10.0 Log frame

(i) Planned date for project completion: 30 June 2029.

(ii) Date of Log Frame Preparation: 08 February 2022.

| **Design /Narrative Summary** | **Performance Targets and Indicators with Baselines –Objectively Verifiable Indicators (OVI)** | **Data Sources and Reporting Mechanisms –Means of Verification (MOV)** | **Important Assumptions (IA)** |
| --- | --- | --- | --- |
| **Goal** |  |  |  |
| Improved livability of the selected coastal towns | Reduced incidence of water borne diseases by 30% from 2028 baseline | BBS Census reports by District | The Government remains committed urban agenda |
| **Outcome** | **By 2028:** |  |  |
| Climate and disaster resilience of coaster towns strengthened benefiting the poor and women. | 1. Capacity of cyclone shelter with EWCD features a separate areas and toilets for women increased to 10,000 number. (2021 baseline:0) 2. At least 75% of household in project areas reported reduced inundation for less than 3 days. (2021 baseline 43%) 3. Average travel time of project beneficiaries to cyclone shelters reduced by 25% 4. 85% holding tax collection efficiency achieved in 20 towns (2021 Baseline: 0 towns) | * a-d. LGED annual reports and project quarterly progress reports. * IMED report. | * Climate change impacts are within predicted level. * Paurashavas (Local Government) continue to prioritize governance improvement. |
| **Outputs** | **By 2028:** |  |  |
| 1.Municipal Infrastructure for resilience improved. | By 2028:  1a.23 EWCD friendly cyclone sheltersconstructed with early warning system.  1b.140.97 kms of drains constructed or rehabilitated.  1c. 298.39 kms roads upgraded.  1d. Slum improvement program implemented in each *Pourashava.* (2021 baseline:not implemented.)  1g. 4 integrated solid waste management b subprojects completed.  1h. At least two gender responsive and socially inclusive c urban open spaces d developed.  1i. At least six local EWCD friendly economic infrastructures e developed.  1j. Nature-Based Solutions piloted in at least in 3 towns. | **For all indicators:**   * 1a-1j. Project quarterly progress reports. * Audit Report. * Project Completion Report. * IMED report. | **For all indicators:**  A: Pourashavas achieve governance improvement criteria to be eligible for project investments. |
| 2. Resilient livelihood improved | By 2028:  2a. 60% of climate vulnerable households (including 50% female beneficiaries) covered in the graduation program in 6 pilot project towns.  2b. 50% women, including person with disabilities, reported increased skills in 6 pilot project towns.  2c. Inventory of productive asset of 70% of low-income households documented and insured. | **For all indicators**:   * 2a and 2c Project quarterly progress reports. * 2b. Post training survey reports. | **For all indicators:**  A: Pourashavas achieve governance improvement criteria to be eligible for project investments. |
| 3. Institutional capacity governance, climate-awareness strengthened | By 2028:  (2021 Baseline: None)  3a. Risk-informed urban development plans, GAPs and PRAPs of 22 towns submitted to *pourashavas* council.  3b. At least 225 staff of including 90% of eligible women staff municipalities and LGED reported increased knowledge on climate and disaster risk assessment to inform municipal plans.  3c. At least 225 staff including 90% of eligible women staff of municipalities and LGED reported increased knowledge on nature-based solutions and green solutions.  3d. Annual gender responsive O&M plans approved, and annual budget allocated for implementation in 22 project towns.  3e. Computerized tax records and billings systems made functional in 22 project towns.  3f. Standing committees on women and children affairs, poverty reduction, and slum improvement operationalized in 22 towns.  3g. Gender-sensitive urban space design guidelines completed. | **For all indicators:**     * 3a-3g. Project quarterly progress Report. | **For all indicators:**   * Paurashavas achieve improvement criteria to be eligible for project investment. |
| Inputs: Funds from GOB  Funds from ADB  Staff and Professionals  Equipment and vehicles | 1. Total GOB funds:  Tk. 51600.00 Lakh  (US $ 60.00 million)  2. Total ADB funds:  Tk.215000.00Lakh.  (US $ 250.00 million)  Concessional Loan:  Tk. 129000.00 Lakh.  (US $ 150.00 million)  Regular Loan:  Tk. 82560.00 Lakh.  (US $ 96.00 million)  Grant:  Tk. 3440.00 Lakh.  (US $ 4.00 million)  3.Committed Staff and professional involvement.  4. Equipment and vehicles | 1. Monthly billing   and reports   1. Monthly progress reports 2. Project Director’s records and reports 3. Quarterly Progress Reports | * Timely project funding and timely release of funds. * Timely decision making by competent authorities. * Pro-active roles of Paurashavas * Co-operation of stakeholders. |

|  |
| --- |
| **Key Activities with Milestones**  **1. Output 1 Municipal infrastructure for resilience improved.**  1.1 Prepare integrated drainage plan for 5 towns with high climate risk impact by Q 4 2022  1.2 Identify critical drainage and municipal infrastructure (stage I) for building climate and disaster resilience (Q1 2023)  1.3 Complete design of stage I infrastructure by Q4 2023.  1.4 Complete procurement of stage I for building climate and disaster resilience works Q3 2024.  1.5 Complete design of other infrastructure (stage II) works by Q1 2025.  1.6 Complete procurement of other infrastructure (stage II) works by Q2026.  **2. Output 2 Resilient livelihood improved.**  2.1 Conduct market assessment, skill-mapping, and training needs assessment (Q2 2023, Q2, 2025)  2.2 Prepare inventory of productive asset of each household. (Q3 2023)  2.3 Provide skills training and raise awareness on climate adaptation (Q3 2023 – Q3 2026)  2.4 Establish market linkages (Q1 2024 – Q4 2026) |
| **3. Output 3 Institutional capacity, governance, and climate-awareness strengthened.**  3.1 Sign partnership agreement with project coastal towns by Q1 2022  3.2 Conduct orientation on the stage I criteria to pourashavas by Q2 2022  3.3 Evaluate performance for stage I criteria of pourashavas by Q3 2022.  3.4 Evaluate performance for stage II by Q 4 2024 |
| **Project Management Activities**  Establish Regional Project Management Unit and project implementation units (Q3 2022)  Recruit and mobilize of project management consultant (Q4 2022)  Recruit and mobilize detailed design service consultant (Q1 2023)  Recruit and mobilize institutional capacity and community development consultant (Q 12023)  Recruit and mobilize 2 non-government organization (Q4 2022)  Conduct routine monitoring, reporting, and evaluation (2022-2028), Accounting and auditing (2022-2028) |

A = assumption, ADB = Asian Development Bank, DMF = design and monitoring framework, EWCD = elderly, women, children and differently abled persons friendly features, GAP = gender action plan, LGED = Local Government Engineering Department, O&M = operation and maintenance, OP = operational priority, PRAP = poverty reduction action plan, Q=quarter, R = risk.

a EWCD friendly cyclone shelters will include separate toilets for women and men, separate space for women (including nursing mothers) and girls with adequate lighting, access to safe drinking water, solar panel and ramps for easy access by the elderly and persons with locomotor disability in the building/toilets, and tactile flooring for stairs and entrances for visually impaired persons.

b Solid waste management service chain from source, collection, recovery, treatment, disposal.

c Features that enhance women's safety and feelings of safety with special focus on lighting, visibility, pedestrianization, ease of access for women including those with babies and children, and signages with helpline numbers. Each open space will be designed, taking into consideration the perspective of women and girls who will be the users.

d Open space is land and/or water area with its surface open to the sky, consciously acquired or publicly regulated to serve conservation and urban shaping function in addition to providing recreational opportunities.

