

# Final report



International Federation  
of Red Cross and Red Crescent Societies

## Bangladesh: Cyclone Sidr

Final Report  
Emergency appeal n° MDRBD003  
GLIDE No: [TC-2007-000208-BGD](#)  
25 February 2010

Period covered by this Final Report:  
16 November 2007 to 30 November 2009

Appeal target: CHF 24,483,160  
(USD 22.2 million or EUR 15 million)

Final appeal coverage: 80%; [click here to go directly to the interim financial report](#) or [here to link to contact details](#) >

### Appeal history:

- A Revised Emergency Appeal was launched on 25 November 2007 for CHF 24,483,160 (USD 22.2 million or EUR 15 million) to assist 243,000 families (1,215,000 beneficiaries) for two years.
- A Preliminary Appeal was launched for CHF 3,989,305 on 16 November 2007 to mobilize immediate relief assistance.
- CHF 250,000 was allocated from the Federation's Disaster Relief Emergency Fund (DREF) to support Bangladesh Red Crescent Society's relief efforts in this operation.



A residential core shelter built by the Cyclone Sidr operation in Bangladesh. 1,250 residential core shelters have been built by the Sidr operation.

Photo credit: International Federation

With this interim final report, this emergency appeal is closed, as implementation of all activities has been completed. This appeal received a total income of CHF 19,636,901 and expenditure is CHF 16,665,142. A balance of CHF 2,971,759 remains, and the remaining funds will be used for the community based Cyclone Sidr recovery programme focusing on Cyclone Sidr affected districts, and this will be linked to the Annual Plan for Bangladesh for 2010-11. Partners/donors who have any questions about the reallocation of the final balance of funds are kindly requested to contact the International Federation within the next 90 days. The funds will then be reallocated after 90 days, and the final report issued.

### Summary:

The Cyclone Sidr operation began in the middle of November 2007 and was implemented over a two year period; the emergency phase was completed by the end of March 2008 and the early recovery phase by the end of November 2009. This was the biggest Red Cross Red Crescent emergency response operation in Bangladesh since the 1991 flood operation, and, in terms of providing recovery support, it was the first of its kind in the history of the Bangladesh Red Crescent Society (BDRCS).

The following was achieved:

- More than 84,000 Sidr affected families were provided with relief items (food and non-food items) in 13 districts.

- More than 83,000 people were assisted with basic health care and emergency medicines in 13 districts through BDRCS's mobile medical teams during the emergency phase.
- Around 15,000 families were provided with coconut saplings and hoes during the emergency phase in order to restore their livelihoods.
- The early recovery operation was mainly focussed on the four most affected districts: Pirojpur, Patuakhali, Barguna and Bagerhat. It was implemented in an integrated manner; and has achieved the following:
  - 1,250 residential core shelters were constructed and handed over to selected families.
  - A total of 5,093 families were supported under "shelter objective 2" enabling them to repair their damaged houses or to extend their new core shelters. Beneficiary families received shelter repair training, tool kits and cash grants.
  - A total of 6,649 families were supported under the water and sanitation programme with the provision of permanent pit latrines, access to safe water sources and hygiene promotion activities.
  - Over 253 water sources (tube-wells, ponds) were repaired in the early phase of the operation.
  - 4,997 families received cash grants for livelihoods through bank transfers. Training sessions for skills were provided to all targeted beneficiaries.
  - The BDRCS "unit" capacity was enhanced in four districts for preparedness and response to disasters. This was achieved by providing two new warehouses and renovating the unit office.
  - Disaster risk reduction (DRR) activities in the communities helped in reducing their vulnerabilities to a certain extent. A two-day DRR training session conducted in four districts was held for unit volunteers. A detailed assessment of 32 cyclone shelters was conducted and 14 cyclone shelters were renovated based on need and priority.
  - Volunteers from the communities and the cyclone preparedness programme (CPP) were trained in psychosocial support. A total of 57 community and district level psychosocial support training sessions were conducted. Psychosocial support manuals for BDRCS volunteers were also developed.
  - 12 public health in emergencies (PHiE) training sessions were conducted covering 48 communities and 30 cyclone shelters, under the health programme. A total of 263 volunteers were trained in PHiE. A PHiE manual was developed following the Bangladesh context. In addition, training of branch volunteers in community based participatory approaches and first aid was carried out.
- Though the Sidr operation was large and complex, the BDRCS, supported by the International Federation and partner national societies, has been able to achieve most of the objectives and targets within the Emergency Appeal timeframe despite initial delays and challenges during implementation.
- A two days lessons learnt workshop was organized after the closing of the operation in order to review and capture lessons learnt during the operation and provide recommendations for future programming in disaster response and recovery operations in Bangladesh. The outcomes of this workshop are being finalised and will be shared with all partners in due course.
- A final evaluation of the operation has been carried out by a team of independent consultants. At present, the final evaluation report is under preparation, but once the report is finalised, it will be shared with all relevant partners, donors and stakeholders.

