



# Bangladesh Report 2013

## Disaster Preparedness Response and Recovery



**Department of Disaster Management (DDM)**  
Ministry of Disaster Management and Relief (MoDMR)  
Government of the People's Republic of Bangladesh



Bangladesh Report 2013

**Disaster Preparedness  
Response and Recovery**



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Ministry of Disaster Management and Relief (MoDMR)  
Government of the People's Republic of Bangladesh

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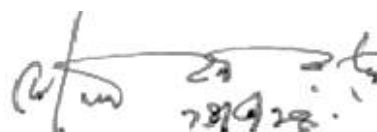
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# Message from Minister, MoDMR

**B**angladesh is one of the most disaster-prone countries in the world. The country has had a long experience of severe cyclonic events, floods, landslides, arsenic contamination, tornadoes and is under risk of earthquakes. Also Bangladesh is vulnerable to the impact of climate change which has threatened livelihoods and food security in different parts of the country. The Department of Disaster Management the only Department of the Ministry of Disaster Management and Relief, has the mandate to reduce the overall vulnerability from different impact of disaster by undertaking risk reduction activities, conducting human assistance programmes, strengthening and coordinating programmes undertaken by various Government and non-government organisations.

I am pleased to learn that Department of Disaster Management has undertaken the initiative in preparing the Bangladesh Report that reflects the accumulated disaster preparedness, response and recovery measures. I am also happy to know that our development partners, especially the UNDP, are working with us in this field. The report captures challenges and important lessons learned that will help Government and other stakeholders in taking actions for further improving disaster preparedness, response and recovery efforts in Bangladesh. I hope that all stakeholders will find the report useful.

Through this message, I would like to express my sincere thanks to all responsible persons of the Ministry of Disaster Management and Relief, officials of Department of Disaster Management, UNDP as well as other concerned stakeholders for their contribution to the development of “Bangladesh Report on Disaster Preparedness, Response and Recovery 2013”.



**Mofazzal Hossain Chowdhury Maya**, Bir Bikram, MP  
Minister  
Ministry of Disaster Management and Relief  
Government of the People’s Republic of Bangladesh

## Foreword from Secretary, MoDMR

**B**angladesh experiences several types of disastrous hazards every year. Cyclone and flood are the major natural hazards in Bangladesh along with river bank erosion, drought, flash flood, seasonal storm and tornado and a few man-made hazards such as fire, building collapse, ferry tragedy, road accident etc. Bangladesh is also at risk from earthquake and tsunami and climate change along with new dimension in urban risk due to its fast growing urbanisation and increasing population density in urban centres. In 2013 many disastrous events such as building collapse and tropical storm Mahasen etc. occurred and affected a large number of people in different regions in the country. The Government of Bangladesh has responded to those disasters and provided necessary assistances to the affected people, promptly.

I am happy to note that, the Department of Disaster Management under the Ministry of Disaster Management and Relief has taken an initiative to publish Bangladesh report on the accumulated disaster preparedness, response and recovery for 2013. I hope that all concerned will find it worthwhile.

I would like to convey sincere thanks to colleagues at the Ministry of Disaster Management and Relief, officials and staffs of Department of Disaster Management, United Nations Development Programme (UNDP), Network for Information Response And Preparedness Activities on Disaster (NIRAPAD), NARRI and other humanitarian actors for their contributions to the development of this Bangladesh Report on Disaster Preparedness, Response and Recovery 2013.

I strongly believe that, this report will contribute significantly to enhance credibility and transparency of the emergency response efforts in Bangladesh and demonstrate its commitment for disaster management.



**Mesbah ul Alam**  
Secretary  
Ministry of Disaster Management and Relief  
Government of the People's Republic of  
Bangladesh

## Message from Resident Coordinator, UN

**B**angladesh is a disaster risk hotspot, ranked as a top country in terms of the risks of both natural and man-made disasters. This unfortunate ranking reflects the very profound, multi-layered challenges that face the country and complicate the disaster management task. High population density and poverty increase vulnerability. Poor people in a densely populated country like Bangladesh have limited options on where and how they live. In fact, many live in areas prone to storms, flooding or landslides, their homes often no match to the forces of nature. Climate change adds another layer of risk and its threat to Bangladesh is easy to describe: melting Himalayas to the north of Bangladesh are sending ever more unpredictable river-flows through the country, aggravated by the real threat of a rising Bay of Bengal to the south. Bangladesh has the highest number of people exposed to flooding in the world: nearly 20% of the land mass is covered by flood waters in a normal flood year -up to 68 % during periodic disastrous floods, such as those of 1998! Simply stated, climate change in the Bangladesh context means that natural disasters are more frequent, more intense and more destructive.

Within this incredibly challenging background, the good news is that Bangladesh is one of the best examples in the world of real achievements in disaster management, specifically in preparedness, response, and recovery. Results are a product of the long-term partnership between the Government, humanitarian partners, the development community, including the United Nations System (UN System), all of whom have worked together over 40 years to save lives and build resilience through improved disaster management systems.

The UN System in Bangladesh continues to be a proud partner of the Government of Bangladesh in realising a disaster management vision that focuses on reducing risk to citizens, particularly the poor and the disadvantaged. Implementing this vision requires effective national policies, strong institutions and smart resource and knowledge management, as well as active community participation. This coherent approach is how Bangladesh not only plans better to minimise the impact of natural disasters, but also accelerates coordinated response and recovery after the disasters.

Preparation of the Report on Disaster Preparedness, Response and Recovery (Bangladesh Report) was led Department of Disaster Management (DDM), under the Ministry of Disaster Management and Relief (MoDMR). It presents progress made by Bangladesh in disaster management in relation to 2013 disasters. The analysis of disaster preparedness, response and recovery efforts provides useful lessons and guidance for the Government and other stakeholders for further strengthening the disaster management system in Bangladesh. I congratulate DDM and MoDMR for this publication: it will benefit humanitarian and development practitioners in Bangladesh and abroad. I am also pleased that the Bangladesh Report was developed in consultation with relevant stakeholders. I thank all the officials from the Government from the UN system and from non-government organisations who contributed to this publication.



**Neal Walker**  
Resident Coordinator  
United Nations System Bangladesh

# Acknowledgment from Director General, DDM

It is a great pleasure for the Department of Disaster Management (DDM) to publish the *Bangladesh Report (2013): Disaster Preparedness, Response, and Recovery*. The report is a reflection of the collective disaster preparedness, response, and recovery efforts of the Government of Bangladesh, non-government humanitarian agencies, and the development partners. The report demonstrates commitment of the Government of Bangladesh to continue to build on the past work and lessons, in order to be better prepared for future, and enhance resilience of the vulnerable communities living in the high risk area. While Bangladesh is one of the most disaster prone countries in the world (fifth in the list of 173 countries), it is also one of the few countries with most developed system and capacity for disaster management. Effective national policies and plans, stronger institutions, and smarter resource and knowledge management coupled with active community participation means – Bangladesh not only planning better to minimize the impact of disasters, but also accelerating recovery and build back better in the aftermath of disasters.

DDM was established under the Ministry of Disaster Management and Relief, following the enactment of the Disaster Management Act 2012. DDM has the mandate to implement the objectives of the Disaster Management Act, by reducing the overall vulnerability of the population by undertaking risk reduction and preparedness activities; and by strengthening and coordinating programmes undertaken by various Government and non-government organizations related to disaster risk reduction and response. I hope that this report, including the challenges and lessons learned, will contribute towards a cohesive and well-coordinated programming framework, incorporating Government, non-government organisations, private sector, and communities.

In this regard, DDM offers sincere thanks to the officials of relevant ministries and their agencies, members of the Disaster Management Committees, the humanitarian clusters, UN Agencies, NGOs, IFRC/BDRCS, development partners and other stakeholders for sharing data and offering views, comments and recommendations, for preparation of this report.

DDM acknowledges the technical and financial assistance and wonderful spirit of cooperation of the UNDP Early Recovery Facility (ERF) in developing the Bangladesh Report. DDM also appreciates the Network for Information, Response and Preparedness Activities on Disaster (NIRAPAD) for providing technical support to DDM in compiling stakeholder data, analysis, and drafting of the report. I thank the Technical Committee comprising of representatives from the MoDMR, DDM, UNDP, IFRC, CDMP II, and NARRI for their guidance, technical support, and oversight during preparation of this report.

I, on behalf of DDM, extend my gratitude to the Honourable Minister, and the Secretary, Ministry of Disaster Management and Relief, for their encouragement and support while developing this report.

DDM and the Ministry of Disaster Management and Relief, takes this opportunity to express our deep appreciation to the Swiss Agency for Development and Cooperation, and the Department of Foreign Affairs and Trade Australia, for financing the production of this Bangladesh Report through the UNDP Early Recovery Facility.



**Mohammed Abdul Wazed**  
Director General (Additional Secretary)  
Department of Disaster Management (DDM)  
Ministry of Disaster Management and Relief  
Government of the People's Republic of Bangladesh

## Abbreviation

ACF	Action Contre La Faim
ADPC	Asian Disaster Preparedness Center
AFD	Armed Forces Division
BBC	British Broadcasting Corporation
BDRCS	Bangladesh Red Crescent Society
BDT	Bangladeshi Taka
BGB	Border Guard Bangladesh
BMD	Bangladesh Meteorological Department
CDMP	Comprehensive Disaster Management Program
CI Sheet	Corrugated Iron Sheet
CPP	Cyclone Preparedness Programme
DBBL	Dutch Bangla Bank Limited
DC	Deputy Commissioner
DDM	Department of Disaster Management
DFAT	Department of Foreign Affairs and Trade, Australia
DG	Director General
DGHS	Directorate General of Health Services
DeSHARI	Developing and Strengthening Humanitarian Assistance and Risk Reduction Initiatives
DPHE	Department of Public Health Engineering
DMC	Disaster Management Committee
DMIC	Disaster Management Information Centre
DRR	Disaster Risk Reduction
DSHE	Directorate of Secondary and Higher Education
ECB	Emergency Capacity Building
ECHO	European Commission Humanitarian Aid and Civil Protection Office
EiE	Education in Emergencies
ERF	Early Recovery Facility
FAO	Food and Agriculture Organization
FSC	Food Security Cluster

FSCD	Fire Service and Civil Defence
FFWC	Flood Forecasting and Warning Centre
GoB	Government of Bangladesh
GBP	British Pound Sterling
GR	Gratuitous Relief
HCTT	Humanitarian Coordination Task Team
HEB	High Energy Biscuit
HH	Household
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International Non-Governmental Organization
IPC	Inclusive Preparedness Capacity
IOM	International Organization for Migration
IVR	Interactive Voice Response
JNA	Joint Needs Assessment
Kg	Kilo Gram
LCG-DER	Local Consultative Group on Disaster and Emergency Response
MoDMR	Ministry of Disaster Management and Relief
MT	Metric Ton
NARRI	National Alliance for Risk Reduction and Response Initiative
NDRCC	National Disaster Response Coordination Centre
NFI	Non Food Item
NGO	Non-Governmental Organisation
NIRAPAD	Network for Information, Response And Preparedness Activities on Disaster
SAARC	South Asian Association for Regional Cooperation
SOD	Standing Orders on Disaster
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
UNO	Upazila Nirbahi Officer
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
USD	United States Dollar
VGf	Vulnerable Group Feeding
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization

## Executive Summary

The Department of Disaster Management (DDM) was set up under the Ministry of Disaster Management and Relief (MoDMR) following the enactment of the Disaster Management Act 2012. The Department has the mandate to implement the objectives of the Disaster Management Act by reducing the overall vulnerability of the population from different impacts of disasters by undertaking risk reduction activities; by increasing the efficiency of these activities; and by strengthening and coordinating programmes undertaken by various Government and non-government organisations related to disaster risk reduction and emergency response.

The **first chapter** of this Bangladesh Report 2013 provides an introduction to the report by outlining the Background; Purpose and Methodology; and Structure of the Report. DDM, with support from UNDP, has initiated the preparation of such report since 2013, with the aim of providing all stakeholders comprehensive information on the disaster events and their impacts; responses by Government and other stakeholders and lessons learned.

An overview is given in the **second chapter** on a plethora of disastrous events that took place in Bangladesh in 2013, including a severe cold wave that swept over the northern region in early January; tornadoes in March that took 36 lives; collapse of a multi-storied building in Savar that killed more than one thousand people; and the tropical storm Mahasen that affected approximately 1.5 million people. Other disastrous events outlined in the chapter include, water logging which affected more than 129,055 households, and monsoon floods which

affected nearly 83,050 families. Local disasters reported during 2013 include, flash floods, storm and lightning, landslides, tidal surges and sea-truck capsizes and several fire incidents.

**Chapter three** provides a brief overview of progress made in the area of disaster preparedness and response. It contains updates on a number of tools and capacity development initiatives including, the Humanitarian Assistance Programme Implementation Guidelines 2012-13 – which defines the Government’s support package and eligibility criteria to receive this support. Other major updates highlighted in this chapter include finalisation of tools of the Joint Needs Assessment.

2013 also saw the development of other important tools: Government’s emergency preparedness plan for cyclone by the DDM improved humanitarian coordination facilitated by the Humanitarian Coordination Task Team (HCTT); shelter-assistance package by the Shelter Cluster’s technical working group; contingency plan by the Food Security Cluster (FSC); community-based disaster preparedness model that links response interventions with risk reduction; and an interactive voice-response-enabled early warning dissemination system. Examples of technological advancements continued in the third chapter with the achievement of increased lead time in flood forecasting by the Flood Forecasting and Warning Centre.

A positive trend in preparedness was observed by this report, especially with the annual allocation of cash, food, non-food items and

emergency shelter materials by the Government, International Federation of Red Cross and Red Crescent Societies, Bangladesh Red Crescent Society and World Food Programme.

In **chapter four**, you will find details of significant contributions from the Government in 2013 including distribution of BDT 164.2 million cash-grant, BDT 72 million housing-grant worth, 57,840 MT rice, 510,372 pieces of blankets and 24,336 bundles of corrugated iron sheet amongst the disaster affected people. One of the highlights of the year is the successful evacuation undertaken by the Government's Cyclone Preparedness Programme – co-lead by Bangladesh Red Crescent Society – of more than one million people at the onset of cyclone Mahasen and providing them with rescue and recovery services.

The UN agencies also played a leading role in responding to disasters in 2013; the estimated value of their assistances is BDT 226.3 million, directly benefitting 49,413 households. Some of the major works done by the UNDP, WFP and WHO include: providing livelihood recovery support, ready food and medical care to the people affected by tornadoes and tropical storms. WFP and UNICEF also assisted people affected by water logging; WHO assisted the people affected by building collapse; and FAO assisted the people affected by flood, communal violence and pest attack.

The estimated value of the assistance received from NGOs is BDT 826.1 million, which came from six NGOs' in their response to cold wave; BBC Media Action and Muslim Aid's response to tornadoes, Save the Children, ActionAid, and World Vision's assistance to the people affected by Rana Plaza building collapse, 12 NGOs' response to tropical storms, seven NGOs' response to the monsoon floods, and ACF, Islamic Relief and Solidarités International' response to water logging.

In 2013, the International Federation of Red Cross and Red Crescent Societies and the

Bangladesh Red Crescent Society responded to cold wave, flash floods and landslides, monsoon floods and tropical storm. The total estimated value of assistances from these organisations is BDT 250.4 million, covering a total 70,000 affected households.

**Chapter five** captures challenges and lessons learned, especially during the tropical storm Mahasen, when humanitarian actors on the ground found it difficult to make decisions about evacuation due to changing trajectory of the cyclone path.

An urgent need for setting up district level Disaster Management Fund to support the system at community level has also been identified in this chapter. Government and development partners should allocate adequate resources for early recovery ensuring smooth transition from relief to resilient recovery and development. District Administrations are subject to apply the mandatory standard financial procedures and they may not always be able to utilise the fund fully if it is allocated near the end of a fiscal year. This acts as a barrier for them to promptly respond to disasters unless they fit neatly into a fiscal year. The response plans and the procedures should have flexibility to cope with the situation.

It has been found that determining impacts of tropical storm Mahasen was difficult due to errors in the D-Form report and absence of baseline data on pre-disaster status. In this connection, the report recommends that DMC focuses on capacity-building in data collection and clearly defines the terminologies used in the D-Form, and identifies DMIC to be best positioned to establish a common information hub for all baseline data, assessments and reports. Better communication between NDRCC, DMIC and the Prime Minister's Office Disaster Management Cell will also prove to be beneficial in managing disasters.

There were successes in preparedness to deal with devastating natural phenomena such as

cyclone, but failure to adhere to standard safety measures resulted in tragedies such as the Rana Plaza building collapse. High level of risk tolerance comes naturally to the people of Bangladesh, causing them to ignore compliance to safety measures in their day-to-day lives. The report recommends focused interventions be undertaken to raise public awareness in this regard. In addition, the experience of response activities for Savar building collapse case demonstrated that rescue operation of such magnitude requires appropriate tools and technologies. It is also evident that there is a need to establish an incident management system which will clearly outline responsibilities of humanitarian actors in urban disaster scenarios. Systems and protocols for managing crowd, media, debris management and dead bodies disposal were also felt throughout the response operation.

The successful Joint Needs Assessment was not taken best advantage of by the humanitarian clusters, which otherwise would have resulted in a coordinated response action on the ground to better support the affected communities. Instead of one comprehensive report with cluster specific chapters, clusters produced their own reports using different templates and in different time period. This clearly indicates that there is a need to improve inter-cluster coordination, harmonise data collection, and produce easily understandable, consolidated needs assessment reports with sector specific chapters.

In **chapter six** you will find accounts of resources mobilised in 2013 by the humanitarian actors.

The Government mobilised approximately BDT 2,450.9 million for disaster response and early recovery interventions. The funds came mainly from MoDMR's allocations of food grains and cash; from the Prime Minister's Relief Fund; as well as from bilateral partners like Germany and Taiwan. UN agencies mobilised approximately BDT 226.3 million for disaster response and early recovery activities which came from UKaid, ECHO, and DFAT-Australia. International Federation of Red Cross and Red Crescent Societies launched several appeals, which brought in approximately BDT 250.4 million to respond to various disasters during year. NGOs delivered in approximate BDT 826.1 million for disaster response and recovery in 2013 funded by the bilateral donors and the UN agencies. The major donors funding disaster response and recovery in 2013 include ECHO, UKaid, DFAT-Australia, Sweden, Canada, Luxembourg, Norway and Germany.

**Chapter seven** draws conclusion and highlights the ways forward, including addressing the urgent need to invest more to enhance risk awareness in the communities and mainstream disaster risk reduction in the development programmes.

Another highlighted recommendation is regarding the changing nature of common natural hazards, requiring the humanitarian actors to improve their capacities to deal with the uncertainties associated with natural hazards. The current level of expertise and existing tools are also insufficient to respond to urban disasters.

