**Grant No. 44**

**147 - Ministry of Water Resources**

**Medium Terms Expenditure**

(Taka in Thousands)

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Budget**  **2020-21** | **Projection** | |
| **2021-22** | **2022-23** |
| Operating Expenditure |  |  |  |
| Development Expenditure |  |  |  |
| **Total** |  |  |  |
|  | | | |
| Recurrent |  |  |  |
| Capital |  |  |  |
| Financial Asset |  |  |  |
| Liability |  |  |  |
| **Total** |  |  |  |

**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. **Major Functions**
     1. Implementation of centennial Delta Plan-2100 announced by the Honorable Prime Minister Sheikh Hasina;
     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;
     3. Execute all activities related to flood forecasting and warning, flood control infrastructures, identify causes of flood and assess the damage caused by flood;
     4. Conduct basic and applied researches on river basin management, flood control infrastructures and conduct hydrological survey and collection of data;
     5. International cooperation and trans boundary river related activities for flood control and water resources development;
     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;
     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;
     8. Construction of water reservoirs, embankments and barrages.

**2.0 Medium Term Strategic Objectives and Activities**

| **Medium-Term Strategic Objectives** | **Activities** | **Implementing Departments/Agencies** |
| --- | --- | --- |
| **1** | **2** | **3** |
| 1. Ensure balanced and sustainable management of water resources. | * Excavation and re-excavation of Irrigation Canals * River dredging * Construction and repair of irrigation structure * Construction of Barrages and Rubber Dams * Formation and registration of Water Management Group, conduct training and transfer the responsibility of service charge collection to the Group | * + - * Bangladesh Water Development Board (BWDB) |
| * + - * Conduct feasibility activities for proper management of water resources. | * + - * Bangladesh Water Development Board       * Department of Bangladesh Haor and Wetlands Development       * Water Resources Planning Organization |
| * + - * Update the National Water Management Plan (NWMP) for balanced use of ground and surface water. * Act as Clearing House. * Update national data base on water Resources. | * + - * Water Resources Planning Organization |
| * Collection, analysis and preservation of data and information related to water resources * Implementation of water resource related act. | * Water Resources Planning Organization * Joint Rivers Commission, Bangladesh |
| * Basic and functional research related to water resources and Sample test. | * River Research Institute |
| * Celebration of World Water Day | * + - * Secretariat |
| 1. Flood control and protection of river bank from erosion | * Construction and repair of flood control dam and coastal embankment * Excavation and re-excavation of drainage canals * Construction and repair of flood control and drainage infrastructures * Protection of river bank in order to protect important installations and territorial land from erosion of border rivers | * + - * Bangladesh Water Development Board * Joint Rivers Commission, Bangladesh |
| 1. Development of Haor and Wetlands and water management of Coastal region by keeping consistency with climate change | * Development of Haor and Wetlands | * Department of Bangladesh Haor and Wetland Development |
| * Construction of cross dams in the coastal area in order to reclaim land from the sea and river. * Distribution of reclaimed land for the development of habitat * Protection of wetland and the Sundarban from salinity in coastal region. * Monitoring the schemes in coastal areas. | * + - * Bangladesh Water Development Board * Water Resources Planning Organization. |
| 1. Management of River Basin | * Flood forecasting and Warning | * Bangladesh Water Development Board |
| * Conduct study of Physical and mathematical models | * River Research Institute |
| * Arrangement of bi-lateral and multi-lateral meetings * Receive data and information of trans boundary rivers * Joint observation of Flow. | * Joint Rivers Commission, Bangladesh |

**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.

**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 re-excavation 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 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, 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 re-excavation 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**  **2020-21** | **Projection** | |
| **2021-22** | **2022-23** |
| Poverty Reduction |  |  |  |
| Gender |  |  |  |
| Climate Change |  |  |  |

**4.1 Priority Spending Areas/Program**

| **Priority Spending Areas/Program** | **Related Strategic Objectives** |
| --- | --- |
| 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. | * Ensure balanced and sustainable management of water resources. |
| 1. **Undertaking repair, modification, re-construction and development of existing embankment, infrastructures; construction and maintenance of new embankments, and forestation in coastal areas:**   For protection of human lives, forests, fisheries, animals and valuable resources from natural calamities such as storms, floods, deluges, high tides etc; repair, renovation, re-construction and modification of existing coastal embankments, construction of new embankment and forestation program in the coastal areas have been accorded 2ndpriority. | * Flood control and protection of river bank from erosion |
| 1. **Construction and maintenance of flood control embankments to protect economically important areas, towns and establishments, human life, property and agricultural crops:**   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 3rdpriority. | * Development of Haor and Wetlands and water management of Coastal region by keeping the consistency with climate change. |
| 1. **Receipt of equitable share of the water of trans boundary rivers:**   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 5thpriority. | * Management of River Basin |