e Includes: (i) allocated space for women sellers in markets, (ii) separate toilets for women with water facilities in markets, bus terminals, and boat landings, and (iii) adequate lighting for commercially important roads.

f O&M plans will include specific targets for women members in committees, provision for regular monitoring and maintenance of gender responsive infrastructures and specific targets for women employment in O&M.

|  |  |  |  |
| --- | --- | --- | --- |
| **11.0** | **Project Management**  **11.1 Proposed Project Management Setup** | **:** | (As per Annexure-II)  DPP Page no 26-29 (Attached) |
|  | **11.2 Implement Arrangement** | : | LGED is the lead executing agency for the project. The implementing agencies are Paurashavas. The implementation arrangements are summarized in the following table:  (Please note that implementation arrangements are presented in detail in Annexure II)  **Table Implementation Arrangement**   |  |  | | --- | --- | | **Aspects** | **Arrangement** | | Implementation Period | July, 2022- June 2029 | | Estimated Completion date | 30 June 2029 |   Management   |  |  | | --- | --- | | Oversight body | Project Steering Committee.  Chair: Secretary of Local Government Division.  Members: Joint Chief (Planning Wing), Local Government Devision, Joint Secretary (Development), Local Government Division, Chief Engineer, Local Government Engineering Department, Representative of NEC-ECNEC & Coordination Wing of the Planning Division, Representative of the concerned Wing/Sector-Division of the Planning Commission, Representative of Concerned Sector of Implementation Monitoring and Evaluation Division, Representative of the Programming Division, Planning Commission, Representative of Finance Division, Representative of Economic Relation Division, Representative from the Planning Unit, LGED, Project Director, LGED, Senior Assistant Chief/Assistant Chief (Planning), LGD. | | Executing Agency | Local Government Engineering Department (LGED) | | Key Implementing Agency | 22 Paurashavas | | Project Management and Project Implementation Agency | PMU (Dhaka): 51 key staff  RPMU (Khulna and Barishal): 26.  PIUs, 22 Paurashavs: 8 key staffs per paurashavas. |   A project management unit (PMU) will be established in LGED headquarters consisting of a Project Director, Two Deputy Project Director, four Senior Assistant Engineer, five Assistant Engineer etc. Again, a regional project management unit (RPMU) will be established in Khulna and Barishal Division consisting two Deputy Project Director, ten Assistant Engineer etc.  Regional Project Management Unit will be performed as the branch of PMU. With the guidance of PMU, the RPMU will monitor, supervise, manage, coordinate project activities.  The Purashavas will be the Implementing Agencies and will established Project Implementation Unit (PIU) within the Paurashava structure. Local LGED will support to the PIUs.  Project Steering Committee at national level, chaired by Secretary, will provide overall policy guidance to the project. |
| **12.** | **Financial and Procurement plan** | : |  |
|  | **12.1 Procurement plan**  (As per Annexure-III(a), III(b) & III(C)) | : | Attached (Page No.30-61) |
|  | **12.2 Year wise Financial & Physical Target Plan**  (As per Annexure-IV) | : | Attached (Page No. 62-63) |
| **13.** | **After Completion, whether the project needs to be transferred to the Revenue Budget** | : | No |
|  | **13.1 If yes, briefly narrate the institutional arrangement and technical & financial requirement for operation maintenance** | **:** | Not applicable |
|  | **13.2 If not, briefly narrate the institutional arrangement and financial requirement for operation and maintenance** | **:** | The concerned municipalities (Paurashavas) will do the operation and maintenance of the infrastructure and facilities built under the project. |

**-------------------------------------------------------------------**

**Signature of the Officer(s) Responsible for the**

**Preparation of the DPP with Seal and Date**

**PART B**

**Project Details**

**14.0 Background Information**

**14.1 Background**

**Climate vulnerability**:

The Sixth Assessment Report of Intergovernmental Panel on Climate Change (IPCC) revealed that due to the global impact of climate change, the risk of cyclones and tidal surges will increase.[[1]](#footnote-1) Bangladesh is one of the most vulnerable countries in the world with high exposure to a multitude of climate-related hazards. The natural hazards interact with physical and socioeconomic factors, including its low-lying delta and coastal areas, high population density, poverty levels, and lack of resilient infrastructure, resulting in high disaster risk with widespread impacts on both rural and expanding urban areas. Estimates suggest that the effects of climate change could cause an average loss of about 1.3% in the growth of gross domestic product per year until 2041.[[2]](#footnote-2) In the business-as-usual scenario, a total of 30,366,230 households will be affected by the climate change in Bangladesh in 2030.

**Coastal towns and climate risk:**

Coastal towns are particularly at risk from the impacts of climate change due to a combination of reasons including high levels of poverty and limited capacity of *pourashavas* (local governments) to invest in resilience. Most of the coastal towns are situated on the riverbanks of low-lying tidal zones at an average elevation of 1.0–1.5 meters (m) from the sea level.[[3]](#footnote-3) Coastal flooding is a key hazard faced by coastal towns. Estimates suggest that without climate adaptation, an average of 2.5 million to 7.2 million people annually will be affected by coastal flooding in Bangladesh in 2070 to 2100.[[4]](#footnote-4) Rapid unplanned development which compromises natural drainage systems and wetlands, inadequate storm water drainage facilities, and poor solid waste management, all contribute to increased climate risk. Sea level rise results in both groundwater and surface water salinity and shortages in drinking water. The climate-related challenges faced by the coastal towns include (i) inadequate basic municipal infrastructure for resilience, (ii) limited adaptive capacity of low income and vulnerable communities, and (iii) capacity constraints at different government levels with weak governance.

**Inadequate basic municipal infrastructure for resilience**:

The coastal towns lack adequate infrastructure, which is critical in dealing with increasing climate risk. There was a total of 65 flooding events from 1989–2018.[[5]](#footnote-5) The frequency of such events is expected to increase in 1–30-year flooding events. Considering future projections, the number of days with very heavy precipitation (20 millimeters or more) could increase by almost 10 days on average from 1990 to 2100, increasing the risk of floods.[[6]](#footnote-6) Water retention capacity of the towns’ waterbodies is reduced partly by encroachment of waterways, which is caused by rapid and haphazard urbanization, development without consideration of the area’s hydrology, and lack of climate and disaster risk-informed land use plans. Reduced water retention capacity results in increased flood risk. Lack of drains that are designed to withstand increased rainfall intensity, siltation of existing drains, and dumping of solid waste in drains exacerbate this problem, causing severe flooding and extended water logging. All proposed towns are served by an on-site sanitation system. Most toilets are pit latrines, which are in low areas in the household and susceptible to inundation with stormwater. Poor solid waste and septage management or nonexistent treatment systems result in polluted waterways and connected to public health and sanitation problems. Further, water supply services suffer from increasing salinity intrusion due to rising sea levels and unsustainable groundwater extraction. Inadequate basic municipal infrastructure to respond to increasing climate risk threatens both quality of life and the economic growth of coastal towns. This calls for an integrated approach for coastal town development that promotes risk-informed planning and investment for building resilience.

