PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA6589

Project Name	Multipurpose Disaster Shelter Phase II (P146464)
Region	SOUTH ASIA
Country	Bangladesh
Sector(s)	General agriculture, fishing and forestry sector (10%), Primary education (22%), Rural and Inter-Urban Roads and Highways (13%), Gen eral water, sanitation and flood protection sector (30%), Other social services (25%)
Theme(s)	Natural disaster management (67%), Other public sector governance (10%), Rural policies and institutions (15%), Other social develop ment (8%)
Lending Instrument	Investment Project Financing
Project ID	P146464
Borrower(s)	Government of Bangladesh
Implementing Agency	LGED
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	02-Oct-2014
Date PID Approved/Disclosed	02-Oct-2014
Estimated Date of Appraisal Completion	03-Oct-2014
Estimated Date of Board Approval	16-Dec-2014
Decision	

I. Project Context

Country Context

Over the past twenty years, Bangladesh has made significant gains in economic growth, development and poverty reduction. Sustaining annual growth rates of around 6% in the past decade, the country has witnessed a profound social transformation with an influx of girls into the education system and women into the labor force. Economic growth has pulled 16 million people out of poverty in the last 10 years. Despite these successes Bangladesh faces considerable development challenges posed by its low and flat topography and vulnerability to floods, torrential rains, erosion, and sever cyclonic storms and tidal surges especially in the coastal zones.

Coastal Vulnerability. The longitudinal position of Bangladesh, combined with its proximity to the Bay of Bengal and the Indian Ocean, generate a tropical monsoon-type climate, prone to cyclones, flooding and drought. Bangladesh is also at risk for earthquakes and tsunamis, sitting at or near the juncture of several active tectonic boundaries. The summers are generally hot and rainy, while the

winters are slightly cooler and dry. The dry season is from November to February, and average rainfall totals less than 10 mm in January, the driest month. The monsoon season is from June through August, where average rainfall totals increase to a peak of over 500 mm in July, the wettest month. Most regions accrue more than 1,500 mm of annual rainfall, making Bangladesh one of the wettest and most fertile climates in the world. Cyclones typically affect Bangladesh in the fall and spring, the intervals between the dry season and the monsoon season. North Indian Ocean tropical cyclogenes is occurs at least 500 km from the equator, a necessary prerequisite for a strong enough Coriolis force to sustain a low pressure center. Intensification of the storm transpires as gradient wind balance concentrates latent heat near the core. Cyclones move northward where, almost every year, at least one makes landfall in Bangladesh.

Economic Impact of Cyclones. Natural disasters, particularly cyclones, remain a persistent obstacle towards sustained growth in locally affected areas of the coastal region. From 1990-2008, Bangladesh incurred an average annual loss of US$2.189 billion (1.8 percent of annual GDP) from disasters. A comprehensive Joint Damage, Loss and Needs Assessment (JDLNA) undertaken by a team comprised of the Government of Bangladesh (GoB) and international experts , estimated that the total damage and losses caused by 2007 Cyclone Sidr alone to be Bangladesh Taka (BDT) 115.6 billion (US$1.7 billion). More than two-thirds of this was physical damage and one-third economic losses, focused on the coastal regions. Damage and losses were concentrated in the housing sector (US$840 million, 50 percent of the total), production sectors (US$490 million, 30 percent), and public sector infrastructure (US$250 million, 16 percent). The most affected sectors were, in decreasing order, housing, agriculture, transport, water control structures, education, and industry. Damage and losses to private assets and livelihoods outweighed the losses and damage to public infrastructure significantly. Cyclone Sidr was the second natural disaster to affect Bangladesh in 2007, followed after monsoon floods had caused extensive damage to agricultural production and physical assets, totaling US$1.1 billion. The Bangladesh economy sustained combined effects of the cyclone and the floods of 2007 in the estimated amount of BDT 189.4 billion, or 4.7 percent of GDP for the previous fiscal year.

