Bangladesh University of Engineering and Technology (BUET)

Department of Urban and Regional Planning (URP)

PLAN 402: Project Planning Studio

Concept Note

Submitted to

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Build Back Better: Cyclone Shelter Project

I. Project Overview	
Project Title	Construction of Multipurpose Cyclone Shelter
Location	Paurashava: Borhanuddin, Charfassion, Lalmohan District: Bhola Country: Bangladesh
Starting Date	February 01, 2024
Duration of Action	1 Year
Donor	ADB (Asian Development Bank)
Total Budget	BDT 20 Million
Local Partners	NGO
Sector(s)	Shelters, Protection, Livelihoods
Overall Objective	To Improve the living conditions of cyclone affected communities in three paurashavas of Bhola
Target Beneficiaries	The proposed project aims to assist the most vulnerable socio-economical groups (i.e., poor farmers, fishermen) who are amongst the most severely affected by cyclone and who have very limited capacity and financial resources to recover from the devastation. Particular attention will be given to persons with special needs such as female-headed households, women and widows, children, elderly, people living with disabilities. The proposed project is also targeting isolated underserved communities in remote areas.
Implementing Agency	Paurashava and LGED
Contact Person	Name: Mobile No: Email:
II. Context	
Climate Vulnerability of Bangladesh	Bangladesh is one of the most natural disaster prone countries. Over the last 43 years many cyclones have affected the country accompanied with loss of lives and property. Global climate change will make the country even more vulnerable to cyclones and floods. Bangladesh is high on the list of countries most vulnerable to climate change, ranking seventh on the 2021 World Climate Risk Index (GCA,2023). Bangladesh currently ranks as one of the world's foremost disaster-prone country. The situation is aggravated, all the more by its being the most densely populated country in the world (Chowdhury, 2007). In certain regions of the country, people's lives are disrupted by natural disasters each year. The extreme natural events are termed disasters when they diversely affect the whole environment, including human beings, their shelters, or the resources essential for their livelihood. The geographic location of Bangladesh leaves it susceptible to natural calamities (MoEF, 2005).
Adapting Building Back Better Concept	The needs of Bangladesh for adaptation of 'building back better' concept to the impacts of climate change are significant. According to the United Nations, BBB is "the use of the recovery, rehabilitation, and reconstruction phases after a disaster to increase the resilience of nations and communities through the integration of disaster risk reduction measures into the revitalization of livelihoods, economies, and the environment, as well as

	into the restoration of physical infrastructure and societal systems (UN General Assembly, 2016). Build Back Better is championed in the fourth of five priority action areas under the Sendai Framework for Disaster Risk Reduction 2015-2030 (SF). The SF aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in economic, physical, social, cultural and environmental spheres (Collodi et al. 2019). By enforcing disaster-resilient construction standards, this translates into safer buildings; providing insurance and social protection to vulnerable groups; empowering women and underprivileged groups through joint titling of land, property, and assets; and enhancing and expanding basic services to create resilient communities. Thus, in order to boost the resilience of communities in Bangladesh, it is crucial to make sure that a BBB strategy is promoted and universalized during recovery.

III. Project Background

The cyclone struck the coastal towns of Bangladesh with very high wind speeds. Coastal towns are especially vulnerable to the effects of climate change because of their high rates of poverty and Paurashavas' (urban municipal governments') limited ability to make investments in resilience. According to the Government of Bangladesh, the Great Bhola Cyclone of 1970, killed 190 people, injured more than 7,000, and destroyed more than 500,000 houses (Haque, n.d). Very recently cyclone Mohsen again revealed a huge need of cyclone shelters in costal belt. The lower death tolls in recent years can be attributed to a network of cyclone shelters built after the 1970 disaster and a SMS warning system recently introduced (AFP, 2009). The scarcity of cyclone shelters in these coastal towns results in extreme congestion of those that do exist, restricting access to the shelter. According to a report (Islam 2004), the current shelters are only able to house 27% of the population that is at risk, while a majority of those shelters are not in good condition. In 10 coastal towns, the Coastal Towns Infrastructure Environmental Infrastructure Project (CTEIP), funded by the Asian Development Bank (ADB), officially started in September 2014 and was finished in June 2022. As a continuity of the project, ADB extended its support to ‘Build Back better’ Cyclone shelter initiated by Bangladesh Disaster Preparedness Center which will strengthen climate resilience and disaster preparedness in three vulnerable coastal paurashava (secondary towns) of Bhola district. The towns were selected based on their vulnerability, population size, density, and level of past investments.The project will increase the climate and disaster resilience of coastal towns of Bhola districts including benefiting the unprivileged and women in particular. The completion of this project is expected to not only save human lives but also the lives of animals. The shelters to be constructed will also contribute to the general improvement of local community life by serving as school, clinic or community center buildings in normal times.

