

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB4071

Project Name	Emergency 2007 Cyclone Recovery & Rest Pr
Region	SOUTH ASIA
Sector	Flood protection (60%); Crops (20%); General agriculture, fishing and forestry sector (10%); General transportation sector (10%)
Project ID	P111272
Borrower(s)	BANGLADESH
Implementing Agency	
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
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1. Country and Sector Background

Cyclone Sidr (Category IV) hit Bangladesh on the evening of November 15, 2007. The cyclone, originating from a depression over the Bay of Bengal on November 11, 2007, hit offshore islands at 1830 hours and made landfall across the southern coast from Cox's Bazaar toward Satkhira. Heavy rains were experienced throughout the country, including in the capital Dhaka. The first area hit by Cyclone Sidr was Hiron Point and part of the Sundarban mangrove forest in Bagerhat. According to the Bangladesh Meteorological Department (BMD), Cyclone Sidr had a radius of 500 km with the eye of the storm 74 km wide and wind speeds reaching 220-240 km per hour. The storm caused extensive damage, in particular in the south-western districts. As it moved north into central Bangladesh, the cyclone was downgraded to a Category II tropical storm.

The cyclone caused extensive damage to lives and property. Overall 30 districts in the country and about 9 million people (more than 2 million families) were affected by the cyclone. The death toll exceeded 3,000, about 100 were missing, and more than 55,000 people were injured due to the cyclone. There was a nationwide power outage for more than 24 hours. About 1.5 million houses were damaged and 4 million trees were uprooted or destroyed. The livestock death toll was over 100,000. The cyclone hit at a time when *aman* rice, the predominant source of food in the area, was about to be harvested, and almost 113,000 ha and 1,400,000 ha of crops were totally and partially damaged, respectively. The crop loss was estimated to be about 1.3 million tons.

A comprehensive analysis undertaken by a team of the Government of Bangladesh (GoB) and international experts¹, estimated that the total damage and losses caused by the cyclone 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. Damage and losses were concentrated in the housing sector (US\$840 million, or 50 percent of the total), productive sectors (US\$ 490 million, or 30 percent), and public sector infrastructure (US\$250 million, or 16 percent). The most affected sectors were, in decreasing order,

¹ JDLNA team was lead by the World Bank with participation from IFRC, ILO, UN, USAID, EC, IDB, JICA, JBIC, DFID ADB, and FAO. The JDLNA team was financed by the Global Facility for Disaster Reduction and Recovery (GFDRR).

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. The effects of the disaster were highly concentrated in the Districts of Bagherat, Barguna, Patuakhali, Pirojpur, and Barisal, where, according to a 2005 household survey, poverty levels range between 35 percent to more than 50 percent of the population. Therefore, the disaster had a disproportionate impact on some of the poorest population groups in the country. The importance of an effective recovery program cannot be overstated. The number of deaths caused by Cyclone Sidr, however, was far lower than in similar past events, thanks to improved disaster prevention measures, including an improved forecasting and warning system, coastal afforestation programs, cyclone shelters, and embankments. This highlights the effectiveness of recovery programs and long-term approaches to disaster management.

The cyclone was the second natural disaster to affect Bangladesh in twelve months. Previous monsoon floods had caused extensive damage to agricultural production and physical assets, totaling US\$1.1 billion². The Bangladesh economy has sustained combined effects of the cyclone and the floods of 2007 in the estimated amount BDT 189.4 billion, or 4.7 percent of GDP for the previous fiscal year, which is a measure of the negative impact of natural disasters in the country. The successive occurrence of these events is a reminder of the extreme vulnerability of the country to frequent hydro-meteorological hazards. Climate change may exacerbate this problem further in the future.

2. Objectives

The Project will support Government of Bangladesh efforts to facilitate restoration and recovery from the damage to livelihoods and infrastructure caused by Cyclone Sidr and build long-term preparedness through strengthened disaster risk reduction and management.

3. Rationale for Bank Involvement

In line with the Country Assistance Strategy (CAS) as well as the GoB Poverty Reduction Strategy Paper (PRSP), the proposed project will finance activities that are consistent with building the capacity for long-term disaster risk management, which is critical to sustainable economic growth and poverty reduction. The program will directly support cyclone-resistant infrastructure rehabilitation, livelihood restoration and vulnerability reduction.

The Bank has a long history of partnership and collaboration with Bangladesh-in particular in responding to natural disasters (e.g. 1987, 1988, 1998, 2004 and 2007 Bank flood recovery programs) and supporting the long-term goals in the water-related sectors. The Bank is also seen as a trusted partner and a key coordinator for international financing initiatives and the development partners. This was evidenced during the post-Cyclone efforts and the leadership role that the Bank was requested to play by the Government of Bangladesh in coordinating the JDLNA.