With all planned activities completed by the end of November 2009, in line with the targeted Emergency Appeal timeframe, the Sidr emergency operation was closed. Some funds remain from the operation, as some actual costs were lower than budgeted costs, and also exchange rate fluctuations between Swiss francs and local currency during the operational period meant there were also savings. The International Federation and the BDRCS are in the process of developing a plan of action for utilization of the remaining funds in support of community-based initiatives to address the most acute needs of target communities in Cyclone Sidr affected districts (see section on page 22 on the use of the balance of remaining funds). This document is therefore an interim final report as the remaining balance will only be reallocated in three months time. A final report reflecting the closure of the operational balance will be issued after three months, at the end of May 2010.

Many partner national societies and governments made contributions to the appeal: American Red Cross/American government (USAID), Andorra Red Cross, Australian Red Cross/Australian government, Austrian Red Cross, Belgium Red Cross/Belgium government, British Red Cross, Canadian Red Cross/Canadian government, the Hong Kong and Macau branches of the Red Cross Society of China,

Danish Red Cross/Danish government, Finnish Red Cross, French Red Cross, German Red Cross, Icelandic Red Cross, Iranian Red Crescent, Irish Red Cross/Irish government, Italian Red Cross/Italian government, Japanese Red Cross, Republic of Korea National Red Cross, Liechtenstein Red Cross, Luxembourg Red Cross, Monaco Red Cross/Monaco government, Netherlands Red Cross/Netherlands government, New Zealand Red Cross, Norwegian Red Cross/Norwegian government, Qatar Red Crescent, Singapore Red Cross/Singapore government, Slovenian Red Cross, Spanish Red Cross, Swedish Red Cross/Swedish government, Swiss Red Cross/Swiss government, as well as contributions from the Czech, Estonian, Greek and Slovakian governments; the European Commission Humanitarian Aid Office (ECHO), the OPEC Fund for International Development and a number of other private and corporate donors.

On behalf of BDRCS, the International Federation would like to thank all donors and partners for their generous support to this appeal.

## The Situation

Cyclone Sidr hit the south-western coast of Bangladesh in the evening of 15 November 2007. The storm arrived as a category-4 super cyclone with peak winds at 250 kilometers per hour. The cyclone continued to travel in a north-northeast direction, affecting parts of central Bangladesh, where it was subsequently downgraded into a category-3 cyclone. Approximately 30 of Bangladesh's 64 districts were affected by the storm. A total of 3,295 people were reported dead and approximately 53,000 people were reported missing. Across 30 districts of Bangladesh, 8.7 million people were affected.

Approximately 2.2 million acres of crops had been damaged. The main crop damaged was rice as that was the Aman (rice) season. Unlike many other regions in Bangladesh, the area affected only has a single harvest from the November to January. As such the timing of the cyclone was particularly destructive. This was because crops that were nearly ready for harvest were damaged. A quarter of ready-to-harvest crops were destroyed. Added to that many households lost their food stocks because their homes were damaged.

Approximately 1.5 million households were damaged leaving millions of people without shelter. In many districts more than half of thatched-roof homes that house the extreme poor, were completely destroyed. A high proportion of wood-framed houses with corrugated iron roofs have been destroyed or severely damaged in coastal areas. Initial estimates showed that there were around 86,000 families that need support from humanitarian organizations to rebuild their fully damaged houses and around 141,000 families that need help to rehabilitate their partially damaged houses.