**4.2 Medium Term Expenditure Estimates and Projection (2020-21 to 2022-23)**

**4.2.1 Expenditure by Department/Agencies/Institutional Units**

(Taka in Thousands)

| **Description** | **Budget** | **Revised** | **Budget**  **2020-21** | **Projection** | |
| --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2021-22** | **2022-23** |
|  |  |  |  |  |  |

**4.2.2 Expenditure by Economic Group Wise**

(Taka in Thousands)

| **Economic**  **Group** | **Description** | **Budget** | **Revised** | **Budget**  **2020-21** | **Projection** | |
| --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2021-22** | **2022-23** |
|  |  |  |  |  |  |  |

**5.0 Key Performance Indicator (KPIs)**

| **Indicator** | **Related Strategic Objectives** | **Unit** | **Revised**  **Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| 1. Coverage of irrigable areas (Irrigable area 15.89 lakh hectare | 1 | Percentage | 60.95 |  | 61.40 |  | 61.80 | 62.20 |  |
| 1. Coverage of flood free zone and drainage areas (Flood free and drainage areas110 lakh hectare) | 2 | Percentage | 60.10 |  | 60.55 |  | 60.95 | 61.15 |  |
| 1. Protection of important establishments |  |  |  |  |  |  |  |  |  |
| a. Coverage of early flood free area in haor (12.00 lakh hector) | 3 | Percentage | 10.95 |  | 11.50 |  | 12.10 | 12.55 |  |
| b. Coverage of flood free zone in other areas (106 hector) | 2 | 46.20 |  | 46.95 |  | 47.10 | 47.80 |  |
| 1. Coverage of Salinity control areas (26.37 lakh hectare of salinity controllable areas) | 3 | Percentage | 51.40 |  | 51.85 |  | 52.30 | 52.65 |  |

**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 has been 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. Bangladesh Water Rules, 2018 have been formulated under Bangladesh Water Act, 2013.

**6.1.2 Activities, Output Indicators and Targets**

| **Activities** | **Output Indicator** | **Related Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Celebration of World Water Day | Celebrated day | 1 | number | 1 |  | 1 |  | 1 | 1 |  |

**6.1.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects**

(Taka in Thousands)

| **Name of the Institutional Unit/Scheme/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |

**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/ re-construction of about 375 km. sinking dam with 727 nos schemes in haor areas during last financial year.

**6.2.2 Activities, Output Indicators and Targets**

| **Activities** | **Output Indicator** | **Related Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Excavation and re-excavation of irrigation canal | Excavated canals/ Re- excavated canal | 1 | KM | 102 |  | 169 |  | 175 | 180 |  |
| 1. River dredging | River dredging | 1 | KM | 206 |  | 199 |  | 210 | 220 |  |
| 1. Construction and repair of irrigation structures | Constructed structures | 1 | Number | 93 |  | 42 |  | 45 | 50 |  |
| Repaired structures | 31 |  | 93 |  | 100 | 105 |  |
| 1. Construction of Barrages and Rubber Dams | Constructed Barrages and Rubber Dams | 1 | Number | 0 |  | 1 |  | 1 | 1 |  |
| 1. Formation and registration of Water Management Group conduct training and transfer the responsibility of service charge collection to the Group | Formed  Group | 1 | Number | 330 |  | 220 |  | 230 | 240 |  |
| Trained  people | 10750 |  | 9000 |  | 9500 | 10000 |  |
| Transferred responsibility | 15 |  | 15 |  | 18 | 20 |  |
| 1. Conduct feasibility activities forproper management of water resources. | Completion of survey | 1 | Number | 4 |  | 7 |  | 5 | 8 |  |
| 1. Construction and repair of flood control and coastal embankment | Constructed  embankment | 2 | KM | 75 |  | 47 |  | 50 | 55 |  |
| Repaired embankment | KM | 250 |  | 46 |  | 55 | 60 |  |
| 1. Excavation and re-excavation of drainage canals | Excavated and re-excavated of drainage canals | 2 | KM | 580 |  | 617 |  | 625 | 630 |  |
| 1. Construction and repair of flood control and drainage infrastructures | Constructed and repaired infrastructures | 2 | Number | 112 |  | 71 |  | 80 | 90 |  |
| 1. Protection of river bank in order to protect important installations and territorial land from erosion of border rivers | Protected of river bank | 2 | KM | 90 |  | 94 |  | 100 | 105 |  |
| 1. Construction of cross dams in the coastal area in order to reclaim land from the sea and rivers | Constructed cross dams | 3 | Number | 0 |  | 2 |  | 2 | 2 |  |
| Reclaimed  land | Acre | 0 |  | 60 |  | 50 | 40 |  |
| 1. Distribution of reclaimed land for the development of habitat | Development of habitat | 3 | Number | 3000 |  | 2500 |  | 3000 | 2000 |  |
| 1. Protection of costal wetland and the Sundarban from salinity in coastal region | Reduction of salinity | 3 | PPT | 20 |  | 20 |  | 20 | 20 |  |
| 1. Flood Forecasting and Warning | Forecasting and Warning | 4 | Number | 156 |  | 156 |  | 156 | 156 |  |