**Limited adaptive capacity of low-income and vulnerable communities**:

Coastal areas are characterized by high poverty incidence which increases the vulnerability of the urban poor to the impacts of climate variability and change. The urban poor are disproportionately exposed to climate impacts, which results in disruption of livelihoods and loss of income. In many cases, these effects may require the urban poor to adopt negative coping strategies that may impact their long-term well-being and further affect their poverty levels. Thus, priority should be given to support vulnerable households in project towns to adopt resilient livelihood improvement strategies. Such strategies should be based on a robust understanding of future climate risk and communities’ adaptive capacity and should promote comprehensive gender-sensitive measures that protect the most vulnerable, promote equity, and foster community resilience. Another equally important strategy is to ensure that the poor and vulnerable population has access to early warning information, cyclone shelters and evacuation routes that play an important role in minimizing casualties and providing safe shelter for vulnerable households during disasters.[[7]](#footnote-7) The cyclone shelters in the project towns are limited in number, unfriendly for elderly, women, children and persons with disabilities (EWCD), limiting EWCD access to cyclone shelters due to the poor condition of emergency access roads, which are also structurally inadequate to face the projected increase in intensity of tropical cyclones, and are often poorly maintained. Thus, there is critical need for higher-capacity and gender-sensitive multi-purpose cyclone shelters that are designed to meet projected population growth, EWCD requirements and are located away from hazard-prone areas, and are accessible to residents, especially the vulnerable population.

**Capacity constraints at various levels of government to strengthen resilience**:

Coastal towns’ high vulnerability is also linked to weak governance and low adaptive capacity. Addressing climate and disaster risks requires moving beyond business-as-usual urban development and using climate and disaster risk information as a starting point for urban development related decision-making. Recent years have seen progress in building capacity of national and local government institutions on resilience. However, gaps exist in government and *pourashavas* capacity to undertake city-wide climate and disaster risk assessment to inform the preparation of urban development plans, integrate gender responsive climate risk information in infrastructure operations and maintenance processes, and adopt participatory processes to develop and implement city-level emergency preparedness planning. There is an urgent need to strengthen institutional capacity and governance, public awareness and participation, and knowledge management to complement physical investments as part of an integrated approach for building climate change resilience. The proposed project will support strengthening the capacity of *pourashavas* and the Local Government and Engineering Department (LGED), enabling them to anticipate, incorporate, and respond to changes relating to resource mobilization, governance structures, and future planning.

**Government strategy**:

The government recognizes the urgent need to address climate risk in achieving the long-term development aspirations of the country. Government of Bangladesh’s Delta Plan 2100 integrates all climate actions [[8]](#footnote-8) of individual sectoral plans to address increasing climate risk. [[9]](#footnote-9) Bangladesh has been dealing with frequent floods, cyclones, salinity, livelihood and biodiversity losses, reducing wetlands, impact on agriculture and food resources. The Plan outlines polices for the six hotspots that are focused on flood risk management and freshwater conservations.[[10]](#footnote-10) zones and urban areas are two out of six identified hotspots. Government’s Eighth Five-Year Plan for fiscal year 2020–2025 emphasizes the need for scaling up climate actions at local government level, undertaking gender focused climate actions, addressing climate induced migration issues through improvements in livelihoods in cities, and increased commitments to green solutions.[[11]](#footnote-11) The project directly contribute to the government’s priorities and international commitments.[[12]](#footnote-12)

**Lessons Learnt**:

Key lessons that inform the project design include: (i) consider economic development in the context of changing climate risk and with an explicit focus on building resilience of the urban poor; (ii) increased decision-making role for women in the different committees, and diversifying livelihoods including specialized capacity building interventions for women improves the adaptive capacity of vulnerable communities; (iii) a holistic approach to adaptation is urgently needed, including infrastructure investments and enhancements to social, ecological (nature-based) and economic resilience, and adaptive capacity; (iv) the Poverty Reduction Action Plan provides a pourashava-level plan to reduce poverty and address the barriers faced by the poor and vulnerable communities: (v) financial incentives linked to performance indicators early in the project lifecycle can incentivize pourashavas to better perform and comply with sustainable operation and maintenance practices; and (vi) disaster risk assessments and preparation of disaster management plans should be aimed at pourashavas as a whole instead of limiting to assets and infrastructure. .

**Alignment with ADB’s priorities.** The project is aligned with ADB’s Strategy 2030 by supporting key operational priorities related to addressing remaining poverty and reducing inequalities; accelerating progress in gender equality; tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; making cities more livable; and strengthening governance and institutional capacity. [[13]](#footnote-13) This project will contribute to ADB’s Healthy Oceans Action Plan by reducing the amount of solid waste entering coastal waters and increasing coastal resilience to climate change impacts. The project is aligned with the country partnership strategy for Bangladesh, 2021–2025, which prioritizes the provision of climate and disaster resilient infrastructure and services. The contribute to Sustainable Development Goals 5, 11, and 13.

**14.2 Linkages (to Other Projects & Institutions)**

LGED is implementing a good number of urban infrastructure improvement projects all over the country and it is endorsed that urban infrastructure is something that is absolutely needed for improving the quality of human life and phenomenally accelerating the process of Paurashavas development.

For the improvement of climate-resilient urban infrastructure for economic, social, environmental improvement in the coastal region, the project will invest BDT. 266600.00 Lac.

It may be mentioned here that every year Govt. allocate a block fund for Paurashavas development work. Accordingly, Paurashava utilize this for Paurashava infrastructure development/rehabilitation work. This partial development activities are not enough compared to the overall need of the Paurashava. If the proposed project is approved, it will ensure simultaneously the overall development of urban infrastructures and will confirm the balanced urban development principle.

Although few projects are being implemented in the proposed project area, the activities of the proposed project will play a positive/vital role in the development of the livelihood of the selected coastal urban people by working as a supplement to the ongoing project activities.

**14.3 Poverty Situation:**

One in four people in Bangladesh continue to live in poverty, with 12.9% of the population suffering from extreme poverty.[[14]](#footnote-14) The Household Income and Expenditure Survey 2016 highlights that the highest incidence of poverty (over 60%) occurs in climate vulnerable regions of Bangladesh. Coastal towns are characterized by high poverty incidence, which increases the vulnerability of urban poor to the impacts of climate change. The urban poor in coastal towns lack access to basic urban services, such as piped water, piped sewer network, sanitation, and solid waste management. Coastal towns also suffer from large infrastructure deficits that exacerbate sensitivity to climate change. During natural disasters, the poor and vulnerable face loss in terms of finances through depleting savings and incomes; loss of productive assets and livelihoods; loss of human assets with disruption in education, health, and skills development; and loss of natural resources. The project aims to address the multiple dimensions of poverty through sustainable and resilient livelihoods, adaptations in infrastructure, capacity building, governance, and urban planning. The project directly targets the poorest and most vulnerable households in climate risk towns. Sustainable and resilient livelihoods for the communities is a key focus ar

ea. The Graduation approach is adopted in 6 towns to provide a comprehensive support mechanism for vulnerable households to develop adaptive, diversified and climate-resilient livelihoods.

**15.0 Project Description:**

**15.1 Objectives:**

Improved livability of the selected coastal towns.

**15.2 Outcomes:**

Climate and disaster resilience of coastal towns strengthened benefiting the poor and women.

**15.3 Outputs:**

The project directly supports to achieve project outcomes through three outputs.

**Output 1: Municipal infrastructure for resilience improved:**

Output 1 will support the provision of high-priority basic municipal infrastructure and essential services that are critical for building climate and disaster resilience and local economic development to enhance adaptive capacity of 22 coastal towns. Output 1 includes: (i) 23 elderly, women, children, and persons with disability friendly cyclone shelters; (ii) Emergency access roads including bridges and culverts which are critical for accessing cyclone shelters; (iii) 140.97 kms of stormwater drains constructed for improved flood control; (iv) water supply and sanitation services for unserved (or underserved) core urban areas and slum areas; (v) four integrated solid waste management facilities; and (vi) slum improvement programs for basic service improvement implemented in each *pourashava* following poverty reduction action plan. Slum improvement models currently being implemented in ADB projects, such as the Third Urban Governance and Infrastructure Improvement Project, will be replicated with necessary improvements. Investments related to local socio-economic development include (i) development of gender responsive urban space in two *pourashavas*; (ii) markets; (iii) bus terminals; and (iv) other priority roads, bridges, culverts, and boat landing stations. Cyclone shelters will be linked to the basic early warning system and communication. The project will support piloting of NbS in three *pourashavas*.