Contaminated drinking water sources in many parts of the affected areas were a concern. Drinking water sources in many communities had been contaminated by saline water and debris. Damage to any sanitation facilities that did exist was significant. For some of the worst affected areas, most of the latrine super structures were completely damaged; however, some of the concrete parts still remained usable. In order to avoid outbreaks of diarrhoea and other hygiene-related diseases there was a great need to rebuild as well as increase the access to sanitation facilities

Though health facilities were not that much affected and there were no outbreaks of any communicable diseases, some government health facilities were in short of medical supplies. Hence, the health and medical needs were relatively low.

Damage to livelihoods was huge. Approximately 1.7 million livestock were killed which included large numbers of livestock such as large numbers of cattle, buffaloes, goats and poultry were killed. Livestock losses



A glimpse of the damage caused by cyclone Sidr to a coastal town in Bangladesh

Photo credit: International Federation

represented not only a loss of critical household assets, with an associated loss to wealth and income, but also a loss in food production for consumption of the persons in each household.

Bangladesh is in fact under persistent threat from cyclones and flooding as the country has two cyclone seasons per year: April to May and then October to November. Recently, the country's vulnerability to cyclones and floods was evident when a huge depression formed in the Bay of Bengal at the beginning of April 2009. This resulted in a moderate cyclone: cyclone Bijli. Cyclone Bijli did not cause much destruction with the exception of some minor damage in the coastal areas. However, the entire nation was on high alert, and the Bangladesh Red Crescent Society and the Sidr operation staff were fully prepared to provide possible relief activities in case of the potential need arising from the impact of cyclone Bijli. As a precaution Sidr field activities were on hold for a few days whilst preparedness activities were being undertaken. But a subsequent cyclone Aila that passed through some of the Sidr disaster affected areas caused major damages in some localities and hampered the Sidr recovery programme implementation for a few weeks.

## Red Cross and Red Crescent action

### General Overview

Immediately after Cyclone Sidr, the Bangladesh Red Crescent Society (BDRCS) and International Federation responded to the disaster swiftly. Together they met the needs of families and persons most in need in terms of medical services, food, drinking water, clothing, shelter relief, and household and hygiene items.

BDRCS mobilized medical teams, and sent BDT 6.4 million (CHF 116, 360; EUR 79, 447; USD 108, 109), to its branches in 18 of the affected districts to buy dry food for distribution to the affected people. Efforts were, however, focused on six of the most affected branches: Barguna, Bagerhat, Pirojpur, Pathuakali, Jalokhati and Barisal.

CHF 250,000 (EUR 170, 692, USD 232, 273) was allocated from the International Federation's Disaster Relief Emergency Fund (DREF) to provide immediate relief support to BDRCS in this operation. The International Federation also deployed a nine person field assessment and coordination team (FACT) for better assessment and coordination of the relief operation.



Disaster affected person in the middle of her house which is now rubble  
Photo credit: International Federation

Four aerial assessments of the affected areas were done by two teams in two days. The main conclusions of the aerial assessments revealed that:

- Damage caused by cyclone Sidr was very widespread and was without a consistent pattern. However, the devastation was not as severe as it had been perceived. This was in line with the findings and analysis of some other actors.
- The most urgent need was the supply of potable water as drinking water ponds were contaminated with saline water.
- Longer term needs included clothing, shelter, livelihoods restoration and psychosocial support.
- Health needs were being covered by the medical teams deployed by BDRCS, other humanitarian agencies and the government of Bangladesh. (Some medical supplies were needed).
- There was a need for a Logistics Emergency Response Unit (ERU) and the deployment of other ERUs to be considered later.

Following the assessments and based on the needs, the Logistics ERU was mobilized from the British Red Cross. The purpose of the ERU was to assist the operation with the reception and customs clearing of incoming relief goods from abroad (international mobilization), warehousing and transport in country to distribution points.

Following the completion and recommendations of the FACT mission, the full emergency appeal was drafted. Required international human resources including head of operations and other sectoral delegates were recruited to manage and facilitate the operation. In addition, several national staff; such as a medical officer, a disaster management officer and a water and sanitation expert were recruited by the operation. The regional disaster response team (RDRT) was also deployed to assist the relief operation.