Sectoral and institutional Context

The coast of Bangladesh is approximately 710 km long and is home to nearly 40 million people. Cyclones affect the region with strong winds accompanied by powerful storm surges and widespread inundation over a vast area. In 2007, Cyclone Sidr had a diameter of nearly 1,000 km2 at landfall. Destruction is amplified by low-lying physical geography, high-tide at landfall, climate change, high population density, and the low-income status of Bangladesh. The Meghna estuarine region is especially vulnerable to storm surge amplification.

After the severe cyclone of 1970, which killed an estimated 300,000 people, the Government of Bangladesh pledged to improve protection of the coastal population. In the subsequent decades, the Government constructed a network of cyclone shelters in the coastal areas, and developed an early warning system for local communities, entitled the Cyclone Preparedness Program (CPP). Between 1970 and 2007, around 1700 cyclone shelters were constructed, with the aim of providing shelter and protection from high winds and storm surges common during cyclones. The growing network of cyclone shelters and the community based early warning system has served to save lives and assets in the event of a natural disaster.

The increasing coverage of cyclone shelters is often credited with the drastic reduction in lives lost

due to cyclones and other extreme weather events. Globally, in the period 1956-2005, the number of disasters and related economic losses from weather related hazards increased by nearly 10-fold, however the reported loss of life decreased from 2.66 million over the decade 1956-65 to 0.22 million over the decade 1995-2005. Similar patterns are found in Bangladesh; total fatalities from a super cyclone in 1971 were estimated at around 300,000, whereas Super Cyclone Sidr (2007) affected only around 3,000, despite similar wind speeds and storm surge patterns. Both the Cyclone Preparedness Programme (CPP) and the increasing accessibility of cyclone shelters are largely credited with this decline. In addition, lessons learned over the past decades in the construction of cyclone shelters have further improved their designs. For example, shelters now include separate spaces for women, in large part from studies demonstrating the gendered effect of natural disasters. In addition, killas, or space for livestock, is now standard in most shelter designs, which allows for improved economic recovery. Finally, shelters are now almost exclusively constructed as primary schools, which allow for multipurpose uses and brings added social benefits to often remote areas.

Alongside the construction of multipurpose shelters, effective early warning systems are a critical building block to reducing fatalities and economic losses from natural disasters and extreme weather events. Global best practices show that early warning systems require strong technical foundations and good knowledge of the risks, but they must also be strongly "people centered" – with clear messages and dissemination systems that reach those at risk, and effectively bring them to safe haven. Bangladesh's CPP was started through a growing network of volunteers at the local level after the deadly cyclone of 1970. With direct links to the Bangladesh Meteorological Department, the entirely community-based and volunteer staffed CPP is responsible for early warning, search and rescue, evacuation, sheltering, first aid, relief distribution and rehabilitation activities. CPP is considered a model program in the world and has won the "Smith Tumsaroch Award-1998" for its Outstanding Performance in disaster management and has received the endorsement of the Government of Bangladesh (GoB). The CPP has over 200 government staff and about 50,000 volunteers (about 16,000 female volunteers) over 3,000 units, and it operates in 322 union parishads and 37 upazilas (districts) of Bangladesh's coastal districts. Bangladesh's network of shelters provides a vital first line of defense against cyclones, alongside early warning preparedness, megaphones, and an intricate polder system.

