 48,49,00 | 1,00     | 8,00,00   | 0             | 0           |  |
| Total :  |          | 9,33,31 | 59,78,30 | 11,30,30 | 20,50,00  | 13,04,34      | 14,34,77    |  |

### 6.5 Bangladesh Haor and Wetlands Development Board

**6.5.1 Recent Achievements:** For implementing the Haor Development Master Plan, classifications of wetland were completed by study projects and hydro-morphology of haor region's rivers had been collected from field and incorporated in integrated wetland database.

### 6.5.2 Activities, Output Indicators and Targets

|    | Activities Output Related<br>Indicator Strategic                               |  | Unit       | Revised<br>Target | Actual  | Target Revised<br>Target |         | Medium Term Targets |         |         |         |
|----|--|--|------------|-------------------|---------|--------------------------|---------|---------------------|---------|---------|---------|
|    |  |  | Objectives | S                 | 2017-18 |                          | 2018-19 |                     | 2019-20 | 2020-21 | 2021-22 |
|    | 1  | 2                                      | 3          | 4                 | 5       | 6                        | 7       | 8                   | 9       | 10      | 11      |
| 1. | Conduct feasibility activities for<br>proper management of water<br>resources. | Study                                  | 1          | Number            | 1       | 1                        | 1       | 1                   | 1       | 1       | 1       |
| 2. | Development of Haor & Wetlands   | Development of<br>Haor and wet<br>land | 3          |                   | 2       | 5                        | 2       | 2                   | 2       | 2       | 2       |

#### 6.5.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

|  |          |         |          |          |                                   | (Taka    | in Thousands) |  |  |
|--|----------|---------|----------|----------|-----------------------------------|----------|---------------|--|--|
| Name of the Institutional Unit/Scheme/   | Related  | Actual  | Budget   | Revised  | Medium Term Expenditure Estimates |          |               |  |  |
| Project  | Activity | 2017-18 | 201      | 8-19     | 2019-20                           | 2020-21  | 2021-22       |  |  |
| 1  | 2        | 3       | 4        | 5        | 6                                 | 7        | 8             |  |  |
| Operating Activities   |          |         |          |          |                                   |          |               |  |  |
| General Activity   |          |         |          |          |                                   |          |               |  |  |
| 1470201 - Department of Bangladesh Hoar and Waterland Development  | 1-2      | 1,79,44 | 4,27,00  | 4,00,00  | 4,05,00                           | 4,32,00  | 4,75,00       |  |  |
| Total : General Activity   |          | 1,79,44 | 4,27,00  | 4,00,00  | 4,05,00                           | 4,32,00  | 4,75,00       |  |  |
| Total : Operating Activities   |          | 1,79,44 | 4,27,00  | 4,00,00  | 4,05,00                           | 4,32,00  | 4,75,00       |  |  |
| Development Activities   |          |         |          |          |                                   |          |               |  |  |
| Annual Development Program   |          |         |          |          |                                   |          |               |  |  |
| 222002400 - Study for Investigation and<br>Expansion of Ground Water Irrigation in<br>Habiganj, Maulvibazar, Sylhet, Sunamganj,<br>Netrokona and Kishorganj Districts (01/05/2016 -<br>31/03/2018) | 1-2      | 4,18,45 | 5,50,00  | 3,85,00  | 0                                 | 0        | 0             |  |  |
| 222002500 - *Study of Inraraction bet Haor and<br>River Ecosystem including Development of<br>Wetland Inuantory and Wetland Management<br>Framework (01/07/2015 - 30/06/2018)                      | 1-2      | 72,70   | 15,00,00 | 15,66,00 | 2,22,00                           | 10,00,00 | 20,00,00      |  |  |
| Total : Annual Development Program   |          | 4,91,15 | 20,50,00 | 19,51,00 | 2,22,00                           | 10,00,00 | 20,00,00      |  |  |
| Total : Development Activities   |          | 4,91,15 | 20,50,00 | 19,51,00 | 2,22,00                           | 10,00,00 | 20,00,00      |  |  |
| Total :  |          | 6,70,59 | 24,77,00 | 23,51,00 | 6,27,00                           | 14,32,00 | 24,75,00      |  |  |