**Output 2: Resilient livelihood improved**.

The output 2 supports to increase adaptative capacity of vulnerable households to deal with climate shocks. This will be done through localized market assessments to identify viable income generating activities; household skills and resource mapping; household level enterprise and employment matching; and tailored technical training along with asset provision to provide a holistic livelihood support. Additionally, the Graduation approach is introduced to build resilience among the poor and vulnerable households which is a comprehensive and sequenced set of interventions to place households on an upward trajectory from poverty. [[15]](#footnote-15) Output 2 includes:

**Output 3: Institutional capacity, governance, and climate-awareness strengthened**:

The project supports to strengthen institutional capacity and governance, climate-awareness through knowledge management to complement physical investments as a part of an integrated approach for building climate change resilience. Output 3 includes: (i) capacity of LGED and *pourashavas* strengthened to undertake climate and disaster risk assessment to inform the formulation and update urban development plans, including structure plans, detailed area plans, and action plans; and enforcement of development control regulations that factor in natural hazards considerations; (ii) knowledge and capacity of LGED and *pourashavas* on NbS and green solution application developed; (iii) municipal governance, and sustainable service delivery improved by adopting a risk-informed performance-based budget allocation strategy to promote improved governance mechanisms including participation of town level coordination committee on disaster preparedness measures, strengthen municipal finance systems including local revenues enhancement, operation and maintenance plans approval, computerized tax records and billing systems made functional in project towns; (iv) Strengthen and equip Cyclone Shelter Management Committees; and (v) public awareness, behavior change, and community mobilization enhanced in light of coronavirus disease (COVID-19) and cyclone Amphan in 2020. The project will also support training and capacity building of LGED and *pourashavas* to institutionalize information technology-based remote monitoring through strengthening LGED’s geographic information systems section, monitoring and evaluation unit, and project management unit.

* 1. **Activities**
* Construction of Elderly, Women, Children and Differently able (EWCD) friendly cyclone shelters with early warning system= 23 Nos.
* Construction/Upgradation of RCC/BC Road (including emergency access roads for accessing cyclone shelters) = 298.39 Km
* Construction/ Upgradation of Drain (including drains for accessing cyclone shelters) = 140.97 Km
* Construction of Bridge/Culvert (including Bridge/Culverts for accessing cyclone shelters) =920.00 m
* Integrated solid waste management facilities= 4 nos.
* Construction of Bus Terminal= 4 nos.
* Gender responsive and socially inclusive urban open spaces = 2 Nos.
* Local EWCD friendly Multipurpose Market = 22 Nos.
* Nature-Based solution piloted = 3 towns.
* Slum Improvement= 22 Nos.

**15.5 Sex disaggregated data for target population & constrains faced by women**

Women and the poor suffer more from limited access to water supply and basic sanitation resulting in limited employment opportunities and increasing health risks. They are also most vulnerable to the impacts of climate change as their asset bases and livelihood options are severely affected during cyclones. Women currently have limited participation in local decision-making on urban governance and services. They can also serve as agents of change for community behavior change programs, particularly hygiene, sanitation, water conservation, community resilience and disaster preparedness. As women are key players at the household level, increased access to basic public services will improve the lives of women. Asian Development Bank Country Partnership Strategy for Bangladesh, 2016-2020 recognizes that gender equality and social inclusion must be emphasized in the context of urban governance in Bangladesh. Considering this, the project shall define appropriate avenues for meaningful consultations with the poor, women, other vulnerable groups and civil society organizations (CSOs) during project preparation and implementation. The project is categorized as gender equity theme (GEN) and the project components are designed to reduce gender disparities in accessing disaster related services, slum improvement programs, awareness raising programs, water and sanitation facilities and capacity building training and livelihoods improvement programs. Based on the CTEIP project’s experience, the new project includes component specific action areas and a range of evidence-based gender targets and indicators. Opportunities for women’s active involvement and benefits in all project activities have been maximized. The details of the gender aspects of the project are described in the gender action plan (GAP). The project will ensure women’s effective participation in designing and implementing the project’s intervention and women’s decision-making and leadership roles in different committees. It will secure 55% female participation in consultations on project benefitsand interventions, 20% women labor in construction works. Moreover, at least 80% of SICs will be chaired/co-chaired by women, 40% women will participate in the pourashava standing committees, and the Women and Children Affairs Standing committees will be headed by woman Ward Councilor. The project will construct 23 EWCD friendly cyclone shelters, 2 gender-responsive and socially inclusive urban public spaces, and at least 6 local EWCD friendly economic infrastructures. It will also build community toilets and improve the existing water supply in the slum areas. These gender responsive infrastructures will enhance women’s livelihood options and improve their overall well-being. The graduation program in pilot project areas will cover at least 60% of vulnerable households, with 50% female beneficiaries. At least 50% women, including persons with disabilities, will receive livelihood improvement training. It will enhance the institutional capacity of the PIU and LGED staff on gender, climate and disaster risk assessment, nature-based solutions, and green solutions. Moreover, all towns will develop and approve gender-responsive O&M plans with annual budget allocation. At least 40% will participate in the *pourashava* standing committees, and a woman ward councilor will head the Women and Children Affairs Committee. The project will develop a gender-responsive urban space design guideline.

**15.6 Population Coverage**

Project covers 3 Divisions: 1) Barishal Division-includes Patharghata, Betagi, Baneripara, Bakerganj, Mehendiganj, Muladi, Gouranadi, Kuakata, Patuakhali, Swarupkhati, Jhalokathi, Nalchity, Lalmohon, Charfassion, Burhanuddin, 2) Khulna Division-includes Bagerhat, Morelganj, Paikgacha, Chalna, 3) Dhaka Division-includes Zanjira, Bhedarganj. It covers 22 Paurashavas in Coastal regions of the country.

The workers will be recruited from the project area during construction period, so that the employment rate in the project area will be increased. Thus, the employment rate of the people living in the project area is positive.

**16.0 Whether any pre-appraisal/ feasibility study/ pre-investment study was done before formulation of this project? If so, attach summary of findings & recommendations. (If not mentioned the causes)**

Detail Pre-investment study has been carried out. Summary of findings & re-commendations are attached in DPP.However, LGED officials and concerned municipal officers physically visited different areas in the project before the project preparation. The demand and opinion of the municipalities has been given top priority in the scheme selection