Following more detailed assessments and as a result of coordination with the government and other humanitarian agencies, the BDRCS and International Federation decided that within the nine targeted districts, the emergency relief operation would focus on areas along the coast and those where there had been the greatest impact to drinking water sources. The operation also aimed at following an integrated approach for each targeted area, with an integrated programme on livelihoods, water and sanitation, and capacity building. The programme staffing structure intended to reflect this integrated approach.

During the relief operation, there were some situation specific factors that caused delays. These factors included: the need for immediate food and non-food relief items on a large scale; a need for proper logistics; bad road conditions; the inability to access remote areas and locations; and a shortage of local trucks. All these factors together made the relief operation a challenge and highlighted the transportation of much needed supplies to far out locations as difficult. Competition between cyclone affected communities for 'slow to arrive' relief resources from all agencies had resulted in the escalation of tension in an already politically charged environment. The relief distribution plan subsequently favoured multiple distributions to smaller groups of beneficiaries in communities where political rivalry and conflict was a risk to the safety of beneficiaries and BDRCS staff and volunteers. BDRCS and International Federation had also been vigilant in pursuing transparency in the beneficiary selection process with local administrators and were insistent upon independent control over distributions. This has, in a few cases, led to delays because of a lack of agreement on beneficiary lists with local authorities. This includes a lack of agreement between BDRCS, International Federation and the local authorities on the prioritization of relief items from other organizations channelled directly through the government.

Four RDRT members were in the field to monitor the ongoing distribution and provide necessary support as and when required. Their involvement helped to upscale distribution on various occasions. BDRCS staff and volunteers, including the Red Crescent Youth (RCY) and cyclone preparedness programme (CPP) volunteers were extensively involved in the response operation. This was done by working closely with the local government and other agencies to distribute relief items to affected families.

A Sidr operations centre, with office systems was set up in Barisal. Staff were recruited for the centre as required. In addition, a consultant was brought in to interview beneficiaries to ensure that assistance provided was sufficient as well as to evaluate on the efficiency of the operations. This consultant visited the operational area in Barisal to facilitate the beneficiaries' communication evaluation together with BDRCS and International Federation personnel. Findings and recommendations from the consultant were incorporated in the strategic planning workshops for the recovery phase held on 22 January 2008 in Barisal and 24 January 2008 in Dhaka.

A workshop on building cyclone-resilient shelters was conducted in Barisal on 15 December 2007. This was attended by approximately 50 participants, including BDRCS and International Federation staff as well as representatives from the UN and international non-governmental organizations.

As a part of the overall BDRCS/International Federation strategic recovery framework, a participatory community consultation was organized in the middle of February 2008. Community committees were formed and had the main role of monitoring progress and acting as an information hub with BDRCS and International Federation. The coordination mechanism both internal and external to the Movement was set up.

In order to facilitate the recovery phase of the operation and identify the most affected communities in the four worst hit districts: Pirojpur, Patuakhali, Barguna and Bagerhat; a joint field assessment was conducted in all four districts in April 2008. The assessment teams visited over 70 communities and prepared socio-economic and damage profiles amongst other things. The whole process of assessment was coordinated with government authorities in the field. The field assessment focused on all components of recovery programmes (shelter, water and sanitation, livelihoods and health), to identify and plan the scope of work for each programme intervention. Moreover, the accessibility to those communities and the time required to reach the communities from different districts were also assessed.

Out of 70 villages targeted for the assessment, a total of 12 clusters comprising 33 villages in four districts were selected for the recovery operation. This prioritization was made by the respective BDRCS district units based on assessment results as well as a better understanding of their own locality.

The beneficiary model selection was agreed upon and finalized with BDRCS. A household survey was conducted in the twelve clusters from the Pirojpur, Patuakhali, Barguna and Bagerhat districts, following the outcome of the joint assessment and approved plan of action by BDRCS/International Federation. The data of the survey was then entered in the database and from this, a technical verification was processed in coordination with the water and sanitation, shelter and livelihood programmes. As most of the background and policy work was done in 2008, and remaining surveys and verifications were completed by the first quarter of 2009, actual delivery of support began in the second quarter of 2009. Though the core shelter construction in one district started in November 2008, the first model shelter was constructed and handed over only in January 2009. Almost all sectors gained momentum only in the second quarter of 2009 and was eventually completed in the fourth quarter of 2009.