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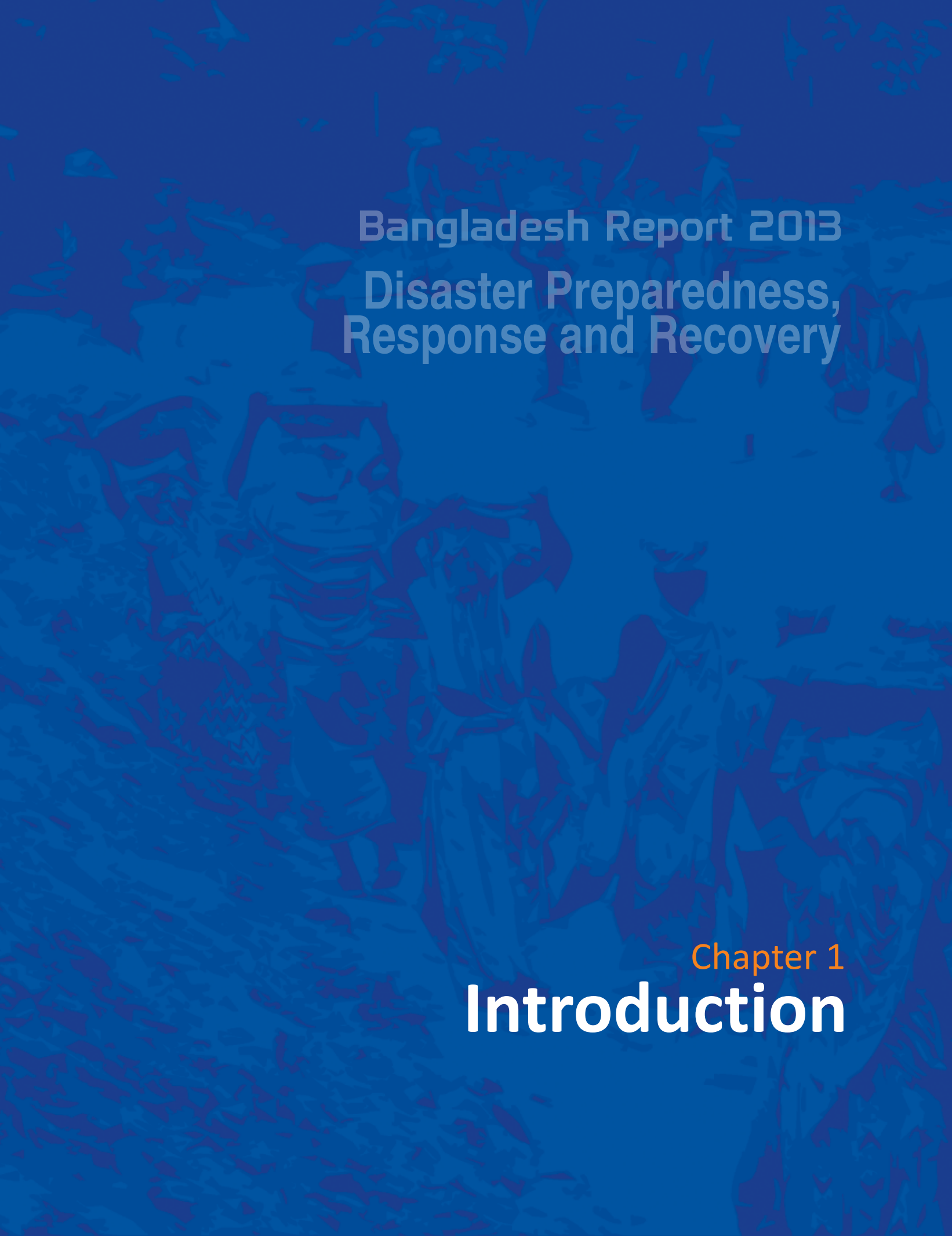
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**Disaster Preparedness,  
Response and Recovery**

Chapter 1

# **Introduction**



## 1.1. Background

The Department of Disaster Management (DDM) under the Ministry of Disaster Management and Relief (MoDMR) was set up in September 2012 following the enactment of the Disaster Management Act 2012. The Department has the mandate to implement the objectives of the Disaster Management Act by reducing the overall vulnerability of the population from different impacts of disasters by undertaking risk reduction activities; by increasing the efficiency of these activities; and by strengthening and coordinating programmes undertaken by various Government and non-government organisations related to disaster risk reduction and emergency response. The Department is responsible for executing the directions and recommendations of the Government concerning disaster management; advancing the national disaster management principles; and implementing the National Disaster Management Plan.

DDM is headed by the Director General, who focuses on networking and collaborating with ministries and departments; scientific, technical, research, academic institutions; development partners, UN agencies and non-government organisations within and outside of the Government's works on various aspects of disaster risk reduction and response management.

The functions and responsibilities of DDM are<sup>1</sup>:

- To reduce the overall vulnerability from different impacts of disasters by undertaking risk reduction activities;
- To conduct different activities to efficiently boost the moral and the rehabilitation programmes;
- To strengthen and coordinate programmes undertaken by various Government and non-government organisations involved in disaster risk reduction and emergency response activities;
- To execute the directions and recommendations of the Government in

connection to disaster management;

- To execute the national disaster management principles and planning;
- To undertake any programme that is deemed fit to support the effective disaster management infrastructure for all kinds of disaster.

While the Department's main focus remains on disaster risk reduction, its significant elements of disaster management activities include preparedness and response to disasters. Compared to the previous year, the magnitude of the hazards in 2013 were relatively small. However, cold wave, tornado, tropical storm, flood, water logging, and a number of local hazards such as thunder storm, flash flood and landslide affected a large number of people cumulatively.

An industrial catastrophe which gained attention globally was the collapse of a multi-storied commercial building in Savar, trapping approximately 3,553 garment workers. A month-long rescue operation was undertaken by the Bangladesh Army, Fire Service and Civil Defence, Border Guard Bangladesh, Police and numerous teams of Bangladesh Red Crescent Society and community organisation volunteers.

DDM played a significant role in responding to these emergencies. This report portrays general reflection of the disasters that took place in 2013 and their impacts and associated preparedness, response and the early recovery efforts undertaken by the Government and other humanitarian actors.

## 1.2. Purpose and Methodology

### *Purpose*

The purpose of this report is to document –

- The nature, magnitude and impact of disasters in 2013;
- Disaster preparedness efforts and progress made in 2013;
- Disaster response and recovery interventions

<sup>1</sup> Disaster Management Act 2012

undertaken by the Government and other humanitarian actors; and

- Challenges and lessons learned from preparedness and response interventions to inform future policies, plans and programmes.

### Methodology

The report reviews and analyses the information received from the Government and other humanitarian actors.

#### Information collection and compilation –

Situation reports and the reports from needs assessment published in 2013 by the Department of Disaster Management, Disaster Management Information Centre and HCTT were collected from the websites.

Information related to preparedness, response and recovery interventions in 2013 by Government and UN agencies, donors, non-

Government organisations and IFRC and BDRCS were collected and reviewed by DDM and UNDP.

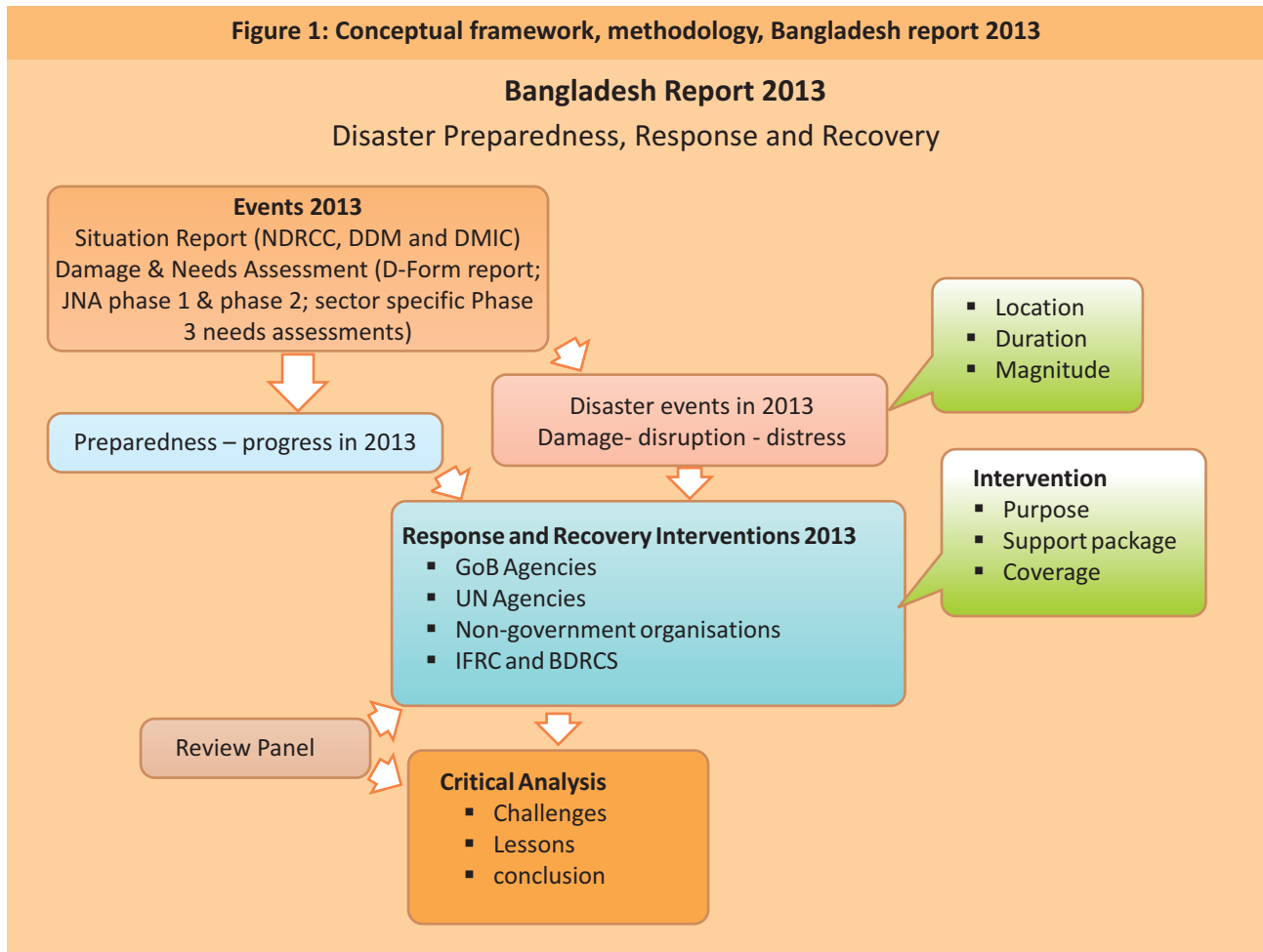
Information related to NGO operations were collected directly from the NGOs using an information collection template.

Case specific documents for lessons learned (such as Rana Plaza building collapse, response to tropical storm Mahasen, and water logging) were used as reference materials.

#### Analysis and review –

Consultants reviewed and analysed the data received from DDM, UN agencies, donors, NGOs, IFRC, as well as various websites. Preliminary findings of the analysis were reviewed by a technical committee with representatives from MoDMR, DDM, UNDP, IFRC, CDM and NARRI consortium. The technical committee, chaired by DDM, provided guidance on the structure and content of the report as well

Figure 1: Conceptual framework, methodology, Bangladesh report 2013



as on the analysis of the lessons learned. Director General, DDM, as the chief advisor for the report provided overall guidance and direction in preparing the report.

**Validation and endorsement** – For validation, the preliminary findings were discussed with the representatives from key Government and UN agencies, humanitarian cluster coordinators, UN OCHA, IFRC and non-government humanitarian actors in a half day-long consultation meeting. Finally, the report was reviewed and endorsed by the Director General, DDM for publication.

This report applied the following concepts as defined in the Standing Orders on Disaster (SOD) 2010:

- **Hazard** – An event that has the potential to cause a disaster, and can be either natural (e.g. flood, cyclone, tsunami), or human-induced (e.g. chemical spill, fire), or biological (e.g. SARS, bird flu) or technological in nature (e.g. nuclear generator failure). Hazards are not, by definition, disasters.
- **Disaster** – It creates a serious disruption to a community caused by the impact of an event which requires a significant coordinated response by the Government and other entities to help the community to recover from the disruption. Disasters are usually associated with severe damages to infrastructure and utilities, deaths, injuries and homelessness, and can be widespread or contained within a particular sector or sub sector.
- **Disaster management** – Arrangements for managing the potential adverse risks which include defining the risk environment, managing the risk environment and responding to the threat environment.
- **Emergency response operations** – These are activities undertaken immediately before, during or after an event to help reduce loss of lives, illness or injuries to humans, property loss or damages, or damages to the environment. It may include, for example, planning, co-ordination and implementation of measures to lessen the effects of a disaster upon members of the public or to protect any property of the state.
- **Emergency response management** – This involves the organisation and management of resources and responsibilities for dealing with all aspects of emergencies, in particular, preparedness, response and rehabilitation. Emergency response management involves plans, structures and arrangements established to engage the normal endeavours of Government, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs. This is also known as disaster management.
- **Preparedness** – It means undertaking measures that are designed to ensure that communities will have the knowledge and understanding of their risk environment to enable them to better cope with potential hazard impacts.
- **Contingency plan** – It is a specific response plan to a disaster which is possible, but the occurrence of which is uncertain.
- **Relief** – This includes money, food, medicine, shelter, clothes or any other assistance provided by public or private organisations to people and communities to overcome the effects of a disaster event.
- **Recovery** – These are measures that are designed to develop the systems required to support affected communities in the reconstruction of their physical infrastructure and restoration of their emotional, economic and physical well-being.
- **Vulnerability** – It is a measurement of a community's elements at risk that are exposed to specific hazards, both natural and human-induced, and that have a low level of resilience to cope with the impacts of that hazard or characteristics of that hazard.

### *Scope of the report*

The scope of the report allowed the technical team to review only secondary documents regarding emergency preparedness and response interventions in 2013, but not to investigate or evaluate to generate primary

information about the status of the humanitarian interventions undertaken in 2013 in Bangladesh. Therefore, the report only reflects the information available in published documents and data provided by the stakeholders through the information collection template. It could not accommodate anecdotal information or records which are not available. In this regard, it should be noted that due to time constraint more extensive search for relevant documents could not be undertaken.

This report presented brief descriptions and effects of the disasters in 2013 and the Government's efforts to manage the threat-environment during the year. More specifically, it described the Government's efforts related to preparedness, response and recovery activities, as well as, the interventions of the UN agencies, NGOs, International Federation of Red Cross and Red Crescent Societies and Bangladesh Red Crescent Society that complemented Government efforts. However, the report was not meant to be an all-inclusive compendium or chronicle of disasters and preparedness and response intervention of the year.

### 1.3. Structure of the Report

This report is divided into seven chapters. A description of each follows:

**Chapter 1:** Provides introduction to the report, describing functions and responsibility of the Department of Disaster Management as outlined in the 2012 Disaster Management Act and explains the purpose, methodology, and scope of the report.

**Chapter 2:** Focuses on overview of the disasters that took place in Bangladesh throughout 2013. Based on the information made available through the situation reports and need assessment reports, the chapter briefly describes damages, disruptions and impacts caused by each event.


**Chapter 3:** Captures the progresses achieved in preparedness for response and recovery, in the area of policy and plans, early warning and evacuation, emergency response, capacity building and community-based disaster preparedness.

**Chapter 4:** Describes response and recovery interventions undertaken by the Government and other humanitarian actors including UN agencies, National and International NGOs, Bangladesh Red Crescent Society and International Federation of Red Cross and Red Crescent Societies.

**Chapter 5:** Explains the challenges faced in the preparedness, response and recovery interventions in 2013, as well as the lessons learned and recommendations for improving future preparedness and response actions.

**Chapter 6:** Captures resources mobilised for response by the Government and other humanitarian actors.

**Chapter 7:** Draws conclusion and provides way forward for future preparedness and response.



Bangladesh Report 2013  
Disaster Preparedness,  
Response and Recovery

Chapter 2  
**An Overview of  
Disasters in 2013**



Bangladesh is known as one of the most disaster-prone countries in the world. Almost every year it suffers from a range of disasters that include

flash floods, storms and lightning, landslides, tidal surges, sea truck capsizes and fire had also occurred in the year 2013.

**Table 1: Disaster pattern observed in 2013**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Affected HH	2,022,420		7,189	3,553	405,821		29,006	5,300	53,582	61,795		
Disasters	Cold wave		Tornado	Building collapse	Tropical storm; water logging		Flood	Flood	Flood	Water logging		

*Source: Adapted from different situation reports of DDM and DMIC in 2013*

large scale national disasters as well as local and low-intensity disasters. The year 2013, with no exception, also encountered a number of disastrous events, although the impact and severity of these disasters appeared to be less than those in the past. Still, disaster in 2013 caused significant damages, disruptions and distresses to the affected people.

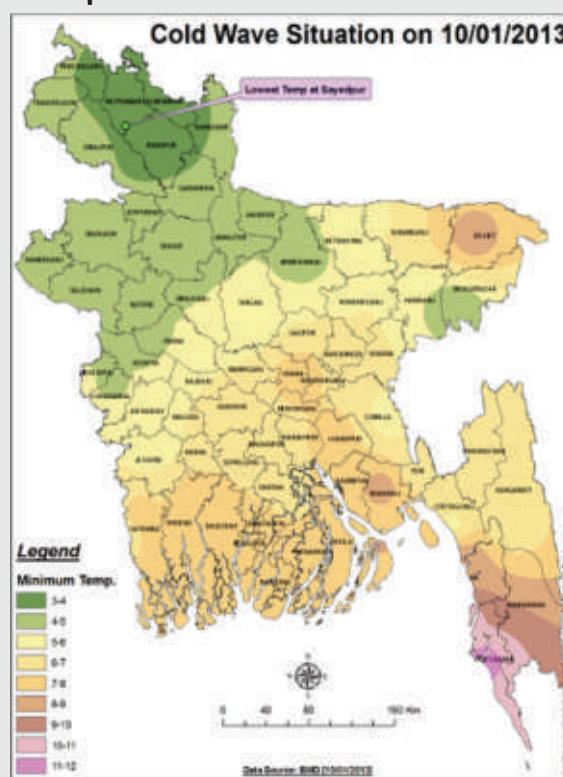
2013 started with a moderate cold wave in mid-January, causing moderate to severe health and communication problems across the country. Three months later on 24 April an eight-story commercial building (Rana Plaza) collapsed in Savar, Dhaka, which sent a very strong emotional shockwave to the Government agencies, development partners, donors, UN agencies, Red Cross and Red Crescent Movement partners, national and international media, and other stakeholders and people at home and abroad.

The following month on May 16, a tropical storm swept 9 districts in the coastal region, causing significant damages and disruptions. After a month parts of the country experienced floods which occurred in three spells: the first one in July, affecting five districts in the northern region; the second one began in mid-August in Kushtia district; and the third spell started in September, affecting seven districts along Brahmaputra and Padma rivers. Apart from these events some other local disasters such as

## 2.1. Cold Wave

During the second week of January a severe cold wave swept over Rajshahi and Rangpur divisions and the regions of Tangail, Mymensingh, Chittagong, Rangamati, Comilla, Srimangal, Jessore and Kushtia districts, and impacts of a moderate cold wave was felt elsewhere in the country.