**17.0 Financial Analysis:**

**Economic Viability:**

The economic rationale for the government’s intervention is sound as the project focuses on climate resilience urban basic services including cyclone shelters, urban drains, emergency access roads and integrated solid water management, wherein, (i) there is a natural monopoly and (ii) the services are public goods managed by the government. Four sample subprojects (*Jhalokathi pourashava* – cyclone shelters and urban roads; and *Bagerhat Pourashava* - solid waste management (SWM) and storm water drain) are selected for present economic analysis Attached in (Appendix-III), considering the representation of investment sectors, geographical distribution, and availability of detailed project reports. The estimated economic internal rate of returns are in the range of 11.1% (Bagarhat drain), 16.9% (Jhalokathi Roads), 17.6% (Bagarhat SWM), to 20.7% (Jhalokathi cyclone shelter), which are higher than the economic opportunity cost of capital of 9.0%, indicating significant economic returns. The sensitivity analysis also revealed that the results are satisfactory, except for cost increase and benefit reduction for drain subproject and combined worst scenarios for drain and SWM subprojects. The project’s economic viability increases if qualitative benefits including GHG emission and cleaner environment are included in the analysis. Construction of assets under these four sample subprojects will benefit 0.13 million population by 2029. The estimated poverty impact ratio for four sample subprojects ranges from 23.8% (Jhalokathi cyclone shelter) to 28.1% (Bagarhat drain). Based on the national urban below poverty line of 18.9%, the overall project is expected to benefit the poor considerably. Economic Analysis Results for Sample Subprojects are given below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Subprojects** | **EIRR %** | **Net Present Value (NPV) 15% Discount (Tk Million)** | **Benefit Cost Ratio (BCR) Considering 15% Discount** |
| Jhalagathi - Cyclone shelters | 20.7% | 15.31 | 1.33 |
| Jhalagathi - Roads | 16.9% | 41.34 | 1.12 |
| Bagerhat - SWM | 17.6% | 37.31 | 1.19 |
| Bagerhat - Storm water drain | 11.1% | -27.06 | 0.78 |

**Financial Viability**:

The financial analysis was carried out for four sample subprojects in two towns (i) Bagerhat (Drains and Solid Waste Management); and (ii) Jhalokathi (Roads and Cyclone Shelter). The proposed sample subprojects are non-revenue generating projects. There is no project specific revenue stream which would cover the O&M expenses. The historical and future cashflow analysis was conducted for the project towns which will operate and maintain assets to be constructed under this project. Analysis found that (i) the towns depend on its own income, (ii) Bagerhat has adequate capacity to operate and maintain the proposed subprojects; (iii) Jhalokathi requires additional financial support from the government to sustainably operate and maintain the proposed subproject. To ensure O&M sustainability, the government of Bangladesh will develop a revenue enhance plan for *pourashavas* as part of Output 3. The scope of the revenue enhancement plan includes (i) identifying the potential for increasing the revenue from existing sources, (ii) exploring new revenue sources and (iii) assess the legal provisions required to amend, to implement the revenue enhancement measures. Also, the government has provided assurance that in case the project towns are not able to meet O&M requirements through its revenue sources then it will provide funding gap to ensure financial sustainability. (Attached in Appendix-II)

**18.0 Lessons learnt from Similar Nature of Project(s):**

The project reflects lessons learned from Third Urban Governance and Infrastructure Project (UGIIP) namely the incentivizing of governance improvement through performance linked investment. The project also learnt lesson from (i) country diagnostic work on climate-resilient pro-poor urban development being undertaken through an ADB knowledge support and technical assistance, (ii) assessment of lessons from implementing resilience measures in the ongoing Coastal Towns Environmental Infrastructure Project (CTEIP) and (iii) ongoing climate risk assessment of 22 coastal towns using the Spatial Data Analysis Explorer (SPADE) are the Key lessons learned that will inform the project design include (i) a holistic approach to adaptation is urgently needed, including infrastructure investments and enhancements to social and economic resilience and adaptive capacity; (ii) economic development should be considered more directly with a stronger focus on the urban poor; (iii) timely access to adequate information is critical to building resilience of municipal services to climate change; (iv) disaster risk assessments and preparation of disaster management plans should be aimed at *pourashavas* as a whole instead of limiting to assets and infrastructure; (v) integration of traditional structural measures with low impact development such as nature-based solutions (NbS) provides multiple benefits to reduce flooding and enhance amenity and biodiversity; (vi) financial incentives linked to performance indicators early in the project lifecycle can incentivize *pourashavas* to better perform and comply with sustainable operation and maintenance practices; and (vii) increased decision-making role for women in the different committees, and diversifying livelihoods and capacity building interventions for women improves the adaptive capacity of vulnerable communities.

The proposed project design incorporates lessons learned from the current CTEIP project’s Gender Equity. The current project consulted with 4,300 women (52.65%) out of 8,167 people on the location selection and design of the community facilities in the project areas which ensured women’s preferences were integrated in site selections of infrastructures. The project constructed 22 cyclone shelters with separate toilets for women and men and an equal share of seats, rooms for lactating mothers, delivery, first aid, and ramp for the elderly and differently abled people. The project constructed 19 public/community toilets, and out of 71 seats, 36 (51%) for women. A total of 1,583 community people participated in updating urban master plans, water safety plans, preparing building codes, and O&M plans, of whom 567 (36%) were women. Ten standing committees on disaster management were formed with 21 (36%) women out of 58 members. The project prepared 10 GAPs (gender action plans) and Poverty Reduction Action Plans (PRAPs) for the 10 Coastal Towns and got approval from the respective Coastal Towns.

**19.0 Basis of item-wise Cost Estimate and Date: (In Lakh BDT)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SL. No.** | **Major Items** | **Unit** | **Unit Cost** | **Basis** | **Source** | **Date** |
| 1. | Cyclone shelters | Nos. | 464.94 | LGED Rate schedule 2019 | LGED | July,19 |
| 2. | Construction/Upgradation of RCC/BC Road | Km. | 238.96 | LGED Rate schedule 2019 | LGED | July,19 |
| 3. | Construction/ Upgradation of Drain | Km. | 334.32 | LGED Rate schedule 2019 | LGED | July,19 |
| 4. | Construction of Bridge/Culvert | m | 13.96 | LGED Rate schedule 2019 | LGED | July,19 |
| 5. | Construction of Bus Terminal | Nos. | 2125.00 | LGED Rate schedule 2019 | LGED | July,19 |
| 6. | Integrated solid waste management facilities | Nos. | 2125.00 | LGED Rate schedule 2019 | LGED | July,19 |
| 7. | Gender responsive and socially inclusive urban open spaces | Nos. | 750.00 | LGED Rate schedule 2019 | LGED | July,19 |
| 8. | Local EWCD friendly Multipurpose Market | Nos. | 539.18 | LGED Rate schedule 2019 | LGED | July,19 |
| 9. | Nature-Based solution piloted | Nos. | 760.00 | LGED Rate schedule 2019 | LGED | July,19 |
| 10. | Slum Improvement | Nos. | 79.55 | LGED Rate schedule 2019 | LGED | July,19 |

**20.0 Comparative Cost of Major Items of Similar Other Projects (Taka in Lac)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SL. No.** | **Major Items** | **Unit** | **Unit cost of the Item**  **(Taka in Lac)**  **Remarks** | | |
|  |  |  | Proposed Project | Similar Ongoing Project (\*) | Similar Completed Project (\*\*) |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1. | Construction/Upgradation of RCC/BC | Km | 238.96 | 157.00 | 130.00 |
| 2. | Construction/ Upgradation of Drain | Km | 334.32 | 207.00 | 172.82 |

\* Name of the similar ongoing projects Proposed:  [\*Coastal](http://www.lged.gov.bd/ProjectHome.aspx?projectID=306) Towns Environmental Improvement Project (CTEIP).

\*\* City Region Development Project (CRDP).

**21.0 Detailed Annual Phasing of cost (As per Annexure-V):** Attached

**22.0 Specification/Design of Major Items:**

Detailed specification/design of major components will be done during implementation.

**23.0 Amortization Schedule for Projects having Involvement of Loan from Government (As per Annexure-VI):**

Will be attached after finalization of Loan Agreement.

