



**DRR IN
ACTION
CASE
STUDY**

Forecast-based Financing: Effective early actions to reduce flood impacts

Theme of the Case Study

Early Warning
Early Action

Country

Bangladesh

Case location

4 Communities in
Bogura District:
Kamalpur,
Bhandarbari 6&7,
Kazla,
Bhandarbari 3

Photo: Kazla, one of the communities assisted by BDRCS and GRC, is located on an island in the river Jamuna. To have access to many goods and services, the population uses ferries to get to the mainland. In the event of severe flooding, many of the inhabitants must evacuate to the mainland. The prices for the ferries often increase significantly in times of flooding and many families have to take up debts to afford the transport. | GRC

Background

Forecast-based Financing (FbF) releases humanitarian funding based on forecasts for pre-agreed activities which reduce suffering, enhance preparedness and response, and contribute to a strengthened community resilience. The relevant thresholds of forecasts that trigger the early actions which aim to reduce the humanitarian impact of the disaster are defined in Early Action Protocols. The impact-based forecasts contribute also to a more efficient use of humanitarian funds, thereby further advancing the shift from traditional post-disaster response to pre-event early action.

Implemented by the Bangladesh Red Crescent Society (BDRCS) and supported by the German Red Cross (GRC), the Bangladesh FbF project activated its Early Action Protocol for the floods in July/August 2017 and distributed cash to affected people. An unconditional cash grant was chosen as the early action for floods to give people the flexibility to prepare individually for the impending flood and take the measures they see fit, which ranged from protecting vulnerable assets and fortifying their shelters to evacuation of livestock. As part of the FbF project, communities were identified ahead of the flood which also allowed the provision of a comparison community for the post-disaster and early action impact evaluation. The evaluation answers some of the most critical questions such as: was the cash used for flood impact reduction; was the cash utilized ahead of the flood peak; and, what impacts were reduced. The survey also outlines the effectiveness of the FbF approach as demonstrated by the comparison community's answers.

Looking at Bangladesh's broader humanitarian landscape, the FbF approach aims to bridge the gap between longer-term disaster risk reduction (DRR) activities and post-disaster response measures. By inserting the FbF early action approach into Bangladesh's Standing Order on Disasters, the project contributes to a positive mindset change at government level which will further advance the pre-event early action spirit.



The four pilot communities in the district of Bogura of the FbF project in Bangladesh were affected by severe flood events twice in 2017, with a first flood peak in July and the second in August that affected millions of households, not only in Bangladesh but also in India and Nepal. Cash grants were distributed by BDRCS and GRC to 1040 households in the 4 communities prior to the July flood, so that they could take action to reduce the impact on their families. | GRC

What did the action seek to change?

The FbF approach identified unconditional cash as the early action for floods and while affected people were free to choose what the money would be used for, it was hoped - and later confirmed by the post-distribution survey – that the unconditional cash grant was used to reduce the flood impacts. The grants were used for fortifying shelters, buying medicine, securing assets, and evacuation of people and livestock. In short, the action sought to reduce the impact of flooding on vulnerable people.

What were the key actions taken to achieve this change?

From the climate science and forecasting background, the FbF approach identified together with the selected communities, the flood thresholds which when reached, activate the FbF early action, i.e. cash.

Programmatically, the FbF team conducted a Theory of Change exercise to determine which early action will reduce the impact of flooding most effectively and, in this case, how cash as an early action modality is a suitable and sustainable way of reducing the flood impact.

What were the essential steps taken along the process to bring about this change?

Step 1	Advocacy of FbF's advantage at various levels: within the host National Society (BDRCS), at government level with disaster management departments and ministries, at the inter-agency level with humanitarian and development partners.
Step 2	In focus group discussions with members of the community, the main problems faced during and after flooding are identified. Analysed together with surveys, studies and historical data, the FbF team determine the most appropriate early action.
Step 3	Capacity building to ensure operational readiness of BDRCS and GRC to implement FbF at the field level.
Step 4	Implementing the early action identified for the project community i.e. distribution of unconditional cash grants to vulnerable people, post distribution monitoring and evaluation



Widow Rebekka says:
"Usually I work in the fields for plants and crops, and I get 140 Taka a day. That's just enough for dinner. I couldn't work in July at all. The fields were inundated early on and the farmers had no income to pay me. Without income and my own land I cannot even take up loans to get over the period of evacuation. With the money from BDRCS and GRC, I bought food for myself and my son. Unfortunately we lost our four goats, but we saved the rest of the money and were able to buy two small new goats after the floods. But we really had to save every penny." | GRC

What SFDRR principles¹ were applicable to this change process?

- Principle 1 Addressing underlying risk factors cost-effectively through investment versus relying primarily on post-disaster response and recovery.
- Principle 2 Decision-making to be inclusive and risk-informed while using a multi-hazard approach.
- Principle 3 Shared responsibility between central Government and national authorities, sectors and stakeholders as appropriate to national circumstances.

¹ e.g. Primary responsibility of the State, Shared responsibility, Protection, All-of-society-engagement, coordination mechanism, empowering local-decision makers, Multi-hazard approach and inclusive risk-informed decision-making, Sustainable development, Local and specific risks.