As of now all targeted activities have been completed and set objectives have been met. Some sectoral targets were reduced or increased in the revised plan of action based on assessment, ground reality, cluster limitation and funding situation. Any such change in targets was brought to the relevant donors' attention through various operations updates.

In addition to the support from the International Federation, the BDRCS implemented bilateral programmes in partnership with the British Red Cross, Swiss Red Cross and Spanish Red Cross Societies

More specific progress against set targets and objectives as per the revised plan of action for each sector is described below.

## Relief Phase

<b>Relief distribution (food and non food items)</b>	
<p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>• Immediate needs for basic food rations for up to 100,000 cyclone-affected families in the south will be met by international and domestic assistance within four months following the cyclone.</li> <li>• Basic non-food items are distributed to 100,000 families in 13 cyclone-affected districts within four months following the cyclone.</li> </ul>	
<b>Expected results</b>	<b>Activities planned</b>
<p><u>Food:</u></p> <ul style="list-style-type: none"> <li>• Supported cyclone-affected families are able to focus on the sustainability of their livelihood(s).</li> </ul> <p><u>Non-food items:</u></p> <ul style="list-style-type: none"> <li>• Targeted cyclone-affected families have received essential non-food items to replace those lost or destroyed during the cyclone.</li> </ul>	<p><u>Food:</u></p> <ul style="list-style-type: none"> <li>• Detailed identification and registration of beneficiaries, and distribution points at union and upazilla levels, with nine targeted areas.</li> <li>• Prepare plans in Red Crescent units and distribute food parcels to approximately 100,000 identified families.</li> <li>• Monitor the distributions and follow up coordination in a timely manner.</li> </ul> <p><u>Non-food items:</u></p> <ul style="list-style-type: none"> <li>• Detailed identification of beneficiaries and distribution points at union and upazilla levels in the nine targeted areas.</li> <li>• Procurement of relief items following standard Federation procedures.</li> <li>• Prepare plans in Red Crescent unit and distribute blankets, clothes, family kits, tarpaulins, ground sheets and jerry cans to approximate 100,000 identified families.</li> <li>• Monitor the distributions and follow up coordination in real-time manner.</li> </ul>

### Progress/Achievements:

Table 1: At the end of the relief operation, food and non-food items were distributed to the following families in the following districts. Please see **Annex 1** and **Annex 2** for details of items distributed.

District	No. of families supported	
	1 <sup>st</sup> Phase of Distribution	2 <sup>nd</sup> Phase of Distribution
	(food & non-food)	(non-food)
Bagerhat	11,500	1,828
Barguna	8,400	3,319
Pirojpur	8,700	3,312
Patuakhali	10,000	2,051
Barisal	9,000	
Jhalokathi	5,000	
Khulna	4,920	
Bhola	1,300	
Satkhira	1,900	
Faridpur	1,500	
Madaripur	4,700	
Gopalganj	2,400	
Shoriatpur	4,000	
<b>Total</b>	<b>73,320</b>	<b>10,510</b>

Immediately after cyclone Sidr, four teams comprising of BDRCS and International Federation were sent to the field to assess the extent of damage in the districts of Bagerhat, Satkhira, Jessore, Khulna, Barguna, Patuakhali, Barisal, Pirojpur, Jalokhati and Bhola. These districts were assumed to be the heavily affected.

Beginning December 2007, relief distribution started in the four worst-affected districts of Pirojpur, Patuakhali, Barguna and Bagerhat covering 38,600 families. In January 2008, the relief distribution was extended to five moderately affected districts of Bhola, Barisal, Khulna, Jalokathi and Shatkhira covering 22,120 families. Finally in March 2008, relief distribution started in four lesser affected districts of Faridpur, Madaripur, Gopalganj and Shoriatpur covering 12,600 families. The first phase relief distribution was completed by March 2008. In total, the relief operation covered 73,320 families (330,000 people) in 13 affected districts. Due to multiple factors such as funding constraints, challenges in distribution and the difficulty in the procurement of food items, it was not possible to complete the distribution within the targeted time frame. The relief package given consisted of 14 different types of food and non-food items.