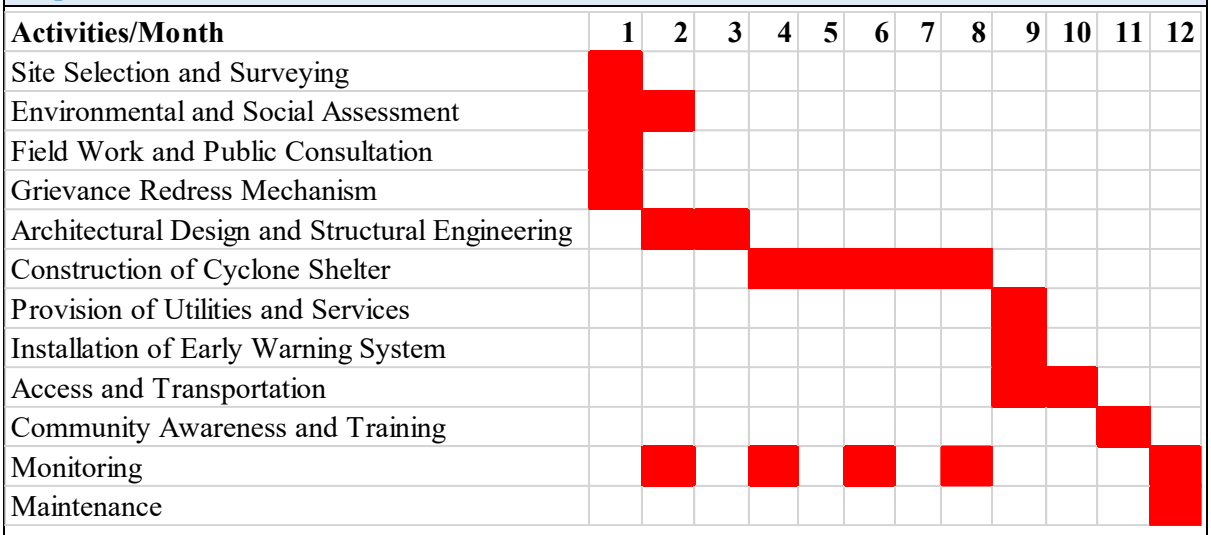
IV. Rationale

As stated in SDG Goal 13, "Climate Action," this project will contribute to the adaptation of local people against natural disasters such as cyclones (United nations, nd). The project aligns with the first goal of the National Adaptation Plan (2023-2050) of Bangladesh (MoEFCC, 2022) providing protection against the variability of climate change and its caused natural disasters. The project will help to reduce economic losses induced by cyclone. Besides, human lives will be more secure for the construction of shelter centers, roads etc. Women, children, physically challenged people who are more vulnerable during disaster will be benefitted. During the construction phase of the shelter center, local people both male and female will get job (construction of shelter center, adjacent roads, tree plantation surrounding the shelter center), children will get education support and health-camp will

be another use of the shelter. The multipurpose shelter center will be gender-friendly (separate room, toilet for women).	
V. Expected Outcome	
1. Reduce the vulnerability of disaster-affected people and build community resilience to natural disasters and extreme climate events. 2. Enhance adaptive capacity and improve well-being of coastal communities	
VI. Objectives	
1. To enhance the protection of the coastal communities to cyclone and extreme weather events through providing effective multi-purpose shelters. 2. To provide facilities to the shelters for multipurpose use in normal times	
VII. Project Components	
Site Selection and Surveying	Identify suitable locations for cyclone shelters based on vulnerability assessments, population density, and accessibility. Conduct surveys to assess the topography and soil conditions.
Environmental and Social Assessment	Environmental and social issues will be identified through the screening process and if any potential issue is identified, the same will be suitably addressed in site specific Environmental Management Plans (EMP) and Social Management Plans (SMP).
Land Acquisition and Involuntary Resettlement	Acquiring land for cyclone shelters involves thorough assessments and compliance with legal frameworks. Involuntary resettlement planning for livelihood restoration, and social infrastructure development. The project will not result into any permanent or temporary land acquisition, and no involuntary resettlement impact is envisaged, as the proposed sites and development activities will be undertaken within the vacant land, Govt./ community lands and are inside the existing school premises. There is no land acquisition as such involved.
Field Work and Public Consultation	Field visit and transect walk to be carried out to the project locations in all paurashavas. Consultation meetings will be conducted with key stakeholders and community members in line with ADB's requirements pertaining to environmental and social considerations.
Grievance Redress Mechanism	A project-specific grievance redress mechanism (GRM) will be established to receive, evaluate, and facilitate the resolution of AP‟s concerns, complaints, and grievances about the social and environmental performance at the level of the project.
Architectural Design and Structural Engineering	Detailed architectural plans for the cyclone shelters, considering factors such as wind resistance, structural integrity, and adequate space for the targeted population. Structural engineers to design the shelter's framework, ensuring it can withstand strong winds and other cyclone-related hazards.
Construction of Cyclone Shelter	Supervise the construction phase by coordinating efforts among construction workers, contractors, and project managers. Local Workforce Utilization: Prioritize hiring local labor for construction, supporting the community's economy and ensuring that those involved have a vested interest in the project's success.
Provision of Utilities and Services	Integration of essential utilities like water supply, sanitation facilities, and power sources. These components are crucial for meeting the basic needs of occupants during and after a cyclone.

Installation of Early Warning System	Implementation of the necessary infrastructure and technology to detect and communicate cyclone threats promptly.
Access and Transportation	Establishment of proper access routes and transportation infrastructure to ensure that people can reach the shelters easily, especially in emergency situations.
Community Awareness and Training	Implement educational programs to raise awareness about cyclone preparedness and the use of cyclone shelters. Conduct training sessions on evacuation procedures and emergency protocols for shelter occupants. Provide training programs for shelter managers and staff to enhance their ability to respond effectively during emergencies.
Monitoring and Maintenance	Development of a system for ongoing monitoring and maintenance of the cyclone shelters.

Implementation Schedule



Expected Results

1. 113 new shelters will be constructed in three paurashavas of Bhola district
2. 105 km (about 65.24 mi) of rural roads will be constructed for better access to shelters
3. 1 million people will be benefitted from the project.
4. 1500 children will get education facility
5. 2500 people will receive medical care at the health camp

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