Alefa Katun, 40, was able to evacuate her two cows and feed them during the flooding thanks to BDRCS and GRC's forecast-based support. "Without the help, I would have had to sell these two so they wouldn't starve. But I would only have received a very bad price for them during the flood. But they are two good cows that are healthy and give a lot of milk," she says. A healthy cow that gives a good amount of milk is worth up to an annual salary (60 000 Taka). During flood events pastures are inundated for weeks so the cows don't have access to their usual feed. Many families lack the funds to buy enough feed for the long periods of inundation and to evacuate their livestock; thus they find themselves forced to sell their livestock before it starves. During flood events prices for good cows like Alefa's fall to six-seven monthly salaries (35 000 Taka). An enormous loss for those families who are forced to sell. | GRC

What were the Achievements and the Impacts?

- From the humanitarian relief and the early warning early action perspective, the FbF activation reduced the suffering of the affected population before the flood event, which is one of the main achievements of the FbF approach. The activation further advanced the integration of the FbF approach into the government's disaster risk management processes thereby promoting the mindset change of prevent early action instead of post-disaster response.
- In the longer term, the FbF approach strengthens the government's responsibility to manage disaster risk and promotes a holistic understanding of disaster risk that is tied to its governance component. From the donor perspective and the commitments made during the Grand Bargain summit, the FbF approach is a powerful tool to substantially advance some of the summit's goals, such as the use of cash-based assistance and the localization of aid. Similarly, the FbF project makes the most efficient use of the donors' funds by releasing humanitarian assistance ahead of a disaster when procurement and logistics are substantially cheaper.
- In addition, as part of the humanitarian-development nexus, the FbF activation serves as a convincing example of bridging the gap between preparedness, response, and longer-term resilience and development activities. In short, the FbF activation acts as a proof of concept, showing that FbF is an approach and a mindset that saves lives, money and advances the disaster risk management of the government.
- From a regional perspective, FbF Bangladesh is at the forefront when it comes to experience with activations and new cash delivery modalities. The learnings from the trigger and early action development contribute to the wider FbF progress in the Asia-Pacific region.

What were the key Lessons Learnt?

- From the climate science and forecasting perspective, the thresholds were revisited as well as the trigger process together with colleagues from the Red Cross Red Crescent Climate Centre (RCCC).
- Operationally, the setup of cash distribution was reviewed, and concrete recommendations were made, such as pre-identification of larger venues, ensuring of strong mobile network, coordination meetings with local government representatives, etc (refer to GRC cash distribution report for detailed lessons learnt). The post-distribution survey shows that programmatically, the FbF approach achieves its goal of reducing the flood impact.

What were the Good Practices arising from this action?

Good Practice 1	This FbF activation proves that acting early effectively reduces the negative impact of a natural hazard
Good Practice 2	This FbF activation demonstrates that good humanitarian donorship in the form of forward-looking and 'uncertainty-accepting' funding for early action effectively helps affected people before a disaster, thus reducing the post-disaster costs of humanitarian response.

Policy Relevance to DRR in Action

The Asia-Pacific Regional Road Map for implementing the 2030 Agenda for Sustainable Development highlights the thematic issues of Disaster Risk Reduction and Climate Change which are prominently addressed by the FbF approach. In terms of the Road Map's implementation strategy, FbF contributes to the 'access to data' component by highlighting the need for enhanced regional collaboration and actively promoting the need for free and neutral data, not only for flood forecasting but also for beneficiary selection. Under the 'Finance' aspect, FbF not only promotes stable forward-looking and long-term financing but also the efficient use of donor funds by maximising its output ahead of a natural disaster. In addition, the FbF activation promotes financial inclusion and literacy, contributing to reduce the number of people without access to a bank account.



Nadu, 42, shopkeeper:

"Of course, during the flood, I didn't have any customers, since they were evacuated. Thanks to the cash grant, I had some money to transport my family's most important belongings to safety and buy food for us. Although I had no income for a while, I didn't have to take out a loan this time. Now people are slowly coming back to my shop." | GRC

Key Messages from this Case Study

- Forecast-based Financing is an innovative example for a functioning EWEA system that advances the Sustainable Development Goals at the national and regional level.
- FbF promotes forward-looking financing of disaster risk management at the government level through its EWEA framework, as well as financial inclusion and literacy of beneficiaries through its Early Action Protocol for floods.
- At the regional level, FbF can act as a role model of an operational understanding of disaster risk that enables a strengthened governance of disaster risk management, thereby advancing the Sendai Framework for DRR priorities at the regional governmental level.

Sharing the case study will not only promote its key messages and advance the strategy towards SDG implementation as described above, it will also allow for a wider adoption of the FbF concept in disaster risk management ministries at the national level and in regional DRR coordination bodies. It further promotes good humanitarian donorship and regional awareness of new approaches to DRR strategies.

References for this Case Study

1. FbF project overview
2. RCCC/GRC post-distribution survey analysis
3. Forecast-based cash report (AmCross/GRC)
4. GRC report on cash distribution with recommendations
5. Photo stories: FbF activation 2017

Collaborators for this Case Study:

Bangladesh Red Crescent Society,
German Red Cross,
Red Cross Red Crescent Climate Centre,
International Federation of
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