**Annex 1** shows the relief distribution matrix. There was still, however, a need for the distribution of relief supplies - - And existing stock was available to support this need. As such, for the second phase of the operation, BDRCS/International Federation have planned to distribute non-food items: two plastic sheets, two blankets, one box of 0.5 kg washing powder, one hygiene box, one saree and one lungi to approximately 11,000 beneficiaries in Pirojpur, Patuakhali, Barguna and Bagerhat in the middle of October 2008. This is in line with the recovery of targeted areas and programme intervention. The planned second phase distribution could not take place in October 2008 due to various reasons, one of them being the national and general elections in Bangladesh.



An elderly beneficiary collecting the relief support provided by the operation  
Photo credit: International Federation

In view of the continuing Sidr Operation and the affected beneficiaries still exposed to further hazards some non-food relief items were distributed between February till March 2009 to 10,510 households in the four most affected districts (see **Annex 2** for details). The actual package of relief items distributed in the second phase consisted of six non-food items: there were two plastic sheets, two blankets, one hygiene box, one box of washing powder (0.5kg per box), and two sarees and lungies. In addition, 1,150 cartoons of BP5 biscuits were also distributed to the most vulnerable people in Barisal, Bhola, Barguna, Bagherhat, Jhalokati, Satkhira and Khulna.

## Impact

The relief operation was successfully completed in a reasonable timeframe. Though 100,000 families were targeted initially, only about 84,000 families (84 per cent) have been supported due to various reasons including funding constraints and non-availability of certain relief items. However, it was considered that the most immediate needs of the most vulnerable people were met. A post distribution assessment was done to assess the impact of the relief distribution and results show that almost all targeted beneficiaries have received the support and generally are happy about it. Some of key indications came from the assessment were as below:

- About 97 per cent knew that relief support was provided by the Red Cross Red Crescent partners
- About 96 per cent beneficiaries card were distributed by the Red Crescent Youth (RCY) and the cyclone preparedness programme (CPP) volunteers
- About 95 per cent beneficiaries said that their need was high when the RCRC distributed relief items.
- About 86 per cent received relief packages with all relief items
- About 89 per cent beneficiaries' directly used food, cloths, family kits and other items to meet their immediate needs
- About 10 per cent did not receive all the items because the relief items were distributed in two to three phases
- About 27 per cent beneficiaries' received relief items both from government organizations and non-governmental organizations
- About 51 per cent of our beneficiaries got vulnerable group feeding (VGF) cards given by the government
- About 11 per cent sold some items from their relief packages. 73 per cent of them purchased food items that were not given in the package; about 15 per cent of the beneficiaries used that money to buy daily necessities; and about 9 per cent used that money for medicine.

Livelihood	
<b>Objective:</b> To protect the food security and livelihoods up to 30,000 of the most vulnerable people affected in the districts of Pirojpur, Patuakhali, Barguna and Bagerhat.	
<b>Expected results</b>	<b>Activities planned</b>
<ul style="list-style-type: none"> <li>• Improved food security for the most vulnerable of the affected population.</li> </ul>	<ul style="list-style-type: none"> <li>• Procurement and distribution of seeds and saplings to up to 30,000 households as part of a combined relief distribution, contributing to increased food security.</li> </ul>

## Progress/Achievements

With a view to support the affected families to restore their livelihoods, as many as 75,000 to 100,000 coconut saplings for a total of 15,000 households were distributed in four districts. This part of the support was provided under the ECHO project. The varieties, species, and types of saplings were selected considering the climate, soil condition, and indigenous practices.

A pictorial pamphlet with technical instructions showing the use of salt, organic fertilizer, and how to nurse trees by experts from the agriculture department was developed in the local context. Following, pamphlets were then disseminated to beneficiaries. This is to ensure that the tree saplings are seeing a maximum survival rate. BDRCS volunteers monitored the nursing of tree saplings in fortnightly, and sent reports on them to the national headquarters (NHQ).

## Impact

Though the initial plan was to distribute seeds and saplings to 30,000 households, actual distribution was made to only 15,000 families. However this intervention had a good impact not only to restore their livelihoods but also to assist in mitigating the detrimental effects of future disasters. According to the beneficiaries, the provision of coconut saplings was highly suitable for their needs, as they use coconut saplings for multiple purposes. For example: the tree is used for wind protection; coconut can also be made into oil; coconut water is used as alternative source of drinking water during emergencies; coconut milk provides nutrition; the leaves are used as shade for temporary dwellings. And its husk is used as an element for making toys, brooms, and quality ropes.























