**Map 1: Cold wave situation in 2013**



*Source: Disaster Management Information Centre*



**Photo 1:** Low temperature, cold wind and fog affected day labourers

In affected areas temperature dropped down to 9°C and in some places it dropped to 3°C (DMIC, Situation Report on Cold Wave, 19 January 2013). Low temperature and fog caused significant disruptions to the lives and livelihoods of the people in these areas: day-labourers were unable to go to work; women in the poor families faced difficulties to do their household chores; children, women and elderly people suffered from respiratory illness, pneumonia, rota viral diarrhoea and other cold related diseases.

## 2.2. Tornado

On 22 March a tornado occurred in Brahmanbaria, a north-eastern district of Bangladesh, causing significant damages to the local shelters, safe water supplies and sanitation facilities and distressed the people in the community. The rapid assessment – led by the Department of Disaster Management and jointly conducted with Shelter, WASH and Early Recovery Clusters – revealed that 431 people were severely injured and 72 among them were hospitalised. The assessment also reported that a total of 1,731 households (of which 1,283 were severely affected and 448 were partially affected) in 15 villages were affected. The report

further noted that 2,522 shelters and standing crops in 520 hectare of land was damaged.

According to the Government’s D-form, at least 36 people were dead and eight unions of three upazila (sub-districts) were affected by the tornado. Among the eight, Machihata and Basudeb unions in Sadar upazila and Uttar Akhaura union in Akhaura upazila were severely affected, while unions of Ramrail and Sultanpur of Sadar upazila, Pourashava of Akhaura upazila and Dakshin Shingerbil and Pattan unions of Bijoy Nagar upazila were moderately affected by the disaster.

**Table 2: Tornado in Brahmanbaria - damage information**

Upazila	Death	Affected HHs	Shelter damage
Brahmanbaria Sadar	35	1,515	2,306
Akhaura	0	210	210
Bijoy Nagar	1	6	6
<b>Total</b>	<b>36</b>	<b>1,731</b>	<b>2,522</b>

*Source: Adapted from Rapid Needs Assessment for Tornado in Brahmanbaria district 2013 and DMIC Situation Report, 23 March, 2013*

On 30 March another tornado hit a upazila in Naogaon district and three upazilas in Natore district. In Naogaon, the tornado claimed two lives, injured 26 people, and caused 4,170



**Photo 2:** Tornado affected people in Brahmanbaria

households to suffer damages and loss of assets, while in Natore, the tornado caused 1,288 households to experience damages and loss of household assets and standing crops.

**Table 3: Tornado in Naogaon and Natore - damage information**

Upazila	Affected HHs	Shelter damage
Naogaon	4,170	340
Natore	1,288	479
<b>Total</b>	<b>5,458</b>	<b>819</b>

*Source: DMIC Situation Reports 3 April, 2013*

Besides, a tornado had also occurred in the Sadar upazila of Meherpur district on 14 October, 2013. According to the Daily Star, a renowned newspaper of the country, had reported at least 25 people were injured and over 100 structures including houses and schools damaged by the tornado.

### 2.3. Building Collapse

An eight-story commercial building (Rana Plaza) in Savar, Dhaka, housing more than three garment factories and 300 shops, collapsed on 24 April in 2013 (DMIC, 24 April, 2013). The

incident was unprecedented and represents one of the worst industrial catastrophes in the world. The building collapsed like a pancake, but fortunately with pockets inside, where many victims survived. Rescue operations began immediately after the incident. Government mobilised Bangladesh Army, Navy, Fire Service and Civil Defence (FSCD), BGB, Police and Bangladesh Red Crescent Society and various volunteer teams for rescue activities including 1,200 volunteers from Dhaka and Narayanganj who are trained by CDMP II under the Ministry of Disaster Management and Relief. The month-long rescue operation continued for three weeks

**Table 4: Building Collapse - damage information**

Rescued alive	2,438
Dead bodies retrieved	1,115
Rescued alive but died at hospital	12
Total death toll	1,127
Dead bodies handed over	836
Unidentified dead bodies buried by Anjuman Mufidul Islam	289
Dead bodies kept at DMC Morgue	2

*Source: DMIC Situation Report, 14 May, 2013*

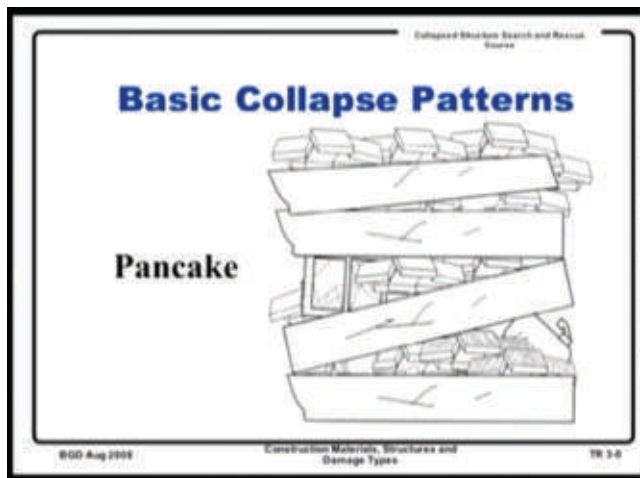


Photo 3: Building collapse (Rana Plaza) in Savar

and found 2,438 people alive. According to the DMIC situation report on 14 May, 3,553 people were trapped inside the collapsed building. Among them 1,127 were killed, and 2,438 people were rescued alive but suffered injuries and trauma.

## 2.4. Tropical Storm

Tropical Storm Mahasen made landfall in Bhola and Patuakhali districts of Barisal division on 16 May, 2013; it then moved over to southern Bangladesh, weakened and dissipated on 17 May (HCTT Phase I Joint Needs Assessment 2013).

According to the Joint Needs Assessment (JNA), damages to properties and infrastructure

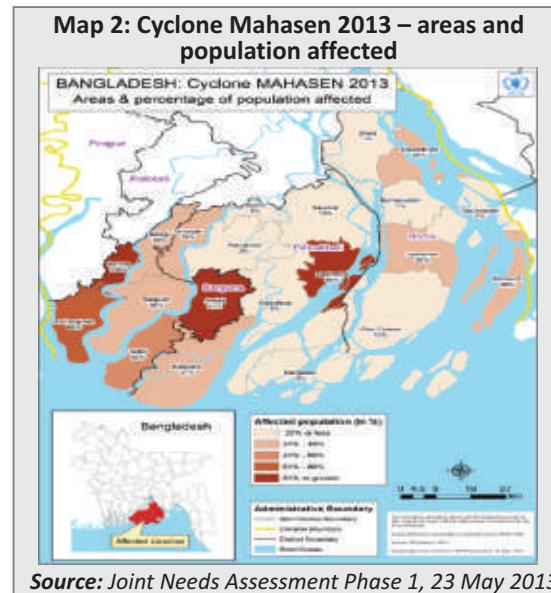
Table 5: Tropical storm – damage information

District	Affected upazila	Affected people	People died
Satkhira	2	1,000	0
Chittagong	4	29,270	2
Noakhali	5	35,127	0
Laxmipur	4	9,465	0
Patuakhali	8	286,001	3
Pirojpur	7	60,000	1
Bhola	7	494,566	4
Barguna	6	518,690	7
Jhalakhati	4	64,460	0
<b>Total</b>	<b>47</b>	<b>1,498,579</b>	<b>17</b>

Source: Situation report of NDRCC 25/5/2013 and compilation of Mahasen 2013 Damage Reports (D-Form, 26/5/2013) from the Deputy Commissioners



**Photo 4:** House damaged by tropical storm Mahasen, May 2013



**Source:** Joint Needs Assessment Phase 1, 23 May 2013

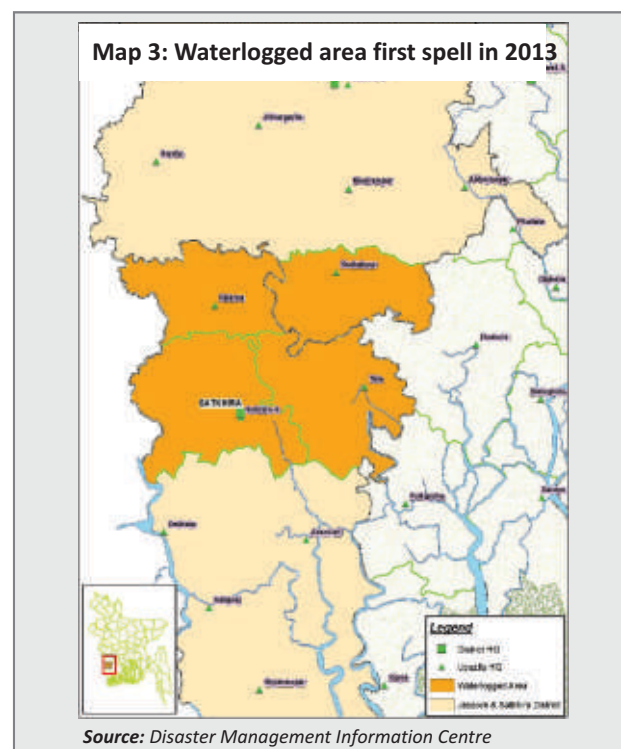
injuries and loss of lives, were less than what was anticipated, thanks to the successful early warning system and evacuation initiative of the Government and the reduced speed of the cyclone.

The cyclone still claimed 17 lives and about 1.5 million people in 47 upazilas in nine districts suffered loss of their houses, household assets and crops in their fields. [D-Form, 26/5/2013; Table-5]

According to D-Form (26 May, 2013), 16,663 houses were fully damaged and 125,253 houses were partially damaged; crops covering an area of 66,115 acres were fully damaged and in 139,792 acres land were partially damaged. In addition, 540 educational and religious institutions were fully damaged, and 3,585 were partially affected. Consolidated reports from the DMCs noted that among the nine, the worst affected were Bhola, Patuakhali and Barguna districts which stood directly on the storm’s path. The Joint Needs Assessment conducted in the most affected districts (Bhola, Barguna and Patuakhali) identified livelihood, shelter and sanitation as priority sectors to receive assistance (HCTT Phase I Joint Needs Assessment 2013).

## 2.5. Water Logging

Water logging had occurred in two spells in 2013. The National Disaster Response Coordination Centre’s Situation Report<sup>2</sup> suggests that the first spell of water logging occurred in May and affected nine upazilas in Barguna, Bhola and Pirojpur districts. According to the report, nearly 2,000 households were affected in Barguna, 15,560 in Pirojpur, and 51,200 households were affected in Bhola.



**Source:** Disaster Management Information Centre

<sup>2</sup> NDRCC situation report, 1<sup>st</sup> June, 2013

District	Upazila affected	Affected HH
1 <sup>st</sup> Spell (May 2013)		
Barguna*	3	2,000
Bhola*	5	51,200
Pirojpur*	1	15,560
2 <sup>nd</sup> Spell (October 2013)		
Jessore**	1	4,850
Satkhira**	3	55,445
<b>Total</b>	<b>13</b>	<b>129,055</b>
*NDRCC situation report on disaster, 1/6/2013		
**DDM presentation, 12/2/2014		

The second spell of water logging began in October in south-western region of the country. It occurred due to the significantly heavy rainfall, and because of the poor drainage system and congestion in the rivers and canals in the area the rain water could not recede. Approximately 60,295 households in four upazilas (Keshabpur, Tala, Satkhira Sadar and Kolaroa) of Jessore and Satkhira districts were affected by this water logging.

A significant number of the affected people were displaced and faced difficulties to access safe water, sanitation facilities and shelters. They also suffered due to the disruptions in their livelihoods, communication system and education, as well as serious damages to crops.

An estimated 2,675 houses were completely and 6,384 partially damaged. Crops in 6,454 acres of land were destroyed and 4,175 fish farms were submerged (DDM presentation, 12/2/2014). 1,061 tube-wells, 4,022 ponds, 136 educational and religious institutes, and about 387 km roads and embankment were damaged (DDM presentation, 12/2/2014).

Damages made to agricultural lands caused severe reduction in employment opportunities for the daily waged labourers, deteriorated food security, and raised concerns for health and nutrition of the people in the community.

<sup>3</sup> DDM SitRep, 19 July, 2013

As many of the water sources in the affected districts were damaged, people were forced to use contaminated water which exposed them to waterborne diseases. It also increased women's and young girls' hardship and insecurity as they had to use unsafe latrines and collect water from distant places.

## 2.6. Monsoon Flood

Torrential rainfall and consequential surge of water from the upstream in July brought about the first spell of flood in several northern districts of Bangladesh. The Department of Disaster Management's Situation Report<sup>3</sup> and various news media reported that many districts (including Thakurgaon, Dinajpur, Panchagarh, Nilphamari, Lalmonirhat, Kurigram, Gaibandha, Jamalpur and Sirajganj) were affected by the flood. The report also noted that a total of 29,006 households in 31 upazilas were affected, 6,982 houses were damaged, and 9 lives were lost.

Due to heavy rainfall in August the water level in the Padma River rose above danger level at some points, causing the second spell of monsoon flood in 2013. The Department of Disaster Management's Situation Report noted that 5,300 households in two upazilas of Kushtia district were affected by the flood.

The 3<sup>rd</sup> spell of monsoon flood began in the middle of September, and according to the Situation Report from NDRCC, 23 upazilas of seven districts in the north and north-western

Month of occurrence and geographic areas	Affected districts	Affected families
July – in the northern region*	5	29,006
August – in Kushtia district**	1	5,300
September – in the district along river Brahmaputra and Padma***	7	48,744
<b>Total</b>	<b>13</b>	<b>83,050</b>
* NDRCC Report on Disaster 19/07/2013		
** DMB Report on Disaster 18/8/2013		
*** NDRCC Report on Disaster 15/09/2013a		



*Photo 5: Inundated localities in Northern Bangladesh*

region of the country were flooded, affecting a total of 48,744 households.

## 2.7. Localised Disasters

Apart from the major disasters, there were several small-scale or low-intensity disasters – such as local storms and lightning, flash floods, tidal surges, landslides and accidents – which occurred in different parts of the country throughout 2013. These events were small-scale individually, but the accumulated damages and disruptions resulted by these events were significant and affected a large number of people.

**Flash Flood** – On 9 May, 2013 heavy monsoon rain fell over Kamalganj upazila in Moulvibazar district, causing a flash flood and bringing severe distress upon people.

**Local Storm and Lightning** – Lightning in 22 locations of 11 districts (including Bagerhat, Satkhira, Brahmanbaria, Bhola, Chuadanga, Cox's Bazar, Jamalpur, Khagrachari, Mymensingh,

Noakhali and Rangamati) resulted in 22 deaths, 34 injuries and traumatic cases that demanded humanitarian assistance. [DMIC Situation Report, 17.04.2013 and Report on Savar Tragedy and Norwester's hit in different places, DDM 09/05/2013]

**Landslide** – Heavy rainfall in Chittagong district by the end of July resulted in landslides at ward 14 in Chittagong City Corporation area, claiming two lives and destroying several houses. [DDM Situation Report, 28/07/2013]

**Tidal Surge** – Heavy rainfall damaged and weakened the embankments in many places in the coastal region. A tidal surge by the end of July caused sea water to enter through the broken embankments, severely affecting 16 upazilas in three districts. According to the Department of Disaster Management's Situation Report approximately 450,000 people in Bhola alone were affected by the tidal surge. [DDM Situation Report, 29/07/2013]

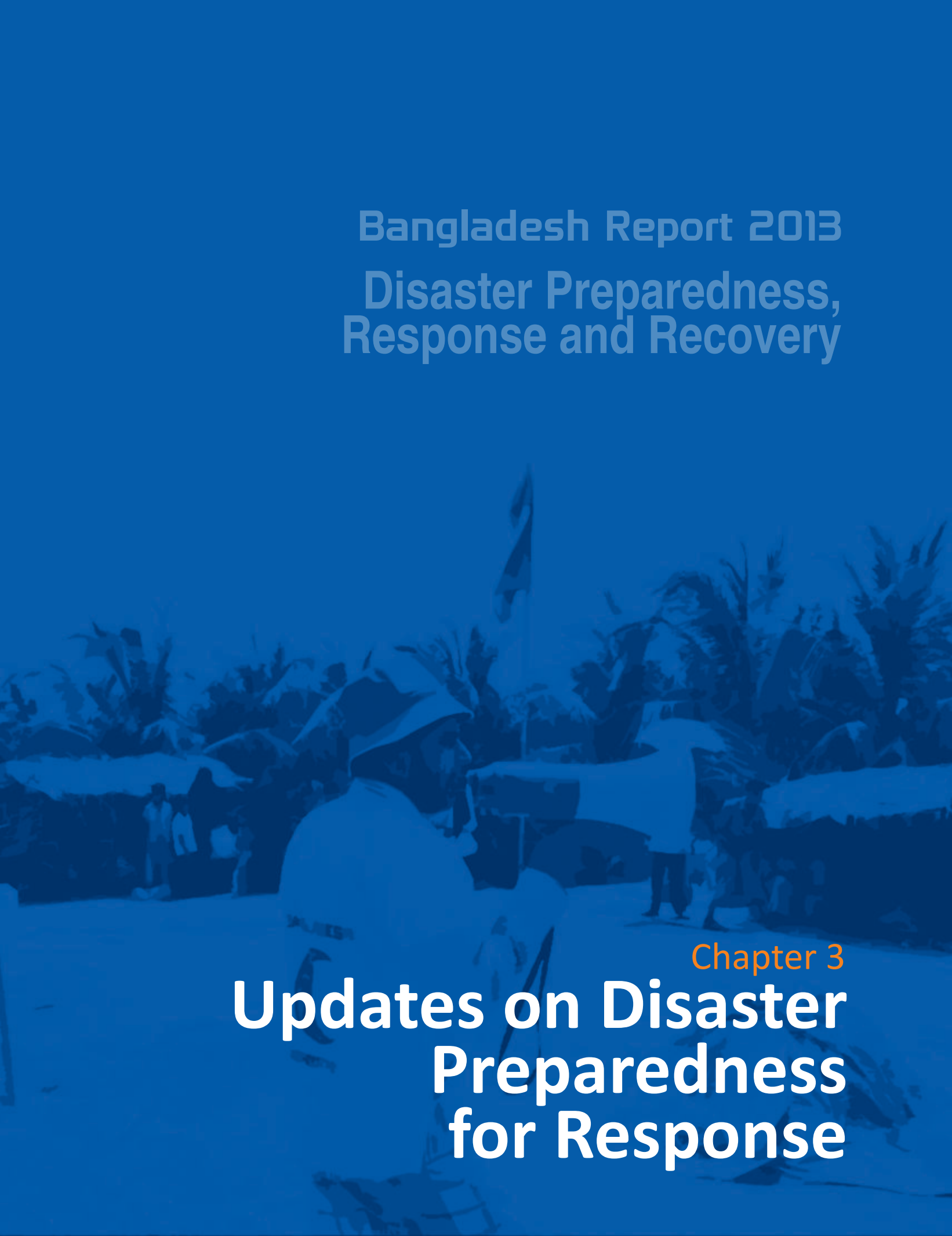


*Photo 6: Damaged house due to landslide in Chittagong*

**Sea Truck Capsize** – On 5 May a sea truck capsized event was reported by the Department of Disaster Management, which killed at least eight people. [DDM Situation Report, 05/05/2013]

**Fire** – Fire accidents occurred several times in 2013, mostly in the garments and sweater factories in Dhaka. Amongst the fire incidents a two-story small garment factory called Smart factory, caught fire in January, killing seven

female workers and injured five others. Another major fire incident that caused several deaths happened at Tang Hai Sweater factory in May 2013, killing eight people including senior managers of the factory. Arguably the most notable fire incident for 2013 is the fire accident that took place at Standard Group in Gazipur in November, causing the business substantial financial loss.