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#### 6.6 Joint River Commission

**6.6.1 Recent Achievements:** By organizing 14 meetings in last three years, The Joint Rivers Commission, Bangladesh took appropriate steps for regional and international cooperation in improving the quality of life of the people through proper distribution of 54 cross-border river waters between Bangladesh and India. According to the Ganges River Water Sharing Treaty signed in 1996, distribution activities of Farakka have been conducted in the dry season. Besides this, providing assistance in flood forecasts to protect the lives and property of the people.

# 6.6.2 Activities, Output Indicators and Targets

|    | Activities  | Output Indicator   | Related<br>Strategic | Unit   | Revised<br>Target | Actual | Target | Revised<br>Target | Mediu   | ım Term T | argets  |   |
|----|---|--|----------------------|--------|-------------------|--------|--------|-------------------|---------|-----------|---------|---|
|    |   |  | Objectives           |        | 201               | 7-18   | 201    | 8-19              | 2019-20 | 2020-21   | 2021-22 |   |
|    | 1   | 2  | 3                    | 4      | 5                 | 6      | 7      | 8                 | 9       | 10        | 11      |   |
| 1. | Collection, analysis and<br>preservation of data and<br>information related to water<br>resources | Prepare river based<br>position papers of<br>trans-boundary rivers                                 | 1                    | Number | 1                 | 1      | 1      | 1                 | 1       | 1         | 1       |   |
| 2. | Arrangement of bi-lateral and multi-lateral meetings  | Holding meeting of<br>Joint Rivers<br>Commission and<br>different committees                       |                      |        | 5                 | 3      | 5      | 4                 | 5       | 5         | 5       |   |
|    |   | Holding meeting of<br>Nepal- Bangladesh<br>joint expert committee                                  | 4                    | 4      | Number            | 1      | 0      | 1                 | 1       | 1         | 1       | 1 |
|    |   | Holding meeting of<br>China - Bangladesh<br>joint research-<br>oriented and<br>technical committee |                      |        | 1                 | 0      | 1      | 1                 | 1       | 1         | 1       |   |
| 3. | Receive data and information of trans boundary rivers   | Receiving of flood<br>related data and<br>information from<br>India, Nepal and<br>China            | 4                    | Number | 8                 | 8      | 8      | 8                 | 8       | 8         | 8       |   |
| 4. | Joint observation of flow   | Joint Observation and<br>sharing of Ganges<br>water at Farakka as<br>per Treaty                    | 4                    | Number | 1                 | 1      | 1      | 1                 | 1       | 1         | 1       |   |

### 6.6.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

|  |          |         |         |         |                                   | (Taka   | a in Thousands |  |
|--|----------|---------|---------|---------|-----------------------------------|---------|----------------|--|
| Name of the Institutional Unit/Scheme/             | Related  |         | Budget  | Revised | Medium Term Expenditure Estimates |         |                |  |
| Project  | Activity |         | 2018-19 |         | 2019-20                           | 2020-21 | 2021-22        |  |
| 1  | 2        |         | 4       | 5       | 6                                 | 7       | 8              |  |
| Operating Activities                               |          |         |         |         |                                   |         |                |  |
| Support Activity                                   |          |         |         |         |                                   |         |                |  |
| 131015900 - Joint Rivers Commission,<br>Bangladesh | 1-4      | 4,41,72 | 8,21,19 | 4,13,67 | 6,61,00                           | 8,80,00 | 9,10,00        |  |
| Total : Support Activity                           |          | 4,41,72 | 8,21,19 | 4,13,67 | 6,61,00                           | 8,80,00 | 9,10,00        |  |
| Total : Operating Activities                       |          | 4,41,72 | 8,21,19 | 4,13,67 | 6,61,00                           | 8,80,00 | 9,10,00        |  |
| Total :  |          | 4,41,72 | 8,21,19 | 4,13,67 | 6,61,00                           | 8,80,00 | 9,10,00        |  |