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

(Taka in Thousands)

| **Name of the Institutional Unit/Scheme/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |

**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 mat and placed 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 Indicator** | **Related Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Basic and functional research related to water resources and Sample test. | Research conducted | 1 | Number | 3 |  | 5 |  | 5 | 5 |  |
| Sample test | 6200 |  | 6250 |  | 6250 | 6500 |  |
| 1. Conduct study of physical and mathematical models | Model study | 4 | Number | 10 |  | 10 |  | 10 | 11 |  |

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

(Taka in Thousands)

| **Name of the Institutional Unit/Scheme/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |

**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.

**6.4.2 Activities, Output Indicators and Targets**

| **Activities** | **Output Indicator** | **Related Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Conduct feasibility activities for proper management of water resources in Haor area. | Report | 1 | Number | 5 |  | 5 |  | 6 | 2 |  |
| 1. Update the National Water Management Plan (NWMP) For balanced use of groundwater and surface water | Updated  Planning | 1 | Number | 5 |  | 5 |  | 1 | 1 |  |
| 1. 3. Act as clearing House | Review of projects | 1 | Number | 60 |  | 60 |  | 60 | 60 |  |
| 1. Update national data base on water Resources. | Increase data layer | 1 | Number | 10 |  | 10 |  | 50 | 50 |  |
| Collected  Data | Number of  Data provider | 50 |  | 60 |  | 60 | 60 |  |
| 1. Monitoring the Schemes in coastal   areas | PIP implementation monitoring report | 3 | Number | 2 |  | 1 |  | 1 | 1 |  |
| Development planning report of 19 districts | 1 |  | 1 |  | 1 | 1 |  |
| 1. Collection, analysis and preservation of data and information related to water resources | Preserved  data | 1 | Number | 1 |  | 1 |  | 1 | 1 |  |

**6.4.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects**

(Taka in Thousands)

| **Name of the Institutional Unit/Scheme/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |

**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 Indicator** | **Related Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Conduct feasibility activities for proper management of water resources. | Study | 1 | Number | 1 |  | 1 |  | 1 | 1 |  |
| 1. Development of Haor & Wetlands | Development of Haor and wet land | 3 | 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/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |

**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 Strategic Objectives** | **Unit** | **Revised Target** | **Actual** | **Target** | **Revised Target** | **Medium Term Targets** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2018-19** | | **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| 1. Collection, analysis and preservation of data and information related to water resources | Prepare river based position papers of trans-boundary rivers | 1 | Number | 1 |  | 1 |  | 1 | 1 |  |
| 1. Arrangement of bi-lateral and multi-lateral meetings | Holding meeting of Joint Rivers Commission and different committees | 4 | Number | 4 |  | 5 |  | 5 | 5 |  |
| Holding meeting of Nepal- Bangladesh joint expert committee | 1 |  | 1 |  | 1 | 1 |  |
| Holding meeting of China - Bangladesh joint research- oriented and technical committee | 1 |  | 1 |  | 1 | 1 |  |
| 1. Receive data and information of trans boundary rivers | Receiving of flood related data and information from India, Nepal and China | 4 | Number | 8 |  | 8 |  | 8 | 8 |  |
| 1. Joint observation of flow | Joint Observation and sharing of Ganges water at Farakka as  per Treaty | 4 | Number | 1 |  | 1 |  | 1 | 1 |  |

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

(Taka in Thousands)

| **Name of the Institutional Unit/Scheme/ Project** | **Related Activity** | **Actual**  **2018-19** | **Budget** | **Revised** | **Medium Term Expenditure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2019-20** | | **2020-21** | **2021-22** | **2022-23** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|  |  |  |  |  |  |  |  |