A blue-tinted photograph of a relief camp. In the foreground, a person wearing a white raincoat and a hooded hat is looking towards the right. In the background, there are several white tents, palm trees, and other people. A flag is visible on a pole in the distance.

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Chapter 3

**Updates on Disaster  
Preparedness  
for Response**



Disaster Management Act 2012, National Disaster Management Plan, and the Standing Orders on Disaster, provides good enabling environment for strengthening disaster resilience in Bangladesh. However, implementation of these policies and procedures requires continuous effort and cooperation from the Government and other stakeholders. Government and non-government stakeholders under the auspices of the Ministry of Disaster Management and Relief have implemented several programmes and initiatives for enhancing disaster preparedness and response. Major undertakings carried out in 2013 are highlighted below.

### 3.1. Policy and Plan

**Humanitarian Assistance Programme Implementation Guidelines 2012-13:** To overcome the challenges encountered in the previous years, the Government has operationalised the Humanitarian Assistance Programme Implementation Guidelines 2012-13. The guidelines helped the Government to clearly define the objectives of response interventions

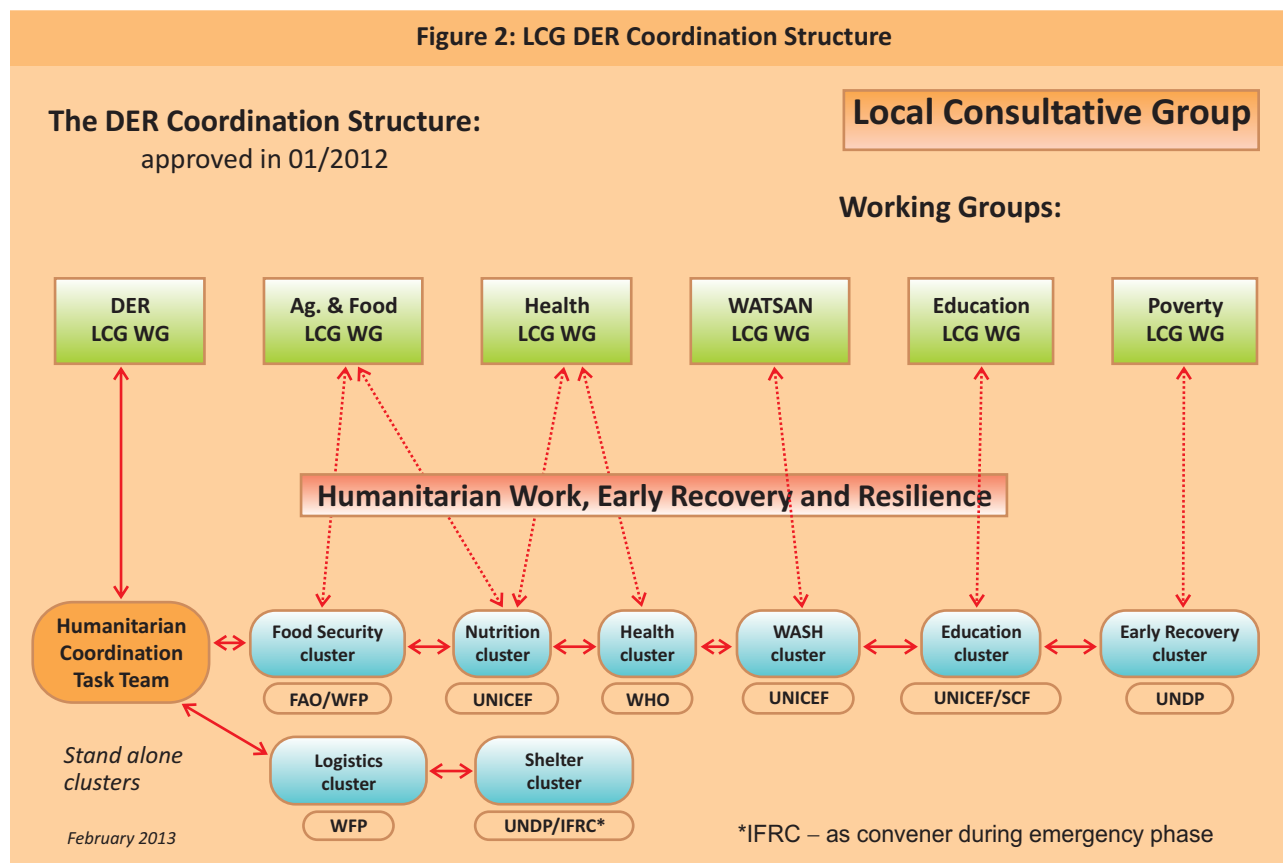
and to determine the nature of the support packages that affected people should receive.

The guidelines listed six types of humanitarian assistance: Vulnerable Group Feeding (VGF), cash grant, rice, warm clothes, CI sheet and housing grants. The guidelines also described criteria for eligibility to receive support as well as the quantities of each type of support for a beneficiary. This helped the MoDMR and the Department of Disaster Management to allocate financial and material resources promptly, and enabled the Local Administration to determine and deliver support package to affected people quickly.

### 3.2. Humanitarian Coordination for Improved Preparedness and Response

The Local Consultative Group on Disaster and Emergency Response (LCG-DER) comprises of representatives from all key stakeholder groups. It is the central forum for the Government and its partners to make strategic decisions and share

Figure 2: LCG DER Coordination Structure





*Photo 7: Training workshop on early recovery, 26-27 August, 2013*

ideas and information on disaster management. Being one of many thematic working groups of the LCG, the DER is mandated to ensure effective coordination of efforts from the national and international stakeholders in the broader scope of disaster management including, risk reduction, preparedness, relief and response, as well as recovery and rehabilitation.

**A Coordinated Humanitarian Response to Disasters Requires:** A specific focus on functional mechanisms for adequate preparedness before a disaster strikes; an effective humanitarian response during the disaster; and an early recovery intervention after the disaster. To meet the requirements humanitarian actors need to formulate mechanisms to promote collective preparedness, be able to make rapid decisions, trigger humanitarian response, coordinate humanitarian actions, and finally, sustain recovery efforts.

**The Humanitarian Coordination Task Team (HCTT)**, jointly led by the Government and UN Resident Coordinator's Office, was formed as a sub-group of LCG-DER in January 2012 (see

figure-2), with the purpose of strengthening the collective capacity of the Government and national and international humanitarian actors so that they can ensure effective humanitarian preparedness for, response to, and recovery from the impacts of disaster in Bangladesh. HCTT provides advice and undertakes agreed upon actions on behalf of the wider LCG-DER group and feeding back to it.

Under the leadership of the LCG-DER significant progress was made in 2013 in strengthening preparedness and response capacity:

**Joint Needs Assessment (JNA):** Tools for phase 1 and phase 2 of JNA were finalised and tested, and ten organisations were capacitated to lead coordination of the assessment. Over 100 field staff and 62 staff from local and international NGOs, International Federation of Red Cross and Red Crescent Societies, Bangladesh Red Crescent Society and UN agencies now have the capacities to conduct JNA. The JNA undertaken following the tropical storm Mahasen ranked the second-best among 88 analysed under a global emergency assessment.

**Humanitarian Clusters:** The clusters have developed sector-specific tools for Phase 3 Needs Assessment and trained the members on these tools. Before the onset of cyclone season in March – April 2013, the humanitarian clusters identified district level focal points and defined coordination roles based on standard guidelines provided by HCTT. Cluster-specific contingency plan and capacity assessment were also undertaken by some clusters.

**Early Recovery and Resilience Agenda:** A two-day training on early recovery was organised jointly by the Early Recovery Cluster and the Government. Over 40 members –representing Government agencies, UN agencies, national and international NGOs, International Federation of Red Cross and Red Crescent Societies, and donors – participated in the training which aimed to enhance stakeholders’ understanding of early recovery concepts, guiding principles, and Early Recovery Framework.

### 3.3. Capacity Development for Disaster Preparedness, Response and Recovery

A five-day training workshop “Tempest Express 22” was organised from 6<sup>th</sup> to 14<sup>th</sup> May 2013, with the following objectives: i) Improved coordination and communications architecture amongst civil ministries of the Government of Bangladesh, Armed Forces Division (AFD), and international humanitarian actors during disaster response; ii) Enhanced civil-military coordination between Bangladesh ministries and AFD; iii) Development of real estate requirements for major responders/stakeholders during a mega disaster; iv) Strengthened use of media in supporting disaster response; v) Enhanced airport and seaport prioritisation and processing procedures; and, vi) Development of planning factors and considerations for establishment of a regional disaster centre in support of SAARC. Tempest Express 22 was participated by representatives from Government ministries,

*Photo 8: Simulation exercise – fire-fighting as part of capacity building for preparedness by GoB*



the humanitarian and donor community (national and international), Bangladesh Armed Forces, and military planners from approximately twenty countries with interests in the Asia-Pacific region.

To support the implementation of the Disaster Management Act 2012, DDM, with support from ERF and CDMP II, organised a 5-day comprehensive training for its field level officials on disaster risk reduction, preparedness, emergency response and early recovery. A total of 64 District Relief and Rehabilitation Officers, 450 Project Implementation Officers participated in the training, resulting in enhanced local capacity for disaster risk reduction, preparedness and response.

CDMP II in association with Fire Service and Civil Defence (FSCD) Directorate, trained additional 7,332 urban community volunteers for disaster preparedness and response in six cities, in 2013. This takes the total to 23,257 urban volunteers (17,833 male and 5,424 female) trained and equipped since 2011. The urban volunteers proved their crucial value in search and rescue operations during the Rana Plaza disaster in April 2013 (920 volunteers working in shifts for 19 days).

The Government, through CDMP II, has expanded the Cyclone Preparedness Programme (CPP) to five new upazilas in three districts (Bagerhat, Khulna and Satkhira) and trained an additional 6,540 volunteers (including 4,360 men and 2,180 women). In association with DatEx-ADPC Joint Venture and municipality authorities, 59 landslide-volunteers have been recruited and trained in Cox's Bazar and Teknaf municipalities.

Methodologies and guidelines for Joint Needs Assessment (JNA) were finalised and tested. The coordination of the assessment will be led by 10 organisations including, 162 staff from local and

international NGOs, International Federation of Red Cross and Red Crescent Societies, Bangladesh Red Crescent Society and UN agencies.

### 3.4. Community Based Disaster Preparedness

In 2013, the National Alliance for Risk Reduction and Response Initiatives (NARRI) developed a community-based disaster preparedness model. The model evolved through a series of consultations with communities, and aims to strengthen national and Local Government's capacity to implement the Standing Orders on Disaster. The Community Based Disaster Preparedness Institutionalisation Model (2013) links response interventions with risk reduction, and enables risk-informed planning, implementation and monitoring of disaster preparedness. The model has been endorsed by DDM, and the NARRI members are using the model in their respective working area. To supplement the Community Based Disaster Preparedness Institutionalisation Model, a harmonised training module for DMCs on disaster risk reduction was developed by NARRI in collaboration with DeSHARI Consortium and ECB Consortium. The harmonised training module has been endorsed by DDM, and a pool of Master Trainers has been developed.

### 3.5. Managing Early Warning and Evacuation

Bangladesh made extraordinary improvements in revamping its early warning systems. The Flood Forecasting and Warning Centre was able to increase the lead time for flood forecasting and early warning from 3 days to 5 days in 2013. As a result, there are higher chances of saving more lives, livelihoods and assets of 88 million people living in four river basins. A recent early warning assessment<sup>4</sup> by the Asian Development Bank found that communities can save more than 70% of their movable assets if they get warning for flood events five days in advance.

<sup>4</sup> ADB (2006) "Bangladesh: Early Warning Systems Study", Technical Assistance Consultant's Report, Project Number: 38625 (TA 4562)



*Photo 9: Supporting community volunteers for cyclone preparedness by IFRC and BDRCS*

2013 also saw adoption of advanced technologies by DDM, which in association with Teletalk Bangladesh, integrated interactive voice response mechanism into its early warning dissemination system. During tropical storm Mahasen more than 60,000 people accessed the system, and another 50,000 people accessed it for other hazards throughout 2013. The effectiveness of the early warning system was evident especially in the case of the tropical storm Mahasen: although 8 million people were at risk, the storm resulted in only 17 deaths. UN OCHA and other humanitarian actors commended the Government's preparedness, noting that it saved countless lives (OCHA News Release 2013).

### 3.6. Ensuring Rapid Response

In 2013, Department of Disaster Management developed an **Emergency Preparedness Plan for Cyclone** for 37 vulnerable upazilas in 12 districts, where the Cyclone Preparedness Programme operates covering an estimated 10,499,325 people. The preparedness plan was based on two scenarios –

- A cyclone hits the south-eastern part of Bangladesh, causing floods and infrastructure damages across five districts (i.e. Chittagong, Cox's Bazar, Feni, Noakhali and Laxmipur) and directly affecting 2.93 million people;
- A cyclone hits south-western part of Bangladesh, causing floods and infrastructure damages across seven districts in Khulna and Barisal regions and directly affecting 2.79 million people.

As part of the emergency preparedness, the Government made an annual allocation of resources for July 2012 to June 2013, including –

- Cash – BDT 130,000,000 as gratuitous relief
- Food – 80,000 MT of rice as gratuitous relief
- Non-food items – 135,000,000 blankets
- Emergency shelters – 20,000,000 corrugated iron sheets and house building grants worth BDT 70,150,000

The **Food Security Cluster** enhanced its capacity to respond to emergencies through: a newly



*Photo 10: Prepositioning of WFP HEB biscuit before Cyclone Mahasen made landfall*

developed cyclone contingency plan; a streamlined information management; enhanced needs assessment capacity with training and tools; and improved Inclusive Preparedness Capacity (IPC) with training and analysis.

**Shelter Cluster's** Technical Working Group has initiated development of hazard specific shelter assistance packages. This work also benefitted from the ECHO supported transitional shelter design which are resistant to identified hazards (flooding, cyclones etc.). **Early Recovery Cluster** trained representatives from Government and other humanitarian organisations, and developed needs assessment protocol and tools for phase 3 sector specific needs assessment.

**Bangladesh Red Crescent Society (BDRCS)** prepositioned relief items with support from IFRC's Disaster Relief Emergency Funds, which are made available within 24 hours. The relief items from BDRCS include, dry food, utensils, blankets, clothes, emergency shelter materials, safe water and sanitation materials and emergency medical kits.

Prior to the landfall of the tropical storm Mahasen, **World Food Programme (WFP)** prepositioned 313 MT of high-energy biscuits in the hard-to-reach areas (where it takes more than 24 hours to transport stock after a cyclone hits). In addition, WFP had more 713 MT of biscuits ready in various warehouses for distribution.

### 3.7. Framework for Disaster Risk Reduction and Education in Emergencies

Under the management of Education Cluster and joint leadership of Directorate of Primary Education (DPE) and Directorate of Secondary and Higher Education (DSHE), and with technical assistance from DDM a Framework for DRR in Education and Education in Emergency has been drafted in 2013. A working group of Education cluster consisting DPE, DSHE, DDM, CDMP, DeSHARI, UNICEF, Save the Children, NARRI, CARITAS and ECHO contributed to the Framework development. The Framework identifies key actions from national to school levels to integrate DRR and Education in Emergencies (EiE) in Education Sector planning. And it prescribes a model for school based DRR and EiE. DDM with the support from Education Cluster and DeSHARI is going to process the endorsement of the Framework by DPE, DSHE and DDM.



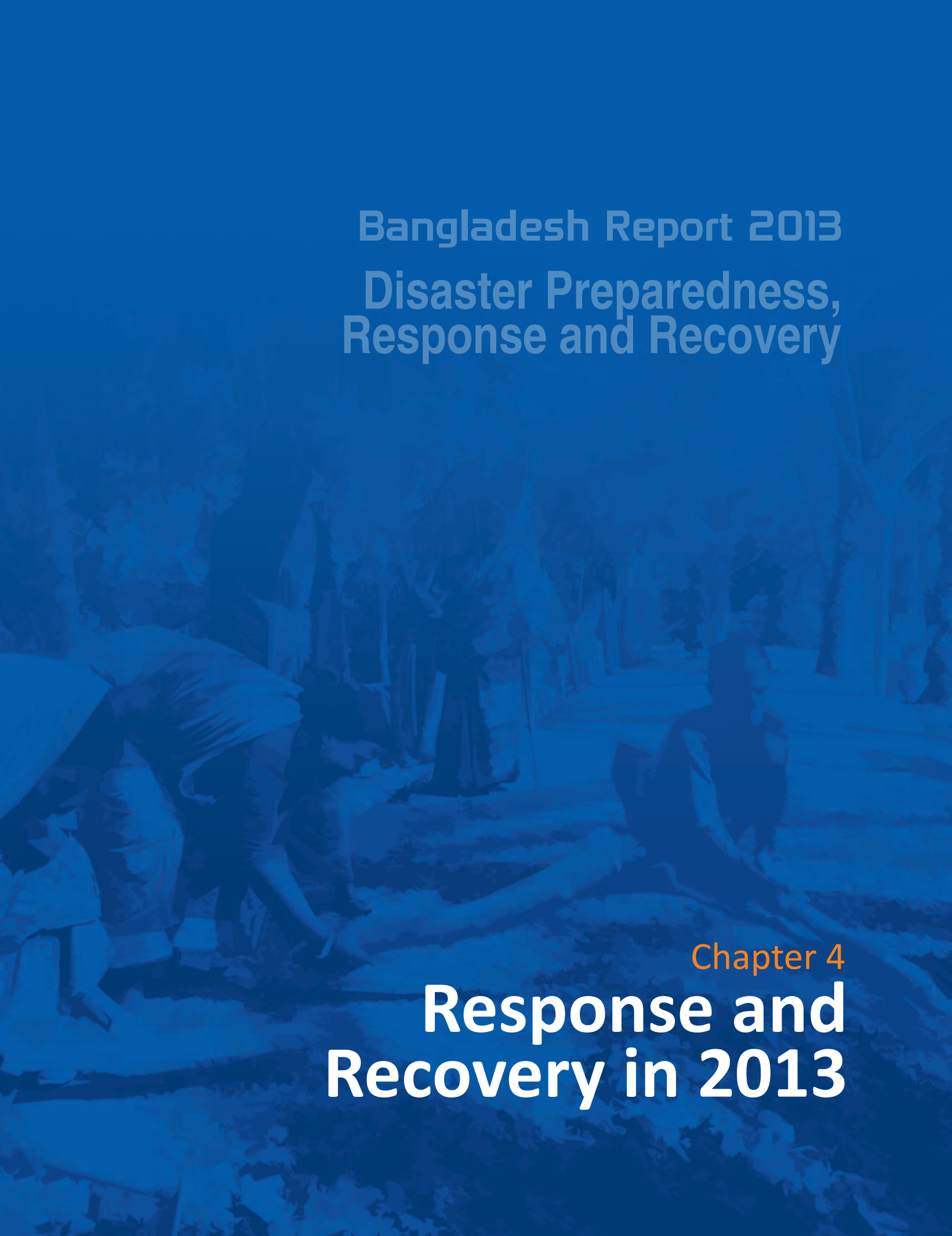
*Photo 11: A Taiwanese organisation provided blanket to DDM for vulnerable people as a token of love*

## Benefits of Preparedness

The Government received high returns on its investments in early warning system, emergency response preparedness, and contingency planning – which was evident in the country’s response to the tropical storm Mahasen. Although 8 million people were at risk, the storm resulted in only 17 deaths – a commendable achievement which was recognised by UN OCHA and other humanitarian actors. The details of the achievement include:

- Timely pre-positioning of relief items by Government and non-government humanitarian agencies;
- In coordination with Union Disaster Management Committee, around 50,000 volunteers of Cyclone Preparedness Programme, a joint venture programme of Bangladesh Government and Bangladesh Red Crescent Society disseminated warnings to people in areas at risk.
- Over 60,000 people used their cell phones to receive information about the storm through the interactive voice response.
- 10 rounds of text messages were issued by the Government, resulting in 40,000 bulk texts to disaster management committees with information about the approaching cyclone.
- Along with other public and private buildings, nearly 3,800 shelters that housed food, water and other emergency items.
- 1.1 million people were safely evacuated to cyclone shelters 24 hours before the landfall with assistance from 50,000 volunteers of Cyclone Preparedness Programme.
- Over 1,300 medical teams were ready to help people in the affected districts.
- 40 water treatment plants stood ready to be mobilised.