4. Description

The Project is designed to achieve the above objectives through the following five components, identified in the JDLNA:

Component A: Recovery of Agriculture Sector and Improvement Program

² World Bank Damage Assessment Report for 2007 Floods

A1: Support to the crops sub-sector (US\$4.7 million). This sub-component will promote improved production and marketing technologies in the sub-sector and finance a comprehensive technology package, model demonstrations of improved technologies and agronomic practices (especially in terms of yield enhancement and salinity resistance), and enhance farmers knowledge through technical assistance and training.

A2: Support to the fisheries sub-sector (US\$3.7 million). This sub-component will promote improved production and marketing technologies in the sub-sector and finance the provision of fisheries equipment (e.g. improved boats, nets and safety equipment) and activities to support sustainability of fisheries resources, including an improved knowledge base (through surveys and studies) on the status of coastal small-scale fisheries as well as rehabilitation, technical assistance and training related to improved aquaculture (fish and shrimp) practices.

A3: Support to the livestock sub-sector (US\$4.2 million). This sub-component will promote improvements in the overall management and production practices in the sub-sector (e.g. restoration of cold chain systems for vaccination delivery, stocking of improved goats, sheep and poultry, introduction of improved grasses for animal fodder, construction of improved model dairy and poultry sheds). The focus will be on improved technologies and enhance farmer knowledge about the livestock sector that is suitable for the coastal areas.

A4: Support to community mobilization and facilitation and component management (US\$3.4 million). This sub-component will facilitate the identification and support of formal and informal farmer/fishers' groups and production and marketing community-based organizations (CBOs) (some of which will have been formed under the existing SIPP as described earlier) to best deliver knowledge, goods and services under this component. It will also include, *inter alia*, an awareness/communication campaign and needs assessments directly with the targeted communities and farmer groups at the start of the project. This sub-component will also finance the management of component A including technical assistance, provision of office equipment and vehicles, and the establishment of a Monitoring and Evaluation (M&E) system for the component. A detailed implementation plan for this component will be provided in the Operational Manual.

Component B: Reconstruction and Improvement of Multipurpose Shelters

B1: Construction of new shelters. This sub-component will support construction of 50 new multi-purpose shelters to build greater protection for future disaster events.

B2: Improvement of existing shelters. This sub-component will finance the repairs and improvement of about 250 existing shelters that are damaged or cannot be used due to inadequacies.

B3: Improvement of communication network to shelters. This sub-component will finance the reconstruction of the road and communication network to the shelters constructed under the project to make them more accessible and effective.

B4: Design and construction supervision of shelters. This sub-component will finance consulting services for surveys, designs, environmental and social impact assessments, environment and resettlement management plans.

Component C: Rehabilitation of Coastal Embankments

C1: Rehabilitation of coastal embankments. This sub-component will finance the emergency repair to over 100 km of coastal embankments damaged during the 2007 cyclone. The repair works will be

designed with improved standards so that protection can be provided in these coastal areas in future from similar storms.

C2: Design and construction supervision of coastal embankments. This sub-component will finance consulting services for surveys, designs, environmental and social impact assessments, environment and resettlement management plans, and construction supervision for embankments and all works covered under the above sub-components.

Component D: Long-Term Disaster Risk Management Program

D1: Disaster risk mitigation and reduction. This sub-component will support the capacity building of the Disaster Management Bureau (DMB), support for detailed multi-hazard risk vulnerability modeling and assessment, and the strengthening of emergency preparedness at the community levels.

D2: Preparation of future projects for River Bank Improvement, Coastal Embankment Improvement and Gorai River Restoration Programs. This sub-component will finance the preparation studies for selected activities under the first phase of the identified long-term program.

D3: Preparation of future projects for disaster shelters and up-gradation of rural road network. This sub-component will finance preparation studies for: (a) construction of new disaster shelters with an investment cost of about US\$200 million; and (b) up-gradation of rural road network in the disaster prone areas.

Component E: Monitoring and Evaluation of Project Impact

This sub-component will finance oversight monitoring and evaluation (M&E) activities to provide continuous feedback to the Government, Project Steering Committee (PSC), and implementing agencies on project performance and impact of its various components.

Component F: Project Management, Technical Assistance, Strategic Studies and Training, and Emergency Support for Future Disasters

This sub-component will support the Government in implementing the project, coordinating all project related activities, and provide resources for needed strategic studies, technical assistance and training.