After Cyclone Sidr (2007) made landfall, several programs were initiated to construct or rehabilitate shelters in the coastal area. Partners such as the Islamic Development Bank, the Army Corps of Engineers, the Bangladesh Climate Change Resilience Fund (BCCRF), and the Government of Bangladesh's Disaster Management Bureau have funded the construction of multipurpose shelters in the coastal area. In 2008, the World Bank approved the Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP), an Emergency Recovery Loan (ERL) targeted at immediate livelihood recovery, and rehabilitation of cyclone shelters and embankment systems affected by the storm. The geographic focus of ECRRP is the nine coastal districts that were heavily affected by Cyclone Sidr: Bagerhat, Barguna, Barisal, Bhola, Jhalakati, Khulna, Patuakhali, Pirojpur and Shatkira. Of these, the districts of Barisal, Bhola, Pirojpur and Patuakali sustained around one third of the total damages. Under ECRRP as well as under two Additional Financing operations, approved in 2010 and 2013, as well as financial contributions from SDC and BCCRF, around 330 new shelters willl be constructed, with 460 to be rehabilitated by the time the project closes in 2017. The Local Government Engineering Department (LGED) has been the implementing agency for the component responsible for the construction and rehabilitation of multipurpose disaster shelters. LGED is mandated with planning and implementation of local level rural urban and small scale water resources infrastructure development programs, as well as construction of roads, bridges/

culverts and markets to social mobilization. In addition to rehabilitation and construction of shelters, LGED commissioned a masterplan of the coastal areas to determine the total needs of multipurpose shelters along Bangladesh's coast, and to provide a ranking system to prioritize investments according to a multi-criteria ranking system.

Because of the significant attention paid to disaster risk management, Bangladesh's ability to manage natural disasters, in particular floods and cyclones, has substantially improved. This reflects a gradual shift from a response-based approach to a strategy that incorporates elements of greater emergency preparedness and risk mitigation. Bangladesh's Second Poverty Reduction Strategy Paper provides for strengthening disaster management and risk reduction, mainstreaming disaster management into national policies and enhancing community capacity for disaster preparedness and risk reduction. The National Plan for Disaster Management (NPDM) (2010-2015) is centered on the following strategic pillars: (i) risk identification and assessment; (ii) strengthening and enhancing emergency preparedness; (iii) institutional capacity building; (iv) risk mitigation investments; and (v) introducing catastrophe risk financing in the longer term. The underlying principles of the NPDM are that both loss of life and the economic impact of disasters can be reduced through advance planning and investment. Further the plan should be both affordable and delivery-efficient. The proposed rehabilitation and construction of multipurpose disaster shelters is a key investment to building resilience of coastal population. The Ministry of Disaster Management is the apex institution responsible for coordinating national disaster management interventions across all agencies.

II. Proposed Development Objectives

The development objective of this project is to reduce the vulnerability of the coastal population to natural disasters across selected coastal districts of Bangladesh.

III. Project Description

Component Name
Reconstruction and Improvement of Multipurpose Shelters
Comments (optional)

Component Name
Project Management, Monitoring and Technical Assistance
Comments (optional)

Component Name
Contingent Emergency Response
Comments (optional)

IV. Financing *(in USD Million)*

Total Project Cost:	371.79	Total Bank Financing:	370.00
Financing Gap:	0.00		
For Loans/Credits/Others			**Amount**

BORROWER/RECIPIENT	1.79
International Development Association (IDA)	370.00
Total	371.79

V. Implementation

Overall project managed and coordination will be done through the Local Government Division (LGD) under the Ministry of Local Government, Cooperatives & Rural Development (LGCRD). The project is to be implemented by Local Government Engineering Department (LGED). LGED already has a Project Management Unit (PMU) from the Emergency 2007 Cyclone Recovery and Restoration Project Component B, which would be strengthened and expanded to implement the additional activities proposed under MDSP.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✗	
Natural Habitats OP/BP 4.04		✗
Forests OP/BP 4.36		✗
Pest Management OP 4.09		✗
Physical Cultural Resources OP/BP 4.11		✗
Indigenous Peoples OP/BP 4.10		✗
Involuntary Resettlement OP/BP 4.12	✗	
Safety of Dams OP/BP 4.37		✗
Projects on International Waterways OP/BP 7.50		✗
Projects in Disputed Areas OP/BP 7.60		✗

Comments (optional)

VII. Contact point

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