1. **The effect/impact, adaption and specific mitigation measures thereof if any on**
   1. **Other Projects/ existing installations:**

The Project will improve climate resilient infrastructure in coastal towns that will result in (i) surface and ground water sources complying with government saline standards, (ii) less flooding and water logging, (iii) less environmental pollution from discharged waste water. Improvement of the drainage and water supply system will improve the overall performance of the drainage and water supply network of the selected coastal Paurashavs and are not supposed to hinder performance of the existing installations. Besides the project has been designed in consultation with the development partners to avoid duplication and create synergies. The project is not expected to cause any adverse effect/impact on the other project or existing installations.

* 1. **Environment, Sustainability like land, water, air, bio-diversity, ecosystem services (If the project is ‘Red Category’ attach the EIA document):**

Project’s potential environmental impacts are short-term, site-specific and experienced mainly during the construction and can be mitigated or minimized to acceptable levels through implementation of simple mitigation measures. Initial environmental examination (IEE) carried out for the five sample subprojects (Jhalokati Cyclone Shelter and Access Road, Jhalokati Roads, Bagerhat Drainage, Bagerhat Integrated Solid Waste Management, and Kuakata Roads and Drains) during the project preparation confirms this. No Category A subprojects, which may result in significant adverse, irreversible, or unprecedented impacts will be considered for implementation under the project.

* 1. **Future disaster management, climate change:**

This project is meant for urban environmental improvement in vulnerable coastal towns of Bangladesh which suffer deficits in basic urban services and are severely at risk to the impacts of climate change. Under the project, proper arrangements will be made to build long-term and disaster-tolerant infrastructure. The climate resilience infrastructure will reduce the chances of loss due to the disaster or the effects of climate change.

* 1. **Women and Children:**

Women and Children are more vulnerable to natural disasters and effects of climate change. This increased vulnerability of woman and children has been duly recognized in designing the project. The project will be developed climate resilient community-based infrastructure in poor, vulnerable areas alongside larger infrastructure interventions. The project also includes livelihood training for poor households targeting women.

Provision of climate and disaster related services will benefit women by improving access and quality of cyclone shelters (separate women’s areas and toilets), reducing their burden to fetch water for families and improving their health from reducing exposure to unhygienic conditions. They will participate in community related decisions in the Community Based Organizations (CBOS) and the town and the ward level committees. Focused livelihood and awareness rising campaigns will target women enabling them to improve their skills and understand for improved social well-being. Women will be encouraged to play a major role in CBOs and town and ward level committees. Women’s will have equal opportunity to participate in project-supported training programs.

In broader aspects, the project will help disadvantaged people, especially women and children, to be a part of the campaign for creating resilience in the disaster and climate change situation.

* 1. **Employments:**

The Project will create immediate and long-term employment opportunities for the poorer section of the urban population in civil works under various sub-projects. After completion of the project, long-term employment opportunities in the project area will be further expanded.

* 1. **Poverty Situation:**

The project will help in reducing poverty, creating employment in the project area. During the project period, short-term jobs will be created in the project area. After successfully implementing the project, various economic activities will be increased in the project area.

* 1. **Organizational Arrangement/Setup:**

Paurashava staff will enhance their skill in engineering fields through construction/re-construction of physical infrastructures. Moreover, there will be a conducive working environment through construction/improvement of physical infrastructure which will have a positive impact on LGED's institutional development.

* 1. **Institutional Productivity:**

The project supports to strengthen institutional capacity and governance, climate-awareness through knowledge management to complement physical investments as a part of an integrated approach for building climate change resilience. Which are includes: (i) capacity of LGED and *pourashavas* strengthened to undertake climate and disaster risk assessment to inform the formulation and update urban development plans, including structure plans, detailed area plans, and action plans; and enforcement of development control regulations that factor in natural hazards considerations; (ii) knowledge and capacity of LGED and *pourashavas* on Nature based soluation and green solution application developed; (iii) municipal governance, and sustainable service delivery improved by adopting a risk-informed performance-based budget allocation strategy to promote improved governance mechanisms including participation of town level coordination committee on disaster preparedness measures, strengthen municipal finance systems including local revenues enhancement, operation and maintenance plans approval, computerized tax records and billing systems made functional in project towns; (iv) Strengthen and equip Cyclone Shelter Management Committees; and (v) public awareness, behavior change, and community mobilization enhanced in light of coronavirus disease (COVID-19) and cyclone Amphan in 2020. The project will also support training and capacity building of LGED and *pourashavas* to institutionalize information technology-based remote monitoring through strengthening LGED’s geographic information systems section, monitoring and evaluation unit, and project management unit.

* 1. **Regional Disparities:**

Coastal region represents lagging regions in terms of poverty, sustained economic development opportunities, infrastructure facilities, etc. These are also the most vulnerable regions to impacts climate change. The development strategies of the Eight Five Year Plan envisage balance development of urban centers across the entire country, with special emphasis on addressing the problems of the lagging regions. In line with this strategy, the project exclusively focusses on the coastal regions and it will strengthen adoptive capacities and resilience of the coastal towns in terms of key infrastructure and the residents of the towns. Development interventions of the project would help reduce regional disparity of coastal towns through improvement of climate resilient infrastructure and adaptation capacities of the project municipalities, including their residents.

* 1. **Populations:**

If this project is implemented successfully, short and long term employment will be created in the project area. Therefore, different economic activities will increase.

1. **Whether environmental clearance under the ECA 1995 (Revised 2010) has been obtained? (If yes, attach the certificate, if not, mention the cause)**

No, the Project falls under ORANGE-B Category. The project is category B for environment per ADB’s Safeguards Policy Statement (SPS) of 2009. Project’s potential environmental impacts are short-term, site-specific and experienced mainly during the construction and can be mitigated or minimized to acceptable levels through implementation of simple mitigation measures. Initial environmental examination (IEE) carried out for the five sample subprojects (Jhalokati Cyclone Shelter and Access Road, Jhalokati Roads, Bagerhat Drainage, Bagerhat Integrated Solid Waste Management, and Kuakata Roads and Drains) during the project preparation confirms this. No Category A subprojects, which may result in significant adverse, irreversible, or unprecedented impacts will be considered for implementation under the project.

1. **Specific Linkage with Perspective Plan/Five Years Plan/SDGs/Ministry/Sector Priority (Mention these pages with causes of respective document/attach the relevant pages of those documents)**

**Bangladesh Delta Plan 2100**:

The Government of Bangladesh has made climate resilience of its citizens, environment, and system a priority. Bangladesh’s climate commitment is demonstrated by the adopting the Bangladesh Delta Plan 2100 (BDP 2100), a comprehensive 100-year strategic plan aimed at attenuation of gradual sustainable development through adaptive delta management process, and through Nationally Determined Contributions Implementation Road Map 2018, Nationally Determined Contributions 2020 (Interim), implementation of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP 2009) since 2010 by channeling its own fund (Bangladesh Climate Change Trust Fund, BCCTF). [[16]](#footnote-16) BDP 2100 integrates all climate actions of individual sectoral plans to address increasing climate risk. BDP 2100 outlines policies for the six hotspots that are focused on flood risk management and freshwater conservations. [[17]](#footnote-17) Several strategies are outlined in the BDP2100 envisaging ecosystem restoration, flood management infrastructures, interventions to ensure water security, and enhancement of ecosystem services through conservation and ecosystem management. All these are in line with Bangladesh’s vision to become a lower middle-income country by 2021 and a developed country by 2041.