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Chapter 4

**Response and  
Recovery in 2013**



Bangladesh Government, UN agencies, NGOs, International Federation of Red Cross and Red Crescent Societies and Bangladesh Red Crescent Society were involved in emergency response and early recovery operations in 2013 following the major disasters including, cold waves, tornadoes, Rana Plaza building collapse, tropical storms, water logging and monsoon floods.

The Government responded to both high and low intensity disasters with an estimated value of the assistance (excluding the cost of delivery) amounting to BDT 2,450.9 million in 2013.

**Table 8: Estimated value of disaster response and recovery interventions by type of agencies**

Type of agency	Value of assistance in BDT	Affected HH
GoB	2,450,861,400	N/A
UN Agencies	226,342,711	49,431
NGO	826,113,294	206,891
IFRC and BDRCS	250,382,144	70,000
<b>Total</b>	<b>3,753,699,549</b>	

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

## 4.1. Response Activities of Bangladesh Government

The Government recognises that the country is highly prone to disasters and about 31.5% of the population lives below the poverty line. Therefore, disaster management is a priority for the Government. Efforts to manage disasters were focused on risk reduction, but a need to manage residual risks was also identified. Accordingly, the Government – through the Department of Disaster Management – planned and implemented numerous response interventions in 2013, which aimed to protect lives and livelihoods of the disaster affected people using asset-transfer as the main strategy to deliver humanitarian assistance. In addition, to support the response intervention and to implement them effectively, the Government developed Humanitarian Assistance Programme Implementation Guidelines 2012-13.

### Types of humanitarian assistance

Asset-transfer was predominantly the Government's strategy for providing humanitarian assistance in 2013, which included cash grants and distribution of rice, corrugated iron sheets, housing grants, blankets and warm clothes amongst the disaster affected people.

**Cash Grant** – In 2013, the Department of Disaster Management distributed gratuitous relief in the form of cash amounting to BDT 164.2 million to disaster-affected families and institutions across the country. Each grant was of an amount between BDT 10,000 and BDT 25,000 for a family that had lost its members due to the disaster, and between BDT 5,000 to BDT 15,000 for an injured person to ensure treatment. Also, poor families whose houses had been damaged by the disaster and needed repairing, received BDT 3,000 along with a corrugated iron sheet. The local institutions that were damaged received BDT 20,000 cash grant each.

**Housing Grants** – the Department of Disaster Management provided housing grants to help poor families reconstruct their houses with BDT 10,000; and those whose houses were completely destroyed, received BDT 20,000. Local institutions that were damaged and required reconstruction received BDT 50,000. In total the amount of housing grants distributed in 2013 amounted to BDT 72 million.

**Rice Distribution** – the Department of Disaster Management provided between 10 to 30 kg food grains to each of the disaster affected poor households, while local schools or institutions received 5 MT rice through a food-for-work programme that helped to repair and reconstruct the community. The total quantity of food grains distributed during 2013 in 64 districts amounted to 57,840 MT.

**Blanket and Warm Clothe Distribution** – Generally, each of the very poor households which cannot afford to buy warm clothes, received one or two blankets. In 2013, the Department of Disaster Management

distributed 510,372 blankets in 64 districts amongst cold wave affected families, as well as to the families that lost their houses or household assets due to fire or other natural hazards.

**Corrugated Iron Sheet Distribution** – the Department of Disaster Management provided these sheets to the poor families whose houses were damaged or destroyed by storm, fire or

their distress and offset economic losses, Department of Disaster Management – through the District Administration – distributed 510,372 blankets (including the blankets received from DBBL) and 22,900 shawls in 64 districts. In addition, the Department distributed BDT 49.5 million among the affected people across the country. (DMIC, Situation Report on Cold Wave; 19 January 2013)

**Table 9: Assistance provided by the GoB**

Type of assistance	Unit	Dhaka	Chittagong	Khulna	Rajshahi	Barisal	Rangpur	Sylhet	Total
Cash	BDT	57,650,000	35,198,000	11,850,000	17,374,000	26,750,000	13,700,000	1,650,000	164,172,000
Rice	MT	15,271	10,609	7,369	7,794	6,725	7,818	2,254	57,840
CI Sheet	BUN	5,616	5,490	2,865	3,547	1,611	3,003	2,204	24,336
Housing Grants	BDT	16,839,000	15,639,000	8,595,000	10,641,000	4,830,000	8,871,000	6,624,000	72,039,000
Blanket and Warm Clothe	Pc.	120,342	78,124	63,439	88,452	34,253	90,199	35,563	510,372

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response, Recovery and Preparedness 2013, DDM*

other natural hazards. Generally, for partial damages each family received two bundles of sheet and those with fully damaged houses received three bundles. Educational institutions that suffered structural damage received 15 bundles of sheet, while local institutions received 10 bundles each. In total, the Department distributed total 24,336 bundles of sheet.

### GoB Response for Major Disasters in 2013

In 2013, the Government responded to a range of major disasters including cold wave, tornado, building collapse, tropical storm, water logging, monsoon flood and landslide through its Department of Disaster Management and the Local Administrations. The estimated value for the Government response for the major disasters in 2013 was approximately BDT 1,315.8 million.

**Cold Wave** – Many people, particularly the poor, suffered the most from the cold wave that swept over the country in January 2013. To help reduce

**Tornado** – Immediately after its occurrence in Brahmanbaria, the Local Administration mobilised Armed Forces Division, Fire Service and Civil Defence and Bangladesh Red Crescent Society to start rescue and relief operations.

**Table 10: GoB response and recovery interventions for major disasters in 2013**

Type of disaster	Total response in BDT	Affected HH
Cold Wave	156,125,518	N/A
Tornado	62,715,530	N/A
Savar Building Collapse	267,596,939	N/A
Tropical Storm Mahasen	78,399,052	N/A
Water Logging	1,934,000	N/A
Monsoon Flood	27,999,000	N/A
Landslide	2,860,000	N/A
Others	718,192,020	3,913
<b>Total</b>	<b>1,315,822,059</b>	<b>N/A</b>

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

Medical assistance was provided to 250 injured people through district hospitals and to another 17 persons through Military Hospital in Comilla Cantonment. The Department of Disaster Management (DDM) supplied 852 tents and subsequently provided 2,485 bundles of corrugated sheet to the families that had lost their houses due to the tornado. Through the District Administration, DDM also distributed gratuitous relief in the form of BDT 2.7 million cash, BDT 7.5 million housing grants and approximately 61 MT rice amongst the affected families. Brahmanbaria's District Primary Education Office distributed 1,180 sets of books to primary school children and 615 sets to secondary school children, while the Department of Public Health Engineering (DPHE) repaired 200 tube-wells and installed 20 new ones. (DMIC, Situation Report on Tornado in Natore, Naogaon and Brahmanbaria, 3 April 2013). Also, the Government allocated an amount of BDT 32 million (funded by Government Climate Change Trust Fund) for 100 tornado affected families in Brahmanbaria for building tornado resilient shelter each of which cost BDT 320,000.

**Savar Building Collapse** – The local people started to rescue immediately after the incident. The Government was also able to quickly mobilise Bangladesh Army, Navy, Fire Service and Civil Defence, BGB, Police and Bangladesh Red Crescent Society and various volunteer teams for rescue activities including 1,200 volunteers from Dhaka and Narayanganj who are trained by Comprehensive Disaster Management Programme under the Ministry of Disaster Management and Relief. The month-long rescue operation continued for three weeks and found 2,438 people alive.

The Government of Bangladesh had mobilised roughly BDT 267.60 million from different sources for supporting the rescue and relief activities for Savar building collapse incident. The Ministry of Disaster Management and Relief allocated approximately BDT 46.24 million for the Department of Disaster Management for rescue and relief activities. To facilitate this rescue operation BDT 2.5 million was given to the Fire Service and Civil Defence for purchasing rescue equipment. The Department also allocated an approximate amount of BDT 28.90



*Photo 12: Rescue operation by GoB after building collapse (Rana Plaza)*

million to the respective District Administrations for instantaneous cash distribution amongst the injured, facilitating rescue operation and covering the transportation, handover and funerary expenditures of the corpse. The District Administrations provided BDT 20,000 to each of the family of deceased people and BDT 5,000 to each injured person. The Department also enabled Bangladesh Army to spend an approximate amount of BDT 12.14 million for the rescue operation while aided the District police, Dhaka to spend roughly BDT 2.7 million for purchasing necessary equipment. The Prime Minister's Relief and Welfare Fund had also contributed to the rescue and relief activities to a great extent. It allocated an amount of nearly BDT 221.36 million for cash distribution amongst the families of the deceased, treatment of the seriously injured people, identification of the dead bodies, etc. (DDM information Collection Template, 2013)

**Tropical Storm Mahasen** – Prior to the tropical storm which made landfall, the Government hoisted cyclone warning signal 7 for districts across the coastal belt. Communities within the warning area were instructed to take shelter in solid brick buildings or cyclone shelters. At the onset of the storm the Government started to broadcast early warning through the Cyclone Preparedness Programme and the Local Administrations. The Local Administration mobilised the Armed Forces, and planned evacuation and rescue operations. To help the affected people in the three most affected districts (Barguna, Bhola, Patuakhali) recover quickly, the Government allocated BDT 300 million for house repairing and rebuilding amongst the Mahasen affected families. Out of the total BDT 300 million, BDT 78.4 million was spent. (www.ddm.gov.bd reference No. 51.01.0000.015.16.001.13-411 dated 16/7/2013)

**Water Logging** – Due to heavy rains and high tides many parts of the country became waterlogged. DDM through the District Administrations provided gratuitous relief to the affected people, which included distribution of 14 MT GR rice and

BDT 30,000 of GR cash in Barguna, 22 MT GR rice in Bhola, 5 MT GR rice in Pirojpur and 15 MT GR rice in Noakhali districts. (NDRCC ref. 51.00.0000.423.40.004.12-260 dated 01/6/2013)

**Monsoon Flood** – DDM through the District Administration distributed gratuitous relief in the form of 101 MT rice and BDT 245,000 cash in Thakurgaon, 108 MT rice and BDT 45,000 cash in Dinajpur, 127 MT rice and BDT 350,000 cash in Panchagarh, 63 MT rice in Kurigram, 82 MT rice and BDT 125,000 cash in Gaibandha, 90 MT rice in Lalmonirhat and 21 MT rice in Nilphamari districts. (www.ddm.gov.bd reference No. 51.01.0000.015.16.006.12-47 dated 19/7/2013)

**Landslide** – Two lives were lost in a landslide in Lalkhan Bazar, Chittagong. DDM through the District Administration provided BDT 40,000 to each of families of the deceased people. The Department also allocated 80 MT GR rice and additional BDT 100,000 to distribute amongst the affected families. (NDRCC ref. 51.00.0000.423.40.12-323 dated 28/7/2013).

In addition to the above response and recovery, DDM with a funding of BDT 718.2 million from the Government Climate Change Trust Fund provided brick built cyclone resistant houses to 3,913 Cyclone Aila affected extreme poor households in the coastal districts. The construction cost for each of these houses was BDT 183,540.



**Photo 13:** GoB provided brick built cyclone resistant house at Dacope upazila, Khulna

## 4.2. Response Activities of the UN Agencies

In 2013, UN agencies responded to the major disasters including tornado in Brahmanbaria, building collapse in Savar, tropical storm Mahasen, flood and landslide, and water logging. They also responded to some of the disasters with unique characteristics, such as communal violence, extreme weather and pest attacks. The estimated value of their response from UN agencies in 2013 was over BDT 223.1 million. Approximately 49,413 affected households directly benefitted from this assistance. The UN agencies also provided assistance through the Government, for example, WHO assisted through the Directorate General of Health Services for disease surveillance and medical interventions.

**Tornado** – UNDP’s Early Recovery Facility project (also funded by DFAT-Australia) provided livelihood recovery support to the tornado affected people in Brahmanbaria through a NGO (Samaj Kalyan Unnayan Shangstha) in collaboration with the DDM and Local Administration. The project aimed to help poorest and the most vulnerable including the disabled to restore their livelihoods and become resilient to future shocks through livelihood training and cash grants. The project provided goods and services worth approximately BDT 5.55 million to 530 tornado affected households. World Food Programme, through its partner BURO Bangladesh, provided 12.3 MT of high-energy biscuits to women and children of 1,644 tornado affected households. World Health Organisation responded to the tornado through the Directorate General of Health Services with disease surveillance and medical interventions. UNICEF distributed 600 family kits benefitting 3,000 people as well as hygiene kits, emergency latrines supplemented by for hygiene promotion.

**Building Collapse** – World Health Organization, through the Directorate General of Health Services, provided medical interventions,

**Table 11: Estimated value of UN system response and recovery interventions by type of disasters**

Type of disaster	Total response in BDT	Affected HH
Tornado	8,311,200	2,174
Building Collapse	4,000,000	N/A
Tropical Storm	20,060,822	4,491
Water Logging	13,140,147	15,478
Monsoon Flood	32,845,905	20,160
Communal Violence	24,553,750	910
Extreme Weather and Pest Attacks	123,430,887	6,200
<b>Total</b>	<b>226,342,711</b>	<b>49,413</b>

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

psycho-social support and financial assistance amounting to BDT 4 million to support the people affected by Savar building collapse.

**Tropical Storm Mahasen** – UNDP provided assistance to 2,200 Mahasen affected families in Bhola and Barguna districts. The programme, with funds from DFAT-Australia and implementation partners Muslim Aid and Uttaran, sought early recovery through cash grants and skill building training. Goods and services provided to the affected people was worth approximately BDT 14.26 million. To help acutely malnourished children under five years and pregnant and lactating women, World Food Programme



**Photo 14: Livelihood supports provided by UNDP after tropical storm Mahasen**

distributed 12.6 MT of nutritious food through its partners Shushilan and Muslim Aid, among 2,291 cyclone affected households in Barguna and Bhola districts. World Health Organization, through the Directorate General of Health Services, provided financial assistance amounting to BDT 4 million to support the people affected by this tropical storm with disease surveillance and medical services. UNICEF distributed 5,500 family kits including hygiene kits benefitting 27,000 people in three affected districts.

**Water Logging** – During the first phase, World Food Programme distributed 167.7 MT of Super Cereal and 7.5 MT of vegetable oil amongst 2,800 pregnant and lactating women and 6,043 under-five children in the waterlogged areas of Satkhira district. In the second phase, the organisation distributed 6.8 MT of high-protein biscuits amongst 6,635 children and pregnant and lactating women through its partner ACF. Through its partner Muslim Aid, UNICEF distributed 9 MT of high energy biscuits to children aged 6-59 months as well as pregnant and lactating women.

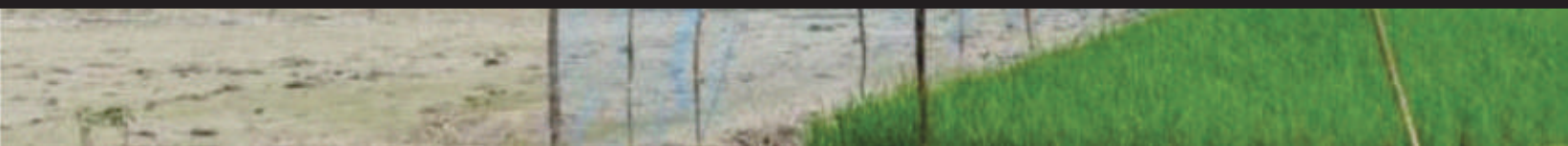
**Monsoon Flood** – Food and Agriculture Organization (FAO) provided emergency

assistance to support the recovery of crop-based livelihoods of landless and marginal farmers affected by the monsoon floods in north-western districts of Kurigram, Gaibandha, Bogra, Sirajganj and Jamalpur. The organisation distributed crop packages and training to restore livelihoods of about 20,160 vulnerable farming households severely affected by the flood. Value of the goods and services provided by FAO amounted to BDT 32.84 million.

**Localised Disasters** - FAO also provided emergency assistance amounting to BDT 21.4 million to 910 households to help them recover their livelihood and loss of agricultural capital following communal violence in Taindong union of Khagrachari district. FAO also provided early recovery assistance of BDT 123.4 million to 6,200 households to restore their agriculture-based livelihoods that suffered from extreme weather conditions and pest attacks in critically food insecure areas of the Chittagong Hill Tracts. UNDP through its Chittagong Hill Tract Development Facility Project provided livelihood recovery support worth BDT 3.2 million to the families affected by communal violence in Taindong union.



*Photo 15: UNDP supported core family shelters with sanitation facilities, emerged as a sustainable housing solution at Koyra upazila, Khulna*



### 4.3. Response Activities of the NGOs

In 2013 NGOs responded mainly to the disasters that affected large areas and large number of people. The value of their total response in 2013 was approximately BDT 826.1 million. The humanitarian NGOs provided support to 206,891 households from the total affected households by the disasters in 2013. Almost half of the amount was used for assisting the people affected by the tropical storm Mahasen. The NGOs also responded to the floods during the monsoon and cold wave in the beginning of the year. Several NGOs also responded to building collapse in Savar, tornado and water logging.

**Cold Wave** – ACF, ActionAid, CARE, Islamic Relief, Muslim Aid, Save the Children and World Vision came forward to assist approximately 119,765 households affected by cold wave in January 2013. Their support packages included warm clothes, medicine and food items. Total cost of their response was approximately BDT 84.9 million.