5. Financing

Source:	(\$m.)
BORROWER/RECIPIENT	-
International Development Association (IDA)	79
Foreign	30
Total	109

6. Implementation

The project will be implemented by four agencies, the Ministry of Food and Disaster Management (through DMB), the Ministry of Agriculture and the Ministry of Fisheries and Livestock (through FAO), the Ministry of Water Resources (through BWDB), and the Ministry of Local Governments (through LGED). A Project Steering Committee (PSC) will be established in the Ministry of Planning. The PSC will be chaired by the Secretary of Planning, and include Secretaries of the Ministries of Water Resources, Agriculture, Fisheries and Livestock, Food and Disaster Management, Local Governments,

and Director Generals from BWDB and LGED. The PSC will provide oversight and coordination in implementation of the Project. A small Project Coordination and Monitoring Unit (PCMU) will be established in the Ministry of Planning to coordinate and manage the Project. FAO will be contracted to implement *component A* in coordination with the Ministry of Agriculture and the Ministry of Fisheries and Livestock (see Annex 6 for details). LGED will be responsible for implementation of *components B and sub-component D3*. BWDB will be responsible for *components C and sub-component D2*. The Ministry of Food and Disaster Management will be responsible for implementation of *sub-components D1 and F2 (jointly with Ministry of Finance)*. The Ministry of Planning will implement *component F (except F2)*.

The project implementation period would be about four years from December 1, 2008 to July 30, 2012 and the credit closing date would be May 31, 2013.

7. Sustainability

To ensure overall environmental and social sustainability of the Project, an Environmental Management Framework (EMF) and Social/Resettlement Policy Framework (S/RPF) will be required. The implementing agencies involved already have experience in implementation of Bank-financed projects and preparing EMPs and SMPs, in accordance with Bank guidelines and procedures. The project will build on these experiences in developing such frameworks for Projects with similar types of civil works activities e.g. Water Management Improvement Project (WMIP), Flood Restoration and Recovery Assistance Program (FRRAP), Municipal Services and Rural Transport Improvement Projects, a Project specific EMF and S/RPF will be developed. For instance, the EMF and S/RPF agreed upon with the GoB under the WMIP highlights the range of environmental (e.g. local drainage patterns changed) and social (e.g. land acquisition) issues that may arise with these types of civil works activities and possible mitigation measures. Depending on the site-specific details, many of these measures will be applicable in this Project. The EMF and S/RPF will be prepared and agreed with the Bank prior to issuing any works contracts under the Project. Land acquisition, if any, will be carried out with prior approval of the Bank that would also determine the eligibility of financing of land acquisition cost from the IDA credit.

8. Lessons Learned from Past Operations in the Country/Sector

The Bank has accumulated significant experience in supporting post-disaster recovery projects. This experience indicates, at the general level, that sustainable recovery not only requires timely implementation of rehabilitation and reconstruction activities, but also preparation of a program that places these activities adequately within the longer-term goal of reducing overall disaster vulnerability. Moreover, as cross-country experience also shows, achieving this objective requires government commitment combined with community and private sector involvement. In the medium-term, in a vulnerable country such as Bangladesh, multi-hazard risk mitigation approaches should be mainstreamed through the CAS and sector strategies, and through regular operations.

The success of the emergency assistance program depends on how fast sustainable results are obtained on the ground. Effective implementation of post-disaster assistance activities is, therefore, critical. In this respect, the program is designed to reflect the following lessons learned from the 2004 and 2007 flood restoration and recovery programs:

- Emergency recovery operations should have a simple design, taking into consideration local implementation capacity and the fact that this capacity may be strained in the aftermath of a natural disaster;
- Effective and simple implementation arrangements should be put in place;

- Whenever possible, experienced and properly staffed implementing agencies should be relied upon to ensure smooth progress;
- These agencies should be empowered to take decisions in a timely manner, and to be able to access funds with minimum bureaucratic requirements, while maintaining acceptable fiduciary controls;
- Complex multi-sectoral operations, requiring major central oversight and protracted decision-making processes, should be avoided;
- Short-term rehabilitation activities should be implemented separately from medium to long-term hazard reduction activities and institutional capacity building, since these require additional preparation (often with inputs from international experts and technical studies) and longer implementation period, and are therefore better addressed through regular operations and AAA; and
- Appropriate management attention and adequate resources for supervision should be provided.

9. Safeguard Policies (including public consultation)

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

10. List of Factual Technical Documents

1. Cyclone Sidr in Bangladesh: Damage, Loss and Needs Assessment for Disaster Recovery and Reconstruction

11. Contact point

Contact: Masood Ahmad

Title: Lead Water Resources Specialist

Tel: (202) 458-2013

Fax:

Email: Mahmad2@worldbank.org

12. For more information contact:

The InfoShop

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Email: pic@worldbank.org
Web: <http://www.worldbank.org/infoshop>