**Government’s Perspective Plan of Bangladesh 2021–2041**:

The Perspective Plan for Bangladesh 2021–2041 (PP2041) estimates that the investment need for the urban sector will grow from 2.4% of GDP now to 5% by fiscal year (FY) 2031 and 7% by FY 2041.[[18]](#footnote-18) PP2041 emphasizes the need for synergies between urban and environment sectors and identified seven strategies for effective environmental management and climate resilience.[[19]](#footnote-19) To meet the huge requirements, PP 2041 suggests the need for involvement of private financing and a strong cost recovery program for urban services in addition to the government’s own budget. While local governments’ tax resources will help finance operating costs, cost recovery from the urban basic services themselves will become even more important.

**Government’s Eighth Five-Year Plan (2021–2025)**:

The sector is guided through a range of national development plan, policies, and strategies, with the overall government development framework set by the Eighth Five-Year Plan (8th FYP) for fiscal year 2021–2025. The Eighth Five-year Plan (8th FYP) for fiscal year 2021–2025. For the sustainable development of the country, the plan focuses on integrating economic progress, environment, climate change and disaster management with appropriate policy and institutional capacity building. Urban sector is one of the several prioritized areas for the overall development with emphasis on increased responsibility of local government institutions where most of the development programs are to be implemented. The 8th FYP suggests a major change in the urban governance by emphasizing political, administrative, and fiscal decentralization and participatory development. Specific steps are proposed including preparation of urban development plans, district level regional plans, and infrastructure plans (road, storm water drains, natural water course). It states that the access to safe water and sanitation will be enhanced to improve health and fight the coronavirus disease (COVID-19) pandemic. In sanitation, it emphasizes fecal sludge management including institutional regulatory framework and capacity strengthening of municipalities.

**National Adaptation Plan 2021**:

Bangladesh is formulating 2021 National Adaptation Plan which will include medium to long-term adaptation investment and will enhance national capacity for integration of climate change adaptation in planning, budgeting, and financial tracking process. The formulation of national adaptation plan is being done in line with Bangladesh’s priorities outlined in the Sustainable Development Goal Framework, Bangladesh Delta Plan 2100, Perspective Plan of Bangladesh 2021–2041, and the 8th Five-Year Plan. Nature-based Solution and ecosystem-based adaptation is given priority.

**27.1 Contribution of the Project in Achieving the Vision, Mission of the Ministry/Division and Implementing Agency.**

With the construction of infrastructure in the disaster-prone urban areas of the country, the development of the economy of the coastal municipality will be accelerated, so that the development of the social status of the local people of the coastal municipality will accelerate which is in line with the duty of the local government, rural development, and cooperatives ministry.

In this endeavor, LGED has been working as a driving force for development, management of the socio-economic conditions, poverty reduction and local level development through the development and management of local infrastructure.

Therefore, the proposed project will be helpful in achieving the mission and vision of the concerned ministries, divisions and organizations.

**27.2 Relation of the Project with the Allocation of Business of the Sponsoring Ministry/Division.**

Coastal Towns Climate Resilience Project (CTCRP) in 22 Paurashava is consistent with Local Government Division's Allocation of Business.

**28.0 Whether private sector/local government or NGO's participation was considered? Describe how they are involved**?

Paurashavas (municipalities) are the implementing agencies of the project. Project Implementation Unit (PIU) will be established in each of the project municipalities. The project will provide capacity support to strengthen institutional capacity, governance, disaster risk management of the project paurashavas particularly through the Institutional Capacity and Community development Consultant. Paurashavas as implementing agencies will directly participate in implementing sub-projects in their respective areas. There is a provision of promoting two Non-Government Organization (NGO) under resilient livelihood improvement component of the project, which includes increase adaptative capacity of vulnerable households to deal with climate shocks. This will be done through localized market assessments to identify viable income generating activities; household skills and resource mapping; household level enterprise and employment matching; and tailored technical training along with asset provision to provide a holistic livelihood support. Additionally, the Graduation approach is introduced to build resilience among the poor and vulnerable households which is a comprehensive and sequenced set of interventions to place households on an upward trajectory from poverty.

**29.0 Major conditionality (ies) for Foreign Aid:** Not Applicable.

**30. Involvement of Compensation, Rehabilitation/resettlement; (indicate the magnitude and cost if applicable)**

A Resettlement Framework, two draft Resettlement Plans for sample subprojects Bagerhat drainage and Bagerhat integrated solid waste management, one Resettlement and Small Ethnic Communities Plan (RSECP) for Kuakata roads and drains, and two draft due diligence reports for Jhalokathi roads and cyclone shelters are prepared (Attached in Appendix-V). All sites and alignments required for the sample subprojects are government-owned; no land acquisition is envisaged. The Resettlement Plan for the Bagerhat drainage sample subproject assesses temporary economic impacts to business owners, during the construction period. The proposed mitigation measures and safeguard planning documents for sample subprojects are adequate to address the assessed impacts. No category A subprojects are envisaged, and none will be allowed. The social safeguards planning documents will be updated during the final design and detailed measurement survey. The estimated cost for resettlement cost is BDT. 10540 Lakh.

**31.0** **Risk Analysis and Mitigation Measures: (Identify Risks During Implementation & Operation**)

|  |  |
| --- | --- |
| **Risks During Implementation & Operation** | **Mitigation** |
| 1.Limited experience of *pourashavas* in implementing ADB financed projects results in noncompliance with ADB’s financial requirements and disbursement delays. | 1.Capacity building in financial management, internal auditing, and ADB’s financial management requirements, disbursement procedures and systems will be provided to staff of PMU and PIUs to ensure robust and transparent project financial management. LGED will include the project in their audit plan of its’ internal audit function; The project support in strengthening accounts and audit committees of the *pourashavas* to undertake regular internal audits. All projects’ transactions will be recorded by computerized accounting software. |
| 2.Covering a broad geographic area with numerous small towns and a multitude of subprojects will stretch implementation capacity of LGED and pourashavas. This could lead to start-up delays and implementation problems. | 2. Subprojects will be implemented within the absorptive capacity of *pourashavas* (local government), LGED will strengthen its project management capacity by establishing two regional project management unit, sufficient capacity support to LGED and *pourashavas* is provisioned and the implementation period consider potential delays. |
| 3.Frequent change of staff positions at Paurashavas may hamper the Project implementation. | 3.To ensure effective implementation of the Project. The key staff members at Paurashava level should not be transferred during the Project Implementation Period. |
| 4. Weak capacity of Paurashavas can affect the Project Performance. | 4.LGED will provide training to Paurashava’s related Officials/staffs to enhance capacity. |
| 5.The project implementation will be disturbed due to enhancing price of construction materials. | 5.The unit price of physical components is determined in accordance with current rate schedule of LGED and has kept provision for price escalation. |

**32.0 Other Important Details (Technical or otherwise)**

**32.1 Sustainability of the Project Benefit**

Each *pourashava* will adopt a gender inclusive O&M Plan to ensure adequate maintenance of the created assets through improved assets management system supported under the project and committing adequate allocation for O&M in its yearly *pourashava* development plan and budget. The project will support each *pourashava* to prepare, adopt and implement a revenue enhancement road map to improve revenue management in terms of revenue coverage, valuation, collection, and taxpayer services.