**Tornado** – Approximately 320 households that were affected by the tornado occurred in Brahmanbaria district received assistance from Muslim Aid, which included relief items, shelter

Type of disaster	Total response in BDT	Affected of HH
Cold Wave	84,883,004	119,765
Tornado	3,206,764	320
Building Collapse	10,385,367	800
Tropical Storm	407,663,477	51,847
Monsoon Flood	204,800,271	21,030
Water Logging	115,174,411	13,129
<b>Total</b>	<b>826,113,294</b>	<b>206,891</b>

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

and house reconstruction materials, while BBC Media Action helped the affected people with lifesaving information. The total estimated value of assistance from these two NGOs was BDT 3.2 million.

**Building Collapse** – Nearly 800 households that were affected by the building collapse in Savar, received assistance worth BDT 10.4 million from ActionAid, Save the Children and World Vision. Their support packages included emergency food aid and rescue services.

**Tropical Storm** – Approximately 51,847 households that were affected by the tropical



Photo 16: Cash for Work intervention after tropical storm Mahasen by NGO for road repairing, Barguna Sadar

storm Mahasen, either received food, cash grant, Non Food Items and WASH support, and housing grants from the NGOs or participated in cash-for-work or cash-for-training schemes run by NGOs including ACF, ActionAid, BBC Media Action, Christain Aid, Concern Worldwide, Islamic Relief, Muslim Aid, NARRI Consortium led by Plan International, Oxfam, Save the Children, Solidarités International, Terre des hommes and World Vision. The estimated value of the total supports from these NGOs amounted to BDT 407.7 million.

**Monsoon Flood** – The NGOs provided support to approximately 21,030 households affected by the monsoon flood. Their assistance included combinations of emergency food items, safe drinking water, WASH support, housing and house construction materials, cash grants, cash-for-work and cash for training. Total value of these supports to the flood affected households was approximated BDT 204.8 million. The key agencies that provided these support include, ACF, DESHSARi Consortium led by Muslim Aid, Islamic Relief, Oxfam, Solidarités International and World Vision.

**Water Logging** – ACF, Islamic Relief and Solidarités provided assistance to a number of 13,129 households affected by water logging in south-western region of the country; total value of this assistance was BDT 115.2 million. ACF’s assistance to the waterlogged households included distribution of emergency food aid, hygiene kit, household water purification kit and water treatment unit and bathing corners.

#### 4.4. Response Activities of Bangladesh Red Crescent Society and International Federation of Red Cross and Red Crescent Societies

In 2013 the BDRCS and IFRC responded to cold wave, flash flood and landslide, monsoon flood and tropical storm. Their support included distribution of hygienic latrine, hygiene kits, cash grants for repairing shelter, training, livelihood

**Table 13: IFRC and BDRCS response and early recovery interventions in 2013**

Type of Disaster	Value in BDT	Affected HH
Cold Wave	19,157,324	40,000
Tornado	6,691,200	1,000
Tropical Storm	68,034,000	6,800
Flash Flood & Land Slide	65,280,000	8,000
Monsoon Flood	50,691,960	13,000
Fire & Other Events	40,527,660	1,200
<b>Total</b>	<b>250,382,144</b>	<b>70,000</b>

*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

and awareness, cash-for-training and indigenous tree species. The estimated value of these assistance is BDT 250.4 million, covering a total of 70,000 affected households.

**Cold Wave** –Bangladesh Red Crescent Society (BDRCS) with support of the IFRC distributed blankets to 40,000 affected households across the country.

**Tornado** – BDRCS with support of the IFRC also provided family kits, transitional shelter materials and cash for food support to 1,000 tornado affected households in Brahmanbaria district.

**Tropical Storm** – During the emergency phase both the organisations also assisted approximately 4,000 households in Barguna, Patuakhali and Bhola districts with cash-for-food, tarpaulin and water jerry cane. 2,800 households in Barguna and Patuakhali districts also received early recovery supports from these organisations, which included: distribution of hygienic latrine; livelihood grants of BDT 3,000 and cash grants of BDT 20,000 per house; cash-for-training worth BDT 3,000 and BDT 4,000 for cash-for-work per household; and distribution of sapling of indigenous tree species.

**Flash Flood and Landslide** –BDRCS with support of the IFRC provided assistance to 8,000 households in Cox’s Bazar, Bandarban and



*Photo 17: Assistance provided by IFRC and BDRCS under the cash-for-work programme after tropical storm Mahasen*

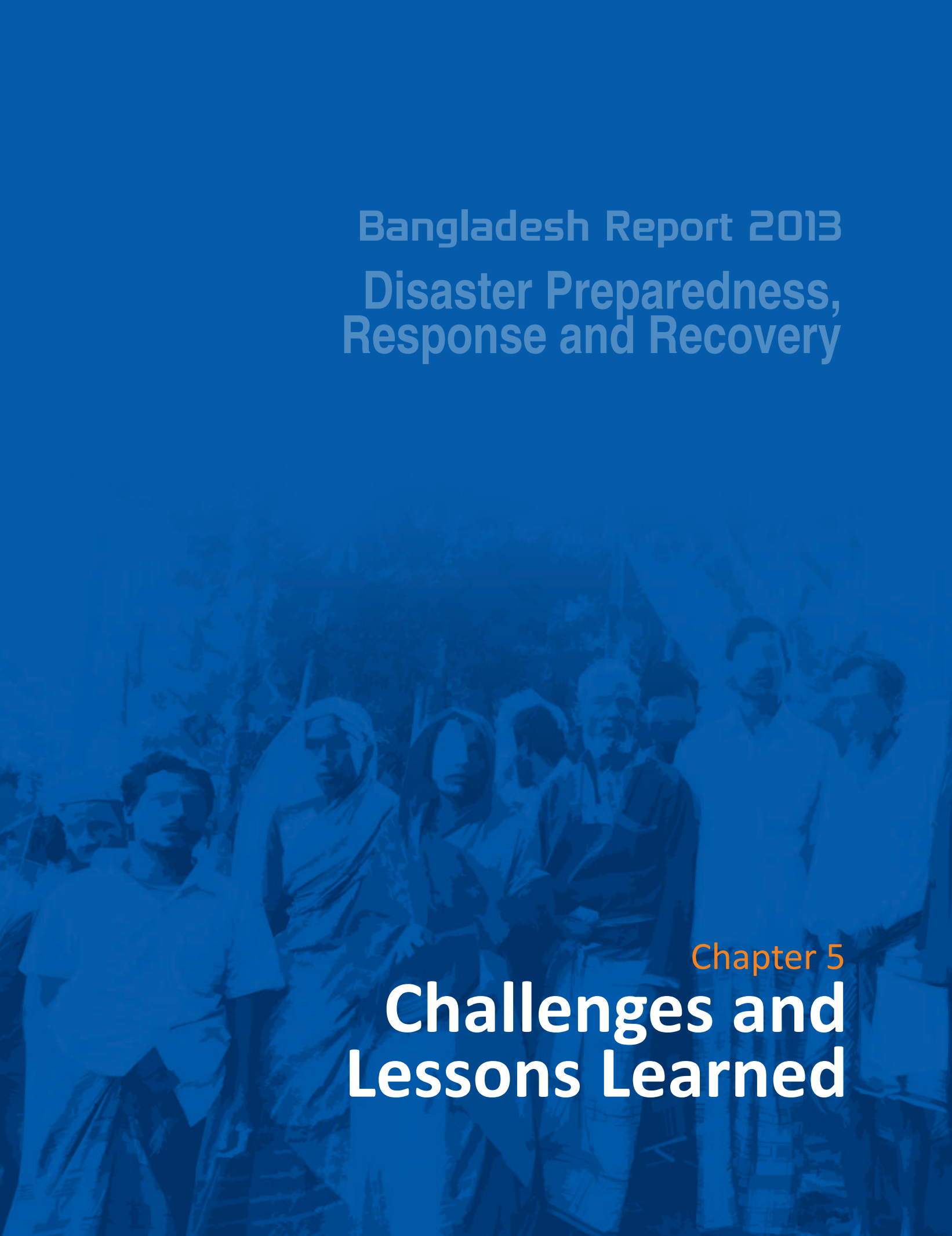
Chittagong districts through cash-for-work, cash-for-training and unconditional grants.

**Monsoon Flood** – 1,000 households in Gaibandha and Kurigram districts received cash grants amounting BDT 12 million from BDRCS. These organisations also distributed 2,000 BDT per household for food support, tarpaulin for emergency shelter and hygiene kits worth BDT

36.3 million amongst 12,000 households in 21 flood affected districts.

**Fire and Other Events** – BDRCS with support of the IFRC provided transitional-shelter materials worth BDT 1.8 million to 192 households in Pabna district. In addition to this material, BDRCS and IFRC continued to provide relief support worth approximately BDT 40 million throughout 2013.





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Chapter 5

**Challenges and  
Lessons Learned**



Bangladesh is fifth in the list of 173 countries that are most prone to natural disasters (World Risk Report, 2012) with one-third of its population living below poverty line who are highly vulnerable to the impacts of climate change, which, in the short and medium term, is likely to be felt through more frequent and severe natural disasters. In addition to the sudden onset of disasters, Bangladesh is increasingly being affected by the slow onset of disasters including, increased salinity of fresh water resources and agriculture lands near coastal areas, and water logging in the south-west region. The frequency of disasters, human and economic losses arising from these disasters, and the subsequent high level of socio-economic vulnerability are some of the key factors that call for increased attention to preparedness and coordinated post-disaster response and recovery interventions that are linked to sustainable development.

Compared to the earlier years, disasters in 2013 were less frequent, and their intensities were, generally, moderate. Nevertheless, there were several disasters including, tropical storm Mahasen and Savar building collapse which had severe and large-scale impacts. The country also experienced cold wave which resulted in single-digit temperature in northern regions and demanded large scale assistance. All in all, the humanitarian agencies faced formidable challenges in 2013 dealing with both annual and singular disasters, and learned valuable lessons when responding to them with immediate and long-term interventions.

## 5.1. Preparedness

### *Challenges*

Bangladesh has gained significant expertise in cyclone tracking; and it has an elaborate system for disseminating early warning.

When the cyclone Mahasen was formed in the Bay of Bengal, the Government agencies were able to track its course and disseminate information to the communities and stakeholders. However, the movement of the cyclone was different than any other cyclone that

Bangladesh had experienced in the past. The relevant agencies were able to track the course of the cyclone and explained it in technical terms but faced enormous difficulties to explain the behaviour of the cyclone in a way that community people would understand the message easily. Local Authorities and the communities faced difficulties to decide when, where and how they should carry out evacuation due to changing trajectory of the cyclone path and potential casualties associated with disasters.

With regards to urban risk management – although there are major achievements in preparedness to deal with more visible and devastating natural phenomena such as cyclones – ensuring application of common safety measures in a day-to-day life continues to be a challenge. Failure to adhere to standard safety measures sometimes results in tragic incidents such as Savar building collapse – where the developer neglected the Building Code when constructing the building, and the owners allowed housing of several garment factories in it, though the building was not designed for industrial use.

### *Lessons learned*

Early warning and evacuation system proved very effective during Mahasen. Bangladesh Meteorological Department (BMD) delivered weather bulletins regularly to its respective wings and CPP. Community people were informed about Mahasen from different sources. In most cases, public received early warning messages via television and radio and these were confirmed by the CPP volunteers in the coastal districts; Union DMC members and mike announcement from local mosques; Interactive Voice Response (IVR) dialing 10941 was active for disseminating weather advisory and updated early warning messages. People from vulnerable areas were evacuated to cyclone shelters and other safer building. However, it has been noted that considering the population of the vulnerable communities, the number of cyclone shelters and their capacity is still very insufficient.

In response to Mahasen, all wings of the Administration, Bangladesh Meteorological Department, DMCs at district, upazila and union level and Local Government representatives with their limited resources and equipment managed their responsibilities well to face Mahasen, resulting in minimum loss of life and injury. Good coordination was evident among the DMCs, CPP volunteers, NGOs, local elites, and the community people in preparation for the Mahasen. It was also noted that cyclone approach roads and *killas* (earthen mound used as livestock shelter) played vital role in facilitating sheltering of the vulnerable people against the impact of the cyclones.

Union DMCs have performed very well during Mahasen preparedness activities. The traumatic experiences from cyclone Sidr and cyclone Aila inspired them to do so. However, most of them are not well aware of their Standing Orders on Disaster (SOD) appointed roles and responsibilities. To further improve performance and effectiveness of the union DMCs, it is advised to organise orientation on their roles

and responsibilities before disaster, during and after disaster, as stipulated in the SOD. Union DMCs need to be supported to prepare contingency plan with required budgets.

The response to the tropical storm Mahasen ensured a good return on Government's investment in the early warning planning, tools, systems and volunteers of Disaster Management Committee and Cyclone Preparedness Programme. However, while warning systems were found to be up and running with considerable commitment of DMCs and CPP volunteers, this event also identified lack of funding for local preparedness and response activities. This points to an urgent need for setting up district level Disaster Management Fund, as indicated in the Disaster Management Act 2012.

It has been noted that although the nature of a hazard generally remains the same, its impact can be different each time as it brings in new elements and uncertainties. Each of the three successive cyclones – Sidr in 2007, Aila in 2009 and Mahasen in 2013 – manifested new

**Photo 18:** DDM officials discussing with upazila DMC members



elements and their impacts were different and unpredictable. It was evident from the experience of Mahasen that the preparedness plan and organisational capacity are in need to be enhanced to address the new elements and uncertainties associated with cyclone. An important learning for us is: both cyclone Aila and tropical storm Mahasen demonstrated the need for periodic assessment and review of the impact as both the disaster events seemed less impactful immediately after they happened, but they had a cumulative long-term impact on the affected population.

People in Bangladesh naturally have a very high level of tolerance for risks; this often makes them disregard possibilities of potential loss or damage, especially if the risk is not evident or not too high. This behavioural trait can bring upon severe localised disasters such as road accidents and building collapse, by not taking timely precaution. Therefore, there is a need for focused interventions to raise public awareness about improving and applying safety measures in day-to-day lives.

## 5.2. Response

### *Challenges*

Bangladesh Government has substantial experience and capacity to deal with disasters in rural areas, but is less capable to manage urban disasters such as the Savar building collapse which killed over 1,100 people just a few weeks before tropical storm Mahasen hit. The Local Administration was able to mobilise rescue teams from the Fire Service and Civil Defence and Armed Forces Division immediately after the building collapsed to start the rescue operation, but they soon realised that they do not have enough experience and, more importantly, appropriate tools and technologies to conduct a rescue operation of this magnitude. However, commitment and motivation among the rescue workers including the volunteers; and using the small equipments helped to rescue alive 2,438 people from the debris of a eight storied building.

Collecting accurate data on loss and damage is a great challenge after any disaster. Immediately after a disaster occurs, information on damages are collected through D-Forms at union level and compiled at upazila level and district level. However, because of lack of skills and ambiguity in the definitions of some of the terms, for example, partially affected households or partially damaged house etc.; data analysis and use of the information for planning response intervention becomes challenging. Baseline data on pre-disaster status are also rarely available, which acted as a barrier in determining the actual impact of the tropical storm Mahasen.

On an operational level, common practice is that response interventions are targeted to the most affected districts, upazilas, and unions. However, it has been observed that some severely affected villages are not included in the response and recovery efforts as they do not fall within the most affected unions or upazila. This has resulted in most deserving families to be left out of the response and recovery programmes.

The improved humanitarian coordination architecture endorsed by the LCG-DER in 2012, resulted in significant progress in emergency preparedness and coordination amongst the humanitarian actors in Bangladesh. The humanitarian clusters were better prepared than in 2012, to organise JNA phase 1, phase 2, and sector-specific phase 3 Needs Assessment, and to define response interventions. However, this improvement in needs assessment did not result in coordinated response activities on the ground. Instead of one comprehensive report with cluster or sector specific chapters, each Cluster produced their own report using different templates. Consequently, the final reports were not only delayed, but also found to be too bulky and difficult to be read and understood especially by Local Government officials.

### *Lessons learned*

Urban disasters, such as fire and building collapse, are more complicated to deal with.

They require more focused and highly disciplined response as well as appropriate tools and technologies. The Government, with support from its development partners, should consider investing in strengthening systems and capacities to minimise and manage urban risks and disasters.

Local people, urban volunteers and the Fire Service and Civil Defence are the first to respond to any urban disaster. The Rana Plaza disaster demonstrated the appropriateness of a volunteer corps in urban disaster preparedness; hundreds of highly motivated urban volunteers participated in the search and rescue operation and were often the ones undertaking the most daring rescues. This spirit of volunteerism is important to build on. However, responding to building collapses also requires highly skilled teams of professional rescuers and a very structured and disciplined intervention. The Savar incident made it evident that there is a need to establish an Incident Management System, outlining clear responsibilities in urban disaster scenarios. Also, it requires systems and protocols for crowd management, dealing with the media, dead body management and debris disposal.

In a densely populated country like Bangladesh – with a large proportion of the population being poor and vulnerable to disasters – hazards of small or medium magnitude can cause people even in less affected areas to suffer greatly and demand humanitarian assistance. It is important for the humanitarian agencies to find ways to target their response coverage ensuring the severely affected families receive response assistance.

Even though it has come a long way, inter-cluster coordination still has room to improve – especially in harmonising data collection activities in the field, and in producing a timely, consolidated, and easily understandable needs assessment report. The needs assessment findings and recommendations should also be disseminated to the Local Authorities on time leading to coordinated response activities.

Disaster Management Committee's capacity building initiatives could focus on enhancing local level skills in data collection, and establishing clear and common definition of various terminologies used in the D-Form. It would also be of immense help to establish a common information hub where all baseline data, assessments and reports can be housed, and Disaster Management Information Centre (under the Department of Disaster Management) could provide this service to the wider humanitarian community.

## 5.3. Recovery

### *Challenges*

Bangladesh Government anticipated and prepared for a significant disruption due to tropical storm Mahasen, allocating substantial amount of financial resources for the District Administration to manage the threats. However, Mahasen occurred in the month of May which was close to the end of the Government fiscal year, resulting to inability of the Local Authorities to fully utilise the resources allocated for response and recovery of the affected families.

### *Lessons Learned*

Some positive trends in the post disaster needs assessment, response and recovery were evident in 2013, particularly demonstrated following Mahasen. Significant improvement in preparedness during peace time leading to Joint Needs Assessment and coordinated response and recovery following disaster events. Increased allocation of funds for early recovery was also noted, as compared to relief focus in the past. Following the tropical storm Mahasen, Government allocated 300 million for shelter rehabilitation and other non-government humanitarian actors including the UN agencies allocated 490 million for early recovery projects.

Joint Needs Assessment has been found useful – it saves time and resources, and is attainable. It is therefore recommended that the humanitarian clusters use it, combined with improved coordination especially in data collection and production of one consolidated needs

assessment report with sector specific chapters. Because Joint Need Assessment also helps to gain a shared understanding of the post-disaster scenario, the real value lies in following it up by coordinated activities on the ground, which did not happen for Mahasen operations.

While significant progress has been made in humanitarian coordination, priorities identified through the need assessments were not adequately addressed. Shelter and WASH needs in the Mahasen affected areas remained significantly unmet and responses were delayed. In order to ensure coordinated and integrated support to the disaster affected families, Government should lead the recovery planning ensuring participation of relevant ministries and non-government humanitarian organisations.

Integrated disaster risk management with a coordination framework is needed to improve cooperation between stakeholders and to promote coherence between risk reduction, preparedness and response activities. These require better communication between three major information centres for emergency

response: the National Disaster Response Coordination Centre under the Ministry of Disaster Management and Relief; the Disaster Management Information Centre under the Department of Disaster Management; and the Prime Minister's Office's Disaster Management Cell operated by Armed Forces Division.

Disasters could occur any time and necessitate prompt responses that may not fit neatly into a fiscal year. Past trends (Aila-May; Mahasen-May), shows that cyclones have often occurred in the month of May. Therefore, it is crucial that the response plans and procedures have the flexibility to accommodate innovations and improvisations needed to cope with a situation.

An area that require attention is the coordination for addressing multi-sectoral and slow onset of disasters such as the water logging in the south-west. Government through the Department of Disaster Management provided a comprehensive report based on its D-Form. However, this complex issue requires high level coordination involving various ministries and Local Government Authorities.



*Photo 19: DDM officials discussing with disaster affected people during monitoring visit*

## Case Study: Mahasen preparedness, response and challenges

On May 11, 2013, a deep depression formed over south-east Bay of Bengal and intensified into a cyclonic storm Mahasen. Within a week, it intensified further and moved toward north-west. The tropical storm Mahasen made landfall between Bhola and Patuakhali districts of Barisal division at 9:30 am on May 16, 2013. The storm then moved to southern Bangladesh, weakened and finally dissipated on May 17, 2013.

Bangladesh Meteorological Department (BMD) tracked the course of the cyclonic storm since its onset. On May 13 BMD advised maritime ports of Chittagong, Cox’s Bazar and Mongla to hoist local danger signal number 4; then, on the May 15, 2013 advised Chittagong and Cox’s Bazar maritime port to hoist danger signal number 7 and Mongla port to hoist danger signal number 5. The coastal districts of Cox’s Bazar, Chittagong, Noakhali, Laxmipur, Feni, Chandpur, Bhola, Barguna, Patuakhali, Barisal and their offshore islands and chars came under danger signal number 7. The coastal districts of Pirojpur, Jhalakathi, Bagerhat, Khulna, Satkhira and their offshore islands and chars came under danger signal number 5.

Following the hoisting of warning signal number 4, MoDMR and DDM advised concerned deputy commissioners to arrange meetings with unions and upazila DMCs for preparedness. Officials from DDM were also assigned to communicate with the coastal districts. DMCs at upazilas opened control rooms and checked emergency food stock and other arrangements. Then, when danger signal number 7 was announced, they started to evacuate people from exposed areas to nearby safe shelters. Approximately one million people were evacuated from 13 coastal districts by the Cyclone Preparedness Programme – a joint venture programme of Bangladesh Government and Bangladesh Red Crescent Society – within the 24 hours before the landfall of the storm.

**Response to Tropical Storm Mahasen by the Agencies**

Agency	Assistance
GoB	Evacuation, Rescue, GR Rice, GR Cash and Medical Support, shelter rehabilitation
UN Agencies	Cash Grant, Skill Building, High Energy Biscuit and Disease Surveillance
NGO	Food Aid, Cash Grant, Cash For Work/Training, NFI, WASH Materials, Housing Grant
IFRC and BDRCS	Cash Grant, Tarpaulin, Water Jerrycan, Hygienic Latrine, Cash for Work/ Training, Sapling of Indigenous Tree Species

The Government made an elaborate plan to deal with the cyclone. The National Disaster Response Coordination Centre remained open 24 hours to exchange information and monitor situation. Interactive voice response dialling was activated to disseminate weather advisory and updated early warning messages.

A total of 1,327 emergency medical teams was ready to provide their services. Bangladesh Navy put 22 vessels and ships on standby for emergency operations and response. Bangladesh Air Force put 20 aircraft on standby for airdrop and transportation of emergency relief goods. Bangladesh Army kept resources and manpower and 2 vessels on standby to mobilise relief. 39,365 volunteers from the Cyclone Preparedness Programme were mobilised in 13 coastal districts to disseminate warning messages.

The Government also allocated 2,800 MT rice and BDT 10.5 million GR cash for relief operation. Other humanitarian agencies prepositioned relief items, emergency WASH facilities and planned for food assistance to supplement the government's response.

According to the D-Form report (26 May 2013), the tropical storm affected some areas of nine districts of which Bhola, Barguna and Patuakhali were the worst affected. A total of about 1.5 million people were affected in 47 upazilas. Seventeen people were killed and 5,374 were injured; 141,916 shelters were damaged of which 16,663 were classified as fully damaged and 125,253 as partially damaged.

Cyclone contingency planning, preparedness actions, and prompt responses by the Government and other humanitarian agencies paid dividend in 2013 as the damages and disruptions were less than anticipated and the country was able to prevent a potential catastrophe.

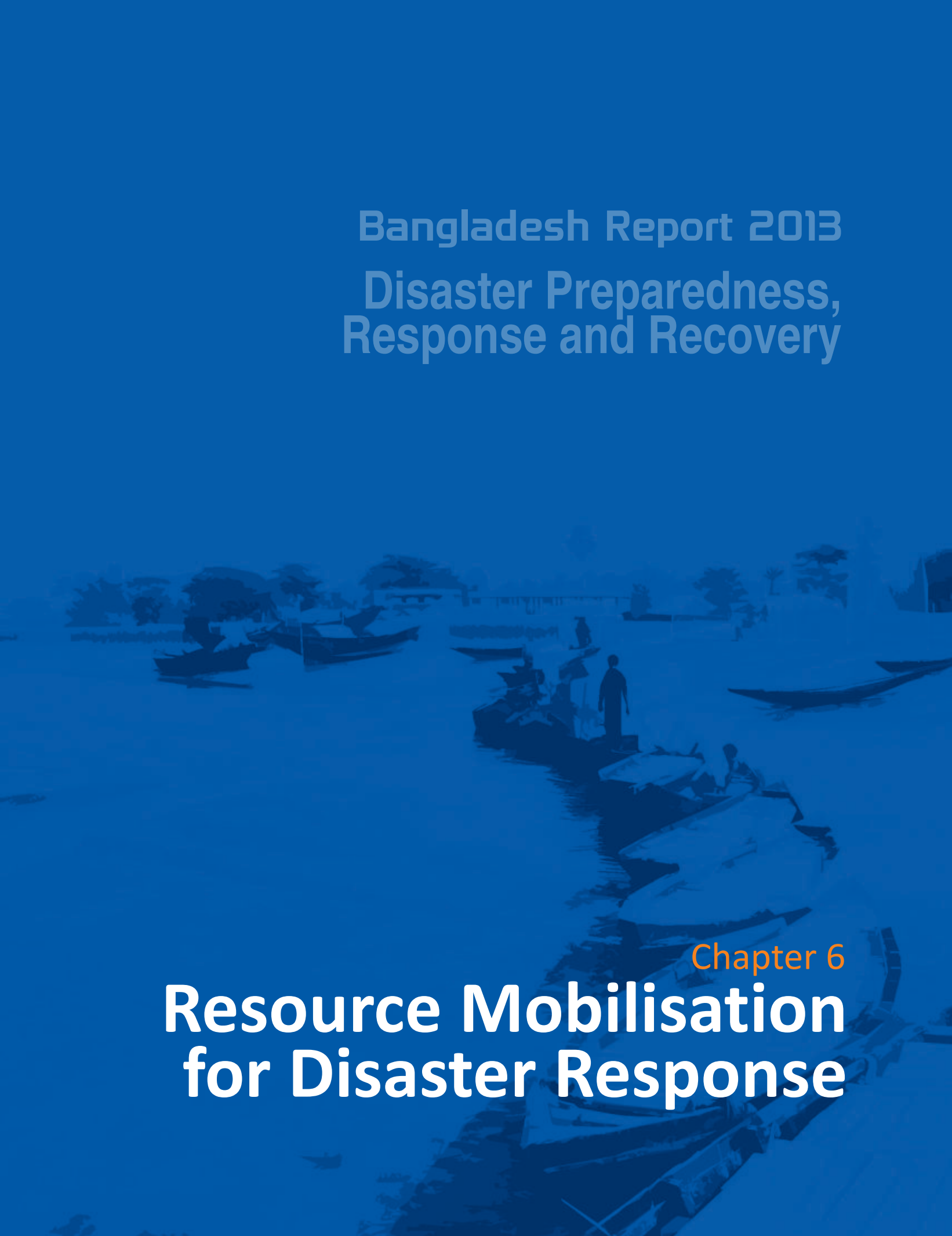
Despite the stress on all the wings of administration, BMD, district, upazila and union DMCs and Local Government representatives were proactive to face the pre, during and post-Mahasen situation. There was good coordination among DMCs, NGOs, CPP volunteers, local elites and the community people. The communication between BMD, CPP and district, upazila and union DMCs was effective. Delivery of weather bulletins and dissemination of early warning messages were relevant and effective. Rescue operation and relief distribution were prompt and useful.

However, the Government as well as other humanitarian agencies, as expected during any disaster events, have faced several challenges while responding to the crisis. Following the immediate response, the Government allocated BDT 300 million for the recovery of the families whose shelters had been fully damaged. The allocation could not be fully disbursed in many affected upazilas due to short span of time available before the end of the fiscal year. Because of the mandatory standard financial procedures, the District Administrations were able to utilise only a quarter of the total allocation. It was also noted that the needs assessment did not lead to a coordinated response covering all the priority sectors in the affected areas.

One of the positive features of the post- Mahasen response was the advocacy for integration of disaster risk reduction in the recovery process. The Phase 3 sector specific assessment recommendations were shared with relevant stakeholders involved in disaster risk reduction efforts, and as a result CDMP has initiated implementation of Risk Reduction Action Plan in Barguna and Bhola – which were the most affected districts.

From the experience of Mahasen, it is evident that prior preparedness can reduce impact of disasters to a great extent. Needs assessments should be followed by timely and coordinated response and recovery activities in priority sectors and populations. Noting that first cyclone season of the year is always close to the ending of the fiscal year, the Government could explore ways to enable allocated funds to be utilised for the benefit of the affected families.





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Chapter 6

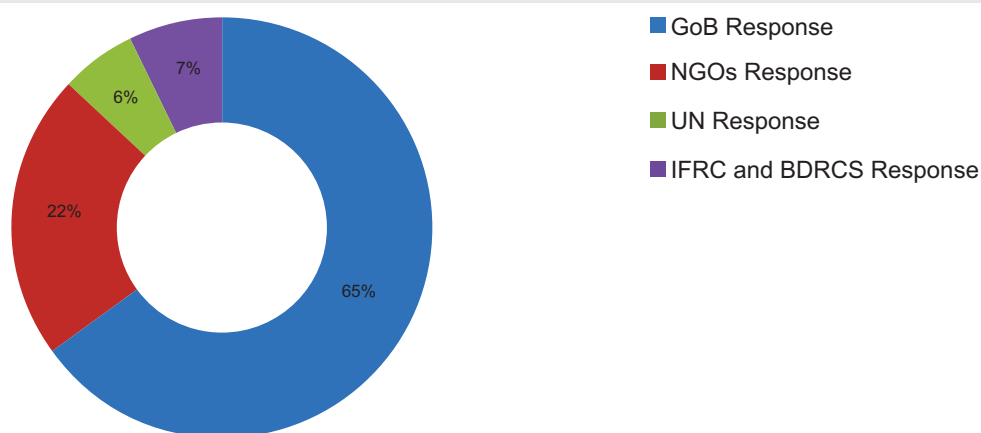
**Resource Mobilisation  
for Disaster Response**



Mobilising financial, material and human resources timely for response and recovery interventions is imperative for the Government and humanitarian actors such as local and international NGOs, UN agencies, International Federation of Red Cross and Red Crescent Societies and Bangladesh Red Crescent Society.

Relief, which allocates food and cash annually to ensure food security and rehabilitation of the vulnerable people affected by disasters. DDM’s resources were channelled through the Director General of DDM to the Deputy Commissioners, who in turn redirected the food or cash to the Upazila Nirbahi Officers (UNOs). A UNO is the

**Figure 3: Percentage of resource utilisation for disaster response and early recovery in 2013 by the type of agencies**



*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

In 2013, disaster response and early-recovery interventions in Bangladesh received aid amounting to an estimated BDT 3,753.7 million – of which BDT 2,450.9 million came from the Government, BDT 226.3 million from UN agencies, BDT 250.4 million from IFRC and BDRCS, and the remaining BDT 826.1 million came from individual or consortia of humanitarian NGOs.

## 6.1. Resource Mobilisation by Bangladesh Government

In order to respond to disasters and to prepare for combating future disasters, in 2013, the Government mobilised a substantial amount of resources in kind and in cash, the estimated value of which was BDT 2,450.9 million.

Although the Government’s gratuitous relief in the form of food and cash has a separate budget, its agencies also join hands to add to the resources. One of the major Government agencies that engage in responding to disasters is the Department of Disaster Management under the Ministry of Disaster Management and

final leg in the chain for distributing aid to affected communities immediately after a natural or man-made disaster.

The Government’s humanitarian interventions in 2013 also received resources from the Prime Minister’s Relief Fund. Donors who contributed to this fund include: Dutch-Bangla Bank Limited who donated 100,000 blankets for cold wave affected people, as well as the German

**Table 14: Distribution of GoB allocated resources (BDT) by type of assistance**

Type of assistance	Value in BDT*	Percentage
Cash	164,172,000	6.81
Rice	1,966,560,000	81.61
CI Sheet	146,016,000	6.06
Housing Grants	72,039,000	2.99
Warm Clothe	102,074,400	2.53
<b>Total</b>	<b>2,450,861,400</b>	<b>100.00</b>

\* The estimated cash value for Rice BDT 34,000 per MT; CI Sheet BDT 6,000 per Bundle; Worm Clothe BDT 200 per piece

*Source: Information Collection Templates for Annual Report on Disaster preparedness, Response and Recovery 2013, DDM*

Government who donated USD 65,445 to assist the people affected by building collapse in Savar.

In 2013, the Government also distributed an estimated 57,840 MT of rice and a total of BDT 164.2 million as cash grant – through its gratuitous relief cash and ‘Vulnerable Group Feeding’ Programmes – amongst the disaster affected people in 64 districts. The affected communities also received BDT 72 million as house building grant and an estimated 24,336 bundles of corrugated iron sheet to repair houses, as well as 510,372 blankets and warm clothes.

## 6.2. Resource Mobilisation by Other Humanitarian Actors

In 2013, the UN agencies mobilised approximately BDT 226.3 million for disaster, response and early recovery operations. Of this amount BDT 177.6 million was contributed by FAO, BDT 23.0 million by UNDP, BDT 16.1 million by WFP, and BDT 9.6 million by WHO. A significant part of the resources that the UN had mobilised in 2013 came from UKaid, ECHO and DFAT-Australia. Generally, the UN agencies channel funds through the NGOs operating in the country.

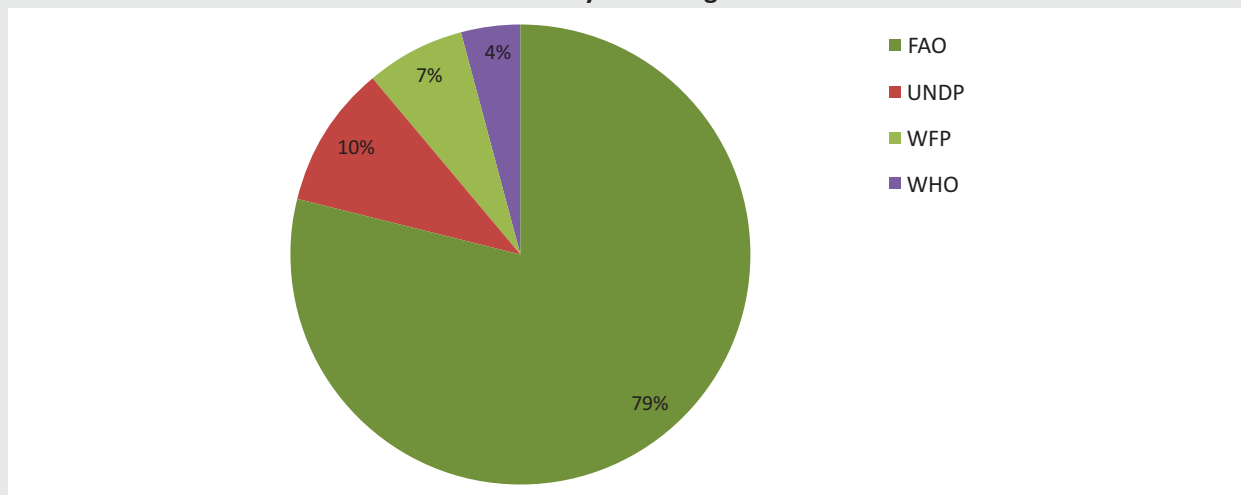
During the year, International Federation of Red Cross and Red Crescent Societies (IFRC) launched

several appeals, notably in response to cold wave, floods and the tropical storm Mahasen. These appeals from IFRC mobilised approximately BDT 250.4 million which was used in responding to the various disasters throughout the year. A major share of IFRC’s appeal-funds came from the Turkish Red Crescent and ECHO.

The local NGOs generally rely on donations for financial support to respond to emergencies, which requires greater visibility of the disaster in order for these organisations to access fund. The international NGOs appeal to their headquarters and to donors and UN agencies to mobilise funds. During 2013, international NGOs operating in the country, individually as well as through consortia, mobilised approximately BDT 826.1 million for disaster response and early recovery interventions.