**32.2 Project Steering Committee (PSC) Formation and TOR:**

A Steering Committee (SC) chaired by the Secretary of LGD will be established at ministry level to oversee the project. Formation of SC will be as follows:

|  |  |  |
| --- | --- | --- |
| 01. | Secretary, LGD | Chairperson |
| 02. | Joint Chief (Planning Wing), LGD | Member |
| 03. | Joint Secretary (Development), LGD | Member |
| 04. | Chief Engineer, LGED | Member |
| 05. | Deputy Chief, LGD | Member |
| 06. | Representative of NEC-ECNEC & Coordination Wing of the Planning Division | Member |
| 07. | Representative of the concerned Wing/Sector-Division of the Planning Commission | Member |
| 08. | Representative of Concerned Sector of IMED | Member |
| 09. | Representative of the Programming Division, Planning Commission | Member |
| 10. | Representative of Finance Division | Member |
| 11. | Representative of Economic Relation Division | Member |
| 12. | Representative from the Planning Unit, LGED | Member |
| 13. | Project Director, LGED | Member |
| 14. | Senior Assistant Chief/Assistant Chief (Planning), LGD | Member Secretary |

The Project Steering Committee (PSC) will hold a minimum of 4 meeting annually. The work schedule of this committee is as follows

* To review the recommendation of the project implementation committee for addressing problems that arise during project implementation and to take decision accordingly.
* To give guideline or to formulate policies which required for implementing project activities.
* Any other matter related to project implementation.

**32.3 Project Implementation Committee (PIC) Formation and TOR**:

The project implementation committee (PIC) will be formed as follows:

|  |  |  |
| --- | --- | --- |
| 01. | Chief Engineer, LGED | Chairperson |
| 02. | Representative from the Planning Wing, LGD | Member |
| 03. | Representative from the Development Wing, LGD | Member |
| 04. | Representative from the concerned Wing/Sector-Division of the Planning Commission | Member |
| 05. | Representative from the programming Division of Planning Commission | Member |
| 06. | Representative of the General Economic Division of Planning Commission | Member |
| 07. | Representative from Concerned Sector of IMED | Member |
| 08. | Representative of Economic Relation Division | Member |
| 09. | Representative from Finance Division | Member |
| 10. | Project Director, LGED | Member |
| 11. | Representative from LGED | Member |
| 12. | Concerned Desk Officer of the LGED | Member-Secretary |

The Project Steering Committee (PSC) will hold a minimum of 3 meeting annually. The work schedule for this Committee is as follows:

* To give necessary assistance or suggestion for implementation project activities.
* If any problem arises during project implementation then to give necessary decision to solve problem.

**32.4 Others, If any:** Not Applicable.

|  |  |  |
| --- | --- | --- |
| ---------------------------------------------------------  Signature of the Head of the  Executing Agency with seal and date |  | ------------------------------------------------------------  Recommendation and Signature of the Secretary of the Sponsoring Ministry/Division with seal and date |

1. IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [↑](#footnote-ref-1)
2. Government of Bangladesh, General Economic Division, Bangladesh Planning Commission, Ministry of Planning. 2020. [*Making Vision 2041 a Reality – Perspective Plan of Bangladesh, 2021–2041*](http://oldweb.lged.gov.bd/UploadedDocument/UnitPublication/1/1049/vision%202021-2041.pdf). Dhaka. [↑](#footnote-ref-2)
3. Snowmen Rahman and Mohammed Ataur Rahman. Climate Extremes and Challenges to Infrastructure Development in Coastal Cities in Bangladesh. Volume 7, March 2015, Pages 96*–*108. [↑](#footnote-ref-3)
4. K. Richardson. 2014. Human Dynamics of Climate Change: Technical Report. United Kingdom. [↑](#footnote-ref-4)
5. Climate Analytics. 2019. [Decarbonising South & South East Asia - Country Profile - Bangladesh (climateanalytics.org)](https://climateanalytics.org/media/decarbonisingasia2019-profile-bangladesh-climateanalytics.pdf) [↑](#footnote-ref-5)
6. WHO. 2015. [*Climate and Health Country Profile- 2015 Bangladesh*](https://www.who.int/globalchange/resources/PHE-country-profile-Bangladesh.pdf?ua=1). Switzerland. [↑](#footnote-ref-6)
7. ADB. 2014. [*Coastal Towns Environment Infrastructure Project*](https://www.adb.org/sites/default/files/project-document/81355/44212-013-rrp.pdf). Manila. [↑](#footnote-ref-7)
8. National Adaptation Programme of Action (2005), Climate Change Trust Act 2010, Bangladesh Climate Change Strategy and Action Plan (2009), Intended National Determined Contribution (2015), Climate Change and Gender Action Plan, National Plan for Disaster Management, 2016–2000, National Water Management Plan. [↑](#footnote-ref-8)
9. Government of Bangladesh. 2018. [*Delta Plan 2100*](https://oldweb.lged.gov.bd/UploadedDocument/UnitPublication/1/756/BDP%202100%20Abridged%20Version%20English.pdf). Dhaka. [↑](#footnote-ref-9)
10. Hotpots are prototypical areas where similar hydrological and climate-change vulnerability characteristics and problems coverage such as sea-level rise, river erosion, intensity of flooding, water shortage, siltation constraints. (Delta plan 2100). [↑](#footnote-ref-10)
11. Government of Bangladesh. 2020. [*Eighth Five Year Plan July 2020–June 2025: Promoting Prosperity and Fostering Inclusiveness*](https://www.ircwash.org/sites/default/files/2021-02-03-17-04-ec95e78e452a813808a483b3b22e14a1.pdf). Dhaka. [↑](#footnote-ref-11)
12. Sustainable Development Goal 1 (*Poverty Targeting*), Goal 5 (*Gender Mainstreaming*), Goal 11 (*Making cities and human settlements inclusive, safe, resilient and sustainable*), Goal 13 (*Climate Action*), Goal 16 (*Strong Institutions*). [↑](#footnote-ref-12)
13. ADB. 2018. [*Strategy 2030:* *Achieving a Prosperous, Inclusive, Resilient and Sustainable Asia and the Pacific*](https://www.adb.org/sites/default/files/institutional-document/435391/strategy-2030-main-document.pdf)*.* Manila. [↑](#footnote-ref-13)
14. Government of Bangladesh, Ministry of Planning, Statistics and Informatics Division. 2017. [*Household Income and Expenditure Survey 2016*](https://catalog.ihsn.org/catalog/7399/study-description)*.* Dhaka [↑](#footnote-ref-14)
15. It includes four key components: social protection through subsistence allowance and linkages to basic services; livelihood promotion through access to sustainable and resilient livelihoods; financial inclusion through access to formal savings mechanisms and financial literacy; and social empowerment for positive behavior change among families and communities. [↑](#footnote-ref-15)
16. Government of Bangladesh. 2018. Delta Plan 2100. Dhaka; and Government of Bangladesh. 2009. Bangladesh

    Climate Change Strategy and Action Plan. Dhaka [↑](#footnote-ref-16)
17. Hotspots are prototypical areas where similar hydrological and climate-change vulnerability characteristics and

    problems coverage such as sea-level rise, river erosion, intensity of flooding, water shortage, siltation constraints.

    Coastal zones and urban areas are two out of six identified hotspots (BDP2100). [↑](#footnote-ref-17)
18. Government of Bangladesh, General Economics Division, Bangladesh Planning Commission Ministry of Planning.2020. Making Vision 2041 a Reality – Perspective Plan of Bangladesh, 2021–2041. Dhaka. [↑](#footnote-ref-18)
19. Seven strategies are: (i) integrate environmental costs into the macroeconomic framework; (ii) implement the Delta Plan to Build Resilience and Reduce Vulnerability to Climate Change; (iii) Reduce Air and Water Pollution; (iii)

    Reduce Air and Water Pollution; (iv) Ensure Sustainable Management of Forestry Resources; (v) Strengthen

    Environmental Coordination and Environmental Institutions; (vi) Strength [↑](#footnote-ref-19)