The UN Office for the Coordination of Humanitarian Affairs (UN OCHA), while compiling data from the Financial Tracking Service, noted that the foreign Governments and institutional donors had channelled fund through various international NGOs and UN agencies respond to the disasters in 2013<sup>5</sup>. These donors include: ECHO, UKaid, Sweden, Canada, Luxembourg, Norway and Germany. The

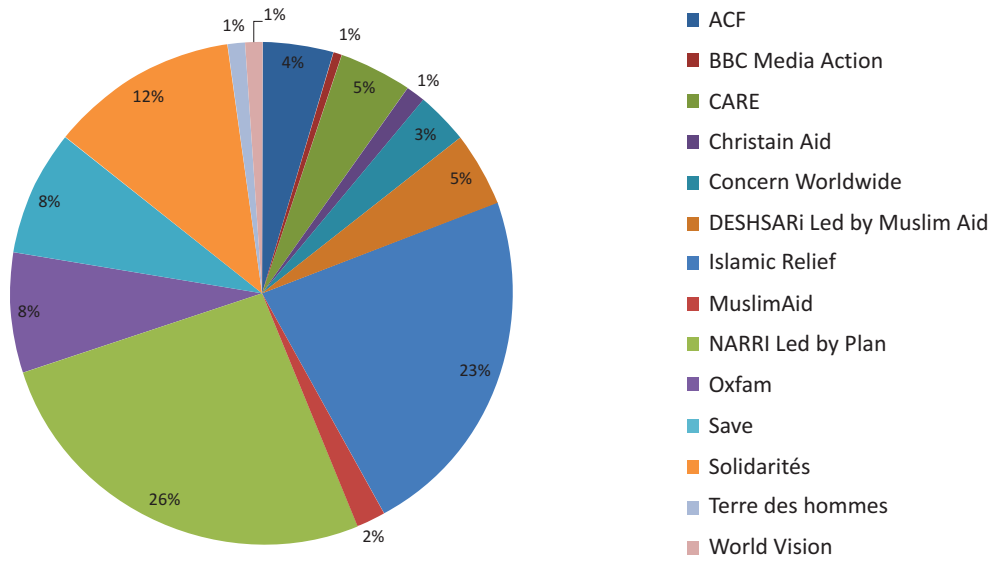
**Figure 4: Percentage of resource utilisation for disaster response and early recovery in 2013 by the UN agencies**



*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

<sup>5</sup> Total Humanitarian Funding per Donor in 2013, Financial Tracking Service, UNOCHA, <http://fts.unocha.org/pageloader.aspx?page=emerg-emergencyCountryDetails&cc=bgd&yr=2013>

**Figure 5: Percentage of resource utilisation for disaster response and early recovery in 2013 by different NGOs**



*Source: Information Collection Templates for Annual Report on Disaster Preparedness, Response and Recovery 2013, DDM*

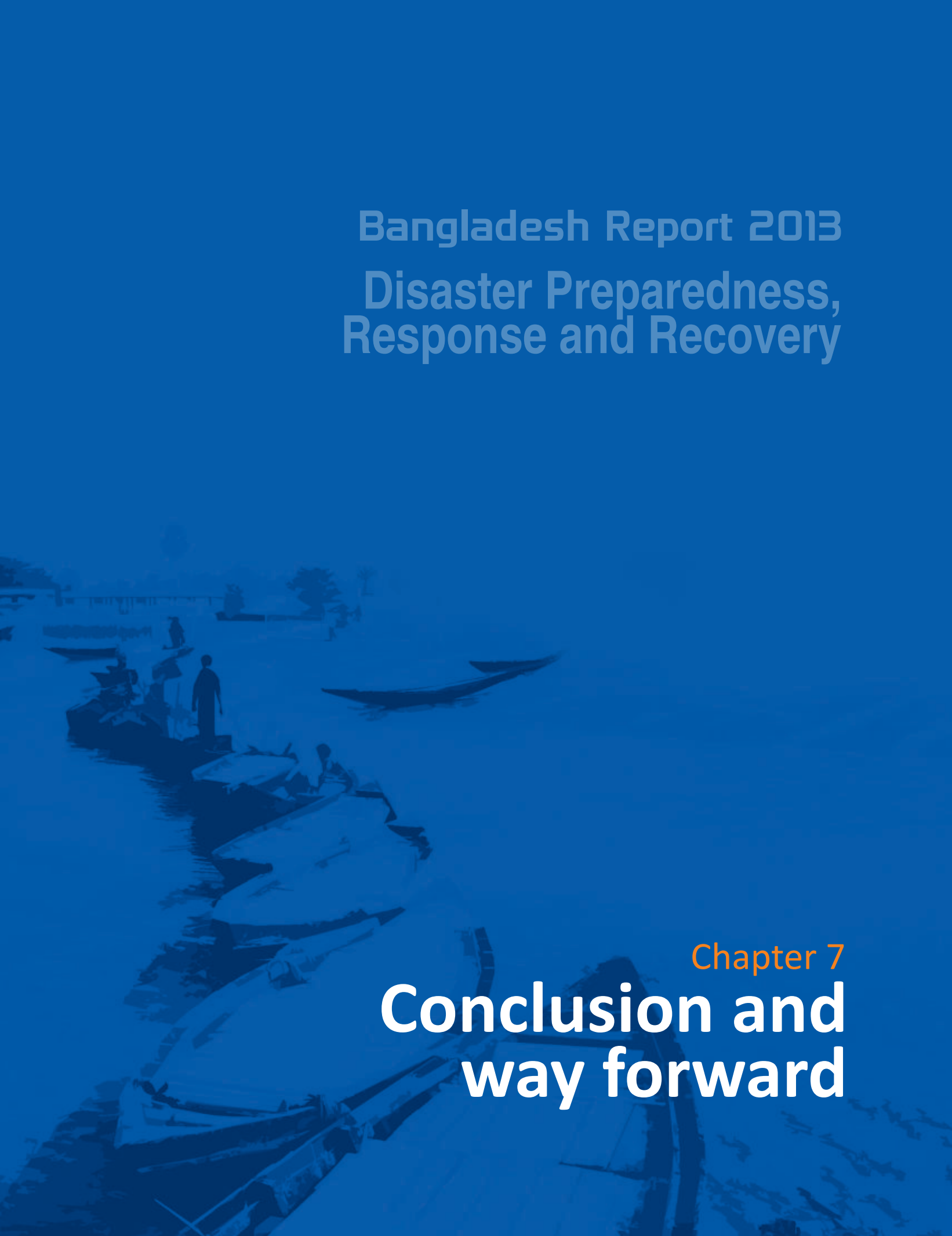
recipients of their funds were: Action contre la Faim, Concern Worldwide, Friendship, German Red Cross, International Federation of Red Cross and Red Crescent Societies, Médecins Sans Frontières Netherlands, Muslim Aid, Oxfam GB, Save the Children, Solidarités International,

Swedish Red Cross, Terre des hommes, and among the UN agencies Food and Agriculture Organization, International Organization for Migration, United Nations High Commissioner for Refugees and World Food Programme.



**Photo 20: Government-supported cyclone shelter**





Bangladesh Report 2013  
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Chapter 7  
**Conclusion and  
way forward**



Bangladesh is a densely populated country, with a large proportion of its population of 160 million living below the poverty line and in vulnerable locations. Consequently, hazards of moderate scale, for example, a localised flood or tornado, can significantly disrupt lives and livelihoods of the affected people. In 2013, millions of people in Bangladesh suffered from cold wave, tornado, tropical storm, water logging, monsoon floods, landslides and tidal surges, as well as man-made hazards such as building collapse and fire. Our experiences from the interventions in 2013 suggest that the humanitarian response system should invest in enhancing its capacity to assist the most vulnerable people living in severely affected areas, and in developing tools and technologies to address urban disasters. There is also a great need to develop protocols and systems for dead body management, debris disposal, crowd control and media management.

On the brighter side, we have noted significant improvement in preparedness and coordinated humanitarian response in the past years, resulting in agreed upon humanitarian response strategies, complementary approaches, more accountability to the affected population and better quality of services. This coordinated response enables us to draw up shared analysis of the impact of a disaster across all sectors, avoid 'assessment fatigue' and ensure that impartial analysis is done on targeted needs. Our joint humanitarian approach, led by the Government and a united front of humanitarian agencies, effectively identifies gaps with greater

precision, supports shared monitoring processes, and encourages coordination during any response intervention. This improved coordination, in turn, sustains an intervention's positive impacts. The collective preparedness of the humanitarian community was best demonstrated by humanitarian actors involved in response operations for the tropical storm Mahasen affected communities in 2013.

The report recommends, Government-led initiatives to strengthen disaster management capacity from the national level down to union level. Setting up disaster management funds at district level and improving information management systems are highly appropriate at the stage. We also believe that the Disaster Management Committee is now ready to strengthen its capacity for D-Form data collection to inform effective response planning. Disaster Management Information Centre could become a central hub for all baseline data, assessment reports and relevant information.

Finally, we ought to consider sustainability of all of our efforts, which can only be ensured by a better coordinated implementation of post-disaster recovery interventions. Investment in immediate humanitarian response is essential to save lives and to prevent outbreak of diseases, but equally indispensable is an increased effort by the Government and development partners to allocate adequate resources to ensure a community's smooth transition from relief to recovery and eventually to resilience.

## Photo Credit

Cover Photo – CDMP II and UNDP-ERF

Photo 1: Low temperature, cold wind and fog affected day labourers - CDMP II

Photo 2: Tornado affected people in Brahmanbaria - DDM

Photo 3: Building collapse (Rana Plaza) in Savar - CDMP II and DDM

Photo 4: House damaged by tropical storm Mahasen, May 2013 - UNDP-ERF

Photo 5: Inundated localities in Northern Bangladesh - DDM

Photo 6: Damaged house due to landslide in Chittagong - DDM

Photo 7: Training workshop on early recovery, 26-27 August, 2013 - UNDP-ERF

Photo 8: Simulation exercise – fire-fighting as part of capacity building for preparedness by GoB – CDMP II

Photo 9: Supporting community volunteers for cyclone preparedness by IFRC and BDRCS - IFRC

Photo 10: Prepositioning of WFP HEB biscuit before Cyclone Mahasen made landfall - WFP

Photo 11: A Taiwanese organisation provided blanket to DDM for vulnerable people as a token of love - DDM

Photo 12: Rescue operation by GoB after building collapse (Rana Plaza) - DDM

Photo 13: GoB provided brick built house in the Sidr and Aila affected area

Photo 14: Livelihood support provided by UNDP after tropical storm Mahasen - UNDP-ERF

Photo 15: UNDP supported core family shelters with sanitation facilities, emerged as a sustainable housing solution at Koyra upazila, Khulna - UNDP-ERF

Photo 16: Cash for Work intervention after tropical storm Mahasen by NGO for road repairing, Barguna Sadar – Plan International

Photo 17: Assistance provided by IFRC and BDRCS under the cash-for-work programme after tropical storm Mahasen - IFRC

Photo 18: DDM officials discussing with upazila DMC members - DDM

Photo 19: DDM officials discussing with disaster affected people during monitoring visit - DDM

Photo 20: Government supported cyclone shelter- DDM

# References

## *Chapter 1: Introduction*

1. Ministry of Disaster Management and Relief, Disaster Management Act 2012, Dhaka: September, 2012
2. Department of Disaster Management, Emergency Preparedness Plan for Cyclone Bangladesh, April 2013
3. Department of Disaster Management (DDM) Web Portal, [www.ddm.gov.bd](http://www.ddm.gov.bd)

## *Chapter 2: An Overview of Disasters Events in 2013*

### **Cold Wave**

1. Situation Report on Cold Wave, 10 January – 19 January, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
2. Situation Report on Cold Wave, 10 January, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)

### **Tornado**

1. Tornado in North Eastern Bangladesh: Brahmanbaria District Rapid Needs Assessment Report, 2013 conducted jointly by Shelter Cluster, WASH Cluster and Early Recovery Cluster
2. Situation Report on Tornado, 23 March to 1 April, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
3. Situation Report on Tornado in Brahmanbaria, Naogaon, Natore, 3 April, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)

### **Building Collapse**

1. Situation Report on Building Collapse at Savar, 14 May, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
2. Situation report on Building Collapse at Savar, 13 May, 2013, NDRCC
3. Situation report on Building Collapse at Savar, Dhaka, 30 April to 1 May, 2013, DDM [www.ddm.gov.bd](http://www.ddm.gov.bd)
4. Situation Report on Building Collapse at Savar, Dhaka, 24 April, 2013, DDM. [www.ddm.gov.bd](http://www.ddm.gov.bd)
5. Search and Rescue Roles of Civil Defence and Urban Community Volunteers in Rana Plaza: A Rapid Assessment, June 2013, CDMP II

### **Tropical Storm**

1. HCTT Phase 1, Joint Needs Assessment Report – Tropical Storm Mahasen – 23 May, 2013
2. Situation Report on Monsoon Depression and Flood, DMIC, 20 May, 2013, [www.cdmp.org.bd](http://www.cdmp.org.bd)
3. Cyclone Mahasen Update, 20 May, 2013, CDMP II
4. NDRCC Report on Cyclone Mahasen, 25 May, 2013, <http://www.ddm.gov.bd/ndrccsitrep/ndrcc25052013.pdf>
5. Compilation of Mahasen - 2013 Damage Reports from the Deputy Commissioners on 26 May, 2013, [http://www.ddm.gov.bd/ndrccsitrep/ndrcc26052013\(damage\).pdf](http://www.ddm.gov.bd/ndrccsitrep/ndrcc26052013(damage).pdf)
6. Assessment on Stakeholders' Role in Preparation for and facing the Tropical Storm Mahasen, June 2013 CDMP II

### **Water logging**

1. Daily Situation Report on 1 June, 2013, NDRCC, <http://www.ddm.gov.bd/ndrccsitrep/ndrcc01062013.pdf>
2. Snap Shot on Water Logging Situation in South West Region in Bangladesh, DMIC, 23 January 2014, [www.cdmp.org.bd](http://www.cdmp.org.bd)
3. JNA 'Light' – Data Consolidation Water logging, South West Bangladesh, 7 November, 2013

### **Monsoon Flood**

1. Situation Report on Flood Overview, 12 September, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
2. Situation Report on Flood, 19 July, 2013, [www.cdmp.org.bd](http://www.cdmp.org.bd)
3. Situation Report, August, 2013 and 9 August, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
4. River Situation as on 13-07-2013, Flood Forecasting and Warning Center (FFWC)-Bangladesh Water Development Board (BWDB)
5. Report on Flood Situation of Northern Area, 11 - 13 July, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
6. Flood Situation Report 2013, UNDP
7. Flood Situation Report, 19 July, 2013, NDRCC, <http://www.ddm.gov.bd/ndrccsitrep/ndrcc19072013.pdf>
8. Recent Disaster Situation Report, 15 September, 2013, NDRCC, <http://www.ddm.gov.bd/ndrccsitrep/ndrcc15092013.pdf>

### **Localised Disasters**

1. Disaster Situation Report, 8 April, 2013, DDM [www.cdmp.org.bd](http://www.cdmp.org.bd)
2. Situation Report on Nor'wester, 17 April, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
3. Report on Heavy Rainfall and Tidal Surge, 29 July, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
4. Situation Report on Tornado, Landslide and Tidal Surge, 28 July, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
5. Report on Disaster, 28 July, 2013, NDRCC
6. Situation Report 6 May, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
7. Situation Report on Flood and Flash Flood, 13 May, 2013, DDM, [www.ddm.gov.bd](http://www.ddm.gov.bd)
8. <http://www.nytimes.com/2013/05/10/world/asia/fire-at-bangladeshi> &  
[http://www.huffingtonpost.com/2013/01/27/factory-fire-bangladesh\\_n\\_2558487.html](http://www.huffingtonpost.com/2013/01/27/factory-fire-bangladesh_n_2558487.html)
9. <http://risebd.com/2013/11/29/fire-engulfs-another-garment-factory-in-gazipur/>

### **Chapter 3: Updates in Disaster Preparedness for Response**

1. Information Collection Templates for Annual Report on Disaster Response and Recovery 2013, DDM
2. ADB (2006) "Bangladesh: Early Warning Systems Study", Technical Assistance Consultant's Report, Project Number: 38625 (TA 4562)
3. Department of Disaster Management, Emergency Preparedness Plan for Cyclone Bangladesh, April 2013
4. Community Based Disaster Preparedness Institutional Model - 2013

### **Chapter 4: Response and Recovery in 2013**

1. Information Collection Templates for Annual Report on Disaster Response and Recovery 2013, DDM.
2. DDM Web Portal: <http://www.ddm.gov.bd/flood.php>
3. Situation Report on Cold Weave, 19 January, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
4. Situation Report on Tornado in Brahmanbaria, Naogaon, Natore, 3 April, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
5. Situation Report on Building Collapse at Savar, 14 May, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
6. [www.ddm.gov.bd](http://www.ddm.gov.bd), Reference No.51.01.0000.015.16.001.13-411, 16 July, 2013
7. Situation Report, NDRCC, Reference No.51.00.0000.423.40.004.12-260, 1 June, 2013,  
<http://www.ddm.gov.bd/ndrcc.php>
8. [www.ddm.gov.bd](http://www.ddm.gov.bd), Reference No.51.01.0000.015.16.006.12-47, 19 July, 2013
9. Situation Report, NDRCC, Reference No.51.00.0000.423.40.12-323, 28 July, 2013,  
<http://www.ddm.gov.bd/ndrcc.php>
10. Cold Wave Response Plan 2013-14, DDM, Updated on 28 January, 2014

### **Chapter 5: Challenges and Lessons Learned**

1. Tornado in North Eastern Bangladesh: Brahmanbaria District Rapid Needs Assessment Report, 2013 Conducted Jointly by Shelter Cluster, WASH Cluster and Early Recovery Cluster
2. JNA 'Light' – Data Consolidation Water logging, South-west Bangladesh, 7 November, 2013
3. HCTT Phase 1, Joint Needs Assessment Report – Tropical Storm Mahasen, 23 May, 2013
4. Situation Report on Building Collapse at Savar, 14 May, 2013, DMIC, [www.cdmp.org.bd](http://www.cdmp.org.bd)
5. DDM Report, 16 July, 2013, Reference No.51.01.0000.015.16.001.13-411, [www.ddm.gov.bd](http://www.ddm.gov.bd)
6. Bündnis Entwicklung Hilft (Alliance Development Works), World Risk Report 2012, [www.ehs.unu.edu](http://www.ehs.unu.edu)

### **Chapter 6: Resource Mobilisation for Disaster Response**

1. Information Collection Templates for Annual Report on Disaster Response and Recovery 2013, DDM
2. Total Humanitarian Funding Per Donor in 2013, Financial Tracking Service, UN OCHA,  
<http://fts.unocha.org/pageloader.aspx?page=emerg-emergencyCountryDetails&cc=bgd&yr=2013>
3. Notes from Gerson Brandao Azevedo, Humanitarian Affairs Advisor, Office of the UN Resident Coordinator, Dhaka

# Disaster Snapshots 2013

## Cold Wave



Cold war, Photo Credit: thedailystar.net, published on January 12, 2013



Cold war, Photo Credit: thedailystar.net, published on January 11, 2013

## Tornado



Damage view of a village in B. Baria by the hit of tornado, Photo Credit: thedailyttefaq.com, published on March 22, 2013



A village in B. Baria after the hit of tornado, Photo Credit: thedailystar.net, published on March 23, 2013

## Building Collapse (Rana Plaza)



A trapped person shouting for saving himself from the collapse building at Savar, Photo Credit: thedailystar.net, published on 23 April, 2013



Rana plaza after collapse, Photo Credit: [http://img.wikinut.com/img/3yx0v86i3it\\_mqyd/jpeg/0/Rana-Plaza-Collapse.jpeg](http://img.wikinut.com/img/3yx0v86i3it_mqyd/jpeg/0/Rana-Plaza-Collapse.jpeg)

## Tropical storm Mahasen



Destroyed houses in Patuakhali district caused by cyclonic storm Mahasen, Photo: BDRCS, [www.ifrc.org](http://www.ifrc.org)



A family lost everything by the hit of Mahasen, Photo Credit: [thedailytitefaq.com](http://thedailytitefaq.com), published on April 16, 2013

## Water logging



Knee-deep lessons in a water-logged Satkhira District school, Photo Credit: Kyle Knight/IRIN, <http://reliefweb.int/report/bangladesh/bangladesh-schools-battle-water-logging>, published on October 29, 2013



A boy walking from his house to the road by carrying food for his father, a village in Satkhira, Photo Credit: [thedailysatkhira.net](http://thedailysatkhira.net), October 20, 2013

## Monsoon flood



Flood situation in Kushtia, Photo Credit: [thebusinessnews24bd.com](http://thebusinessnews24bd.com), August 27, 2013



Students cross an inundated area near their house by a raft to go to their school in Jatrapur union of Kurigram, Photo Credit: [thedailystar.net](http://thedailystar.net), July 